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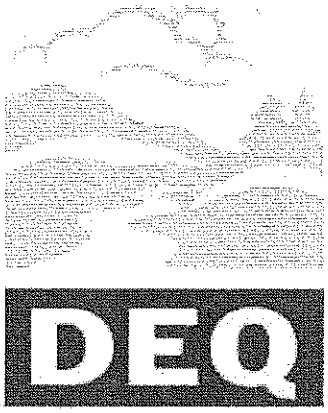
6/7/1985

OREGON
ENVIRONMENTAL QUALITY
COMMISSION MEETING
MATERIALS



State of Oregon
Department of Environmental Quality

OREGON ENVIRONMENTAL QUALITY COMMISSION MEETING

June 7, 1985

Room 602
Multnomah County Courthouse
1021 SW Fourth Avenue
Portland, Oregon

TENTATIVE AGENDA

9:00 a.m. CONSENT ITEMS

These routine items are usually acted on without public discussion. If any item is of special interest to the Commission or sufficient need for public comment is indicated, the Chairman may hold any item over for discussion.

A. Minutes of March 22, 1985, special EQC meeting, and April 19, 1985 EQC meeting.

B. Monthly Activity Report for March and April, 1985.

C. Tax Credits.

9:10 a.m. PUBLIC FORUM

This is an opportunity for citizens to speak to the Commission on environmental issues and concerns not a part of this scheduled meeting. The Commission may discontinue this forum after a reasonable time if an exceptionally large number of speakers wish to appear.

HEARING AUTHORIZATIONS

D. Request for authorization to conduct a public hearing on the modification of Hazardous Waste Management Rules, OAR 340, Divisions 100 to 110.

E. Request for authorization to hold a public hearing to amend standards of performance for new stationary sources, Oregon Administrative Rules (OAR) 340-25-510 to 25-690, to include certain new federal rules and to consider requesting EPA to delegate authority to administer equivalent federal rules in Oregon.

ACTION AND INFORMATION ITEMS

Public testimony will be accepted on the following, except items for which a public hearing has previously been held. Testimony will not be taken on items marked with an asterisk (*). However, the Commission may choose to question interested parties present at the meeting.

F. Proposed approval of Noise Inspection and Compliance Agreement for Tri-Met diesel bus fleet.

POSTPONED ~~G. Variance request from EPA to operate helicopters in excess of Noise Emission Standards of OAR 340-13-020 to obtain water samples from 32 wilderness area lakes.~~

(over)

H. Request for extension of a variance for the miscellaneous products and metal parts industry from OAR 340-22-170(4)(j) which limits solvent content of coatings.

~~I. Petition from Gilmore (Oregon) Steel to exclude from the definition of hazardous waste the contents of the iron ore storage impoundment located in the Rivergate District of Portland.~~

J. Request from John Noce, III, for reduced amount of security for operation of a private sewerage facility.

K. Request for approval of preliminary plan, specifications and schedule for sanitary sewers to serve health hazard annexation area known as North Vernonia Road Area, contiguous to City of St. Helens, Columbia County.

L. Request of East County Sanitary Sewer Consortium for extension of deadline for submittal of additional information regarding mid-Multnomah County sewerage plans, cost estimates and financing options from July 1, 1985 to September 1, 1985.

M. Informational Report: Update on field burning and analysis of smoke-caused traffic accidents.

N. Informational Report: Report to 63rd Oregon Legislative Assembly on status of the Oregon Recycling Opportunity Act and Waste Reduction Programs.

O. Emergency repeal or suspension of motorcycle noise testing requirements for the Vehicle Inspection Program, OAR 340-24-311 and 340-24-337(2)

P. Request by the City of Klamath Falls for Modification of the Approved Time Schedule for Alleviating the Health Hazard in the Pelican City Area.

WORK SESSION

The Commission reserves this time, if needed, for further consideration of any item on the agenda.

Because of the uncertain length of time needed, the Commission may deal with any item at any time in the meeting except those set for a specific time. Anyone wishing to be heard on any item not having a set time should arrive at 9:00 a.m. to avoid missing any item of interest.

The Commission will have breakfast (7:30 a.m.) at the Portland Motor Hotel, 1414 SW Sixth Avenue, Portland. The Commission will lunch in Room 1400, 522 SW Fifth Avenue, Portland.

The next Commission meeting will be July 19, 1985, in Portland, Oregon.

Copies of the staff reports on the agenda items are available by contacting the Director's Office of the Department of Environmental Quality, PO Box 1760, Portland, Oregon 97207, phone 229-5395, or toll-free 1-800-452-4011. Please specify the agenda item letter when requesting.

THESE MINUTES ARE NOT FINAL UNTIL APPROVED BY THE EQC

MINUTES OF THE ONE HUNDRED SIXTY-FIFTH MEETING

OF THE

OREGON ENVIRONMENTAL QUALITY COMMISSION

June 7, 1985

On Friday, June 7, 1985, the one hundred sixty-fifth meeting of the Oregon Environmental Quality Commission convened in Room 602 of the Multnomah Courthouse, 1021 SW Fourth Avenue, Portland, Oregon. Present were Commission Chairman James Petersen, Vice Chairman Arno Denecke, and Commission members Mary Bishop, Wallace Brill, and Sonia Buist. Present on behalf of the Department were its Director Fred Hansen and several members of the Department staff.

The staff reports presented at this meeting, which contain the Director's recommendations mentioned in these minutes, are on file in the Office of the Director of the Department of Environmental Quality, 522 SW Fifth Avenue, Portland, Oregon. Written information submitted at this meeting is hereby made a part of this record and is on file at the above address.

BREAKFAST MEETING

All Commission members were present at the breakfast meeting.

Director Hansen introduced Lydia Taylor, the recently appointed Administrator for the Department's Management Services Division, and David Allen who is serving as a summer law clerk for Hearings Officer, Linda Zucker.

1. Preliminary request for public hearing authorization--Jackson County Air Quality Maintenance Area (AQMA) Inspection/Maintenance (I/M) proposal.

   Director Hansen explained that the formal request for hearing and staff report on this matter is scheduled for the Commission's July 19 meeting. However, to satisfy the 30-day public notice requirement, the Department proposes to publish a notice of public hearing in the July 15 Secretary of State Bulletin. This would allow for public hearings in Jackson County prior to Labor Day. This is necessary if the Department is to have an I/M program in operation prior to January 1, 1986.

Director's Recommendation

It is recommended that authorization be given for publishing a notice of public hearing in the July 15, 1985 Secretary of State's Bulletin with the understanding that final authorization to hold such hearings will be formally requested at the July 19, 1985 EQC meeting. If such authorization is not received from the Commission, any announced public hearings would be cancelled.

It was MOVED by Commissioner Brill, seconded by Commissioner Bishop and passed unanimously that the Director's Recommendation be approved.

2. Atlas of Oregon Lakes.

Andy Schaedel of the Department's Laboratory Division presented the Commission with recently-published copies of the Atlas of Oregon Lakes. Mr. Schaedel explained that this was the culmination of a four-year combined effort of the DEQ and Portland State University (PSU) to inventory and classify 202 Oregon lakes. This Atlas was funded through the Environmental Protection Agency's Clean Lakes Program. As Oregon was the last state to receive funding for this project, it had the benefit of the work done in other states.

Mr. Schaedel introduced Dan Johnson of Portland State University who complimented Department staff, especially Mr. Schaedel and Neil Mullane of the Department's Water Quality Division, on their efforts in getting this document together. Mr. Johnson said the University was pleased because of the cooperative effort that went into compiling this Atlas. He said they were hoping for a wide distribution to raise public knowledge and awareness of lakes and their problems.

Commissioner Buist asked if the quality of Oregon lakes was fairly stable. Mr. Schaedel replied that for the most part the lakes didn't change much--therefore the data in the Atlas wouldn't change much. Commissioner Buist also asked about the pH levels in the lakes. Mr. Schaedel said that pH was mostly within acceptable limits, but that Oregon did have some sensitive lakes.

Chairman Petersen asked about the effect on lakes from field and slash burning. Mr. Schaedel said there was not enough detail on smoke effects at this time, although, the Department was looking into this problem in greater depth.

Director Hansen told the Commission that the Department had applied for a $70,000 grant from the Environmental Protection Agency to establish an atlas for all environmental problems in Oregon. Carolyn Young, the Department's Public Information Officer, is working on this effort.

Mr. Johnson said that the distribution of the lakes atlas would be handled through the Oregon State University Press. They are targeting bookstores. Copies can be obtained now through the Portland State University Geography Department. Cost is $17.95 for softback, and $30 for hardback editions.

4. Future EQC Meeting Dates.

Because of conflicts the Commission needed to change their September meeting date. They decided on the following dates and places for future Commission meetings.

July 19, 1985	Portland
September 27, 1985	Bend
November 15, 1985	Eugene

FORMAL MEETING

AGENDA ITEM A: Minutes of the March 22, 1985 special meeting, and April 19, 1985 regular meeting.

It was MOVED by Commissioner Buist, seconded by Commissioner Bishop, and passed unanimously that the Minutes be approved.

AGENDA ITEM B: Monthly Activity Report for March and April, 1985.

In reference to the hazardous waste disposal requests, Commissioner Denecke asked about wastes coming from Canada. Director Hansen replied this was a normal business activity across international boundaries; there is no formal agreement.

It was MOVED by Commissioner Bishop, seconded by Commissioner Buist, and passed unanimously that the Monthly Activity Report be approved.

AGENDA ITEM C: Tax Credit Applications.

It was MOVED by Commissioner Buist, seconded by Commissioner Bishop, and passed unanimously that the tax credit applications be approved.

AGENDA ITEM D: Request for authorization to conduct a public hearing on the modification and adoption of Hazardous Waste Management Rules, OAR Chapter 340, Divisions 100-110.

This item proposed to amend the State hazardous waste management rules. The proposed amendments establish management standards for certain hazardous wastes which are recycled, classify certain dioxin-containing wastes as hazardous, and make technical corrections and clarifying changes.

The proposed rules would allow the State program to maintain equivalency to the federal RCRA program.

Director's Recommendation

Based on the Summation in the staff report, it is recommended that the Commission authorize a public hearing to take testimony on the proposed modification of OAR Chapter 340, Divisions 100 to 106 and 108, and the proposed adoption of Division 107.

In response to Commissioner Denecke, Al Goodman of the Hazardous Waste Program explained that the modification proposes to close loopholes regarding the definitins of hazardous wastes where wastes are recycled. It would not change regulations on disposal, but only regulations on recycling.

It was MOVED by Commissioner Bishop, seconded by Commissioner Brill, and passed unanimously that the Director's Recommendation be approved.

PUBLIC FORUM:

Jeanne Orcutt, United Citizens in Action, appeared and asked when, and by whom was the Columbia Basin formed. She said it did not appear in the 208 plan. Ms. Orcutt submitted for the record the following documents:

March 11, 1985 letter from Jewell Lansing, Portland City Auditor, to Mayor Clark and City Commissioners

June 4, 1985 Gresham City Council agenda item no. III(1)

Chapter 8.75, Inverness Sewage Treatment Plant

At Ms. Orcutt's request copies of these documents were subsequently mailed to each Commission member.

Harold Sawyer of the Department's Water Quality Division, answered that Columbia Basin simply refers to those drainage basins that use the Columbia Boulevard Sewage Treatment Plant as the point of ultimate treatment; it is merely wording used to describe where sewage is treated.

AGENDA ITEM E: Request for authorization to hold a public hearing to amend and add to Standards of Performance for New Stationary Sources, Oregon Administrative Rules (OAR) 340-25-510 to 805 to include certain new Federal rules and consider requesting EPA to delegate authority to administer the rules in Oregon.

This is a request to hold a public hearing and take testimony on rule changes relating to the latest federal new source performance standards. Adoption of the new standards by the Commission allows the federal Environmental Protection Agency (EPA) to delegate jurisdiction for their rules to DEQ.

Since the rules affect only major new, modified, or reconstructed sources, only one existing Oregon source is covered by these proposed rules. That one Oregon source is a lime plant and it is in compliance. If certain other sources in Oregon make major modifications, they would be affected. Examples of plants in Oregon which might make major modifications in the future are:

a. Steel plants
b. Resin plants
c. Dry cleaners

After the staff report was written, the staff found it necessary to move the proposed hearing date from July 9 to July 16, and revise the deadline for comments to July 19. This had to be done in order to allow 30 days public notice for the hearing after the Commission's action. Therefore, the Director requested amendment of the Director's Recommendation to approve a July 16 hearing and a comment deadline of July 19.

Director's Recommendation

It is recommended that the Commission authorize the Department to hold a hearing to consider amendments to OAR 340-25-510 to 340-25-805, rules on Standards of Performance for New Stationary Sources, and to consider asking for authority to administer the equivalent federal rules in Oregon.

It was MOVED by Commissioner Bishop, seconded by Commissioner Denecke, and passed unanimously that the Director's Recommendation, including amendment, be approved.

AGENDA ITEM F: Proposed approval of Noise Inspection and Compliance Agreement for Tri-Met diesel bus fleet.

Noise emission inspection rules for autos, light-duty trucks, and motorcycles were approved by the Commission on November 2, 1984. The Commission then directed the Department to develop, with Tri-Met, an agreement that would ensure that all of Tri-Met's buses are maintained to appropriate noise limits.

An agreement has been developed and accepted by Tri-Met that would annually inspect and certify compliance with noise standards on each of approximately 600 buses in Tri-Met's fleet. The Department finds this agreement acceptable and recommends the Commission's acceptance.

Director's Recommendations

Based on the summation in the staff report, it is recommended that the Commission accept the proposed noise inspection and compliance agreement for Tri-Met diesel bus fleet and execute the agreement.

Chairman Petersen asked why there was a difference in standards between subfleets. John Hector of the Department's Noise Section replied that it was because each subfleet contained different makes, and years of buses. Chairman Petersen then asked why there was a 3 to 4 decibel allowance in the standard. Mr. Hector said this was done so no buses in good working order would fail.

Chairman Petersen asked if, under the agreement as proposed, it would be possible for Tri-Met to certify a bus on December 30, 1985 and recertify it for the next year on January 1, 1986, thus having two year's certification within two days. Mr. Hector responded that that was possible, but the Department would hope it would not occur. Tri-Met does not intend to test all its buses at the same time at the end of the year but instead to scatter the testing throughout the year. Mr. Hector said DEQ would audit, and if they found this practice going on, would ask Tri-Met to modify its testing procedure. Ron Householder of the Department's Vehicle Inspection Program, said that noise testing would be done in the same way that exhaust inspections are done now--that is, the buses in the fleet are examined at different times throughout the year and because of the nature of Tri-Met's maintenance program the circumstance described by Chairman Petersen was unlikely to occur. However, there was nothing in the agreement to prevent it.

In response to Chairman Petersen, Mr. Hector and Mr. Householder told the Commission that training of inspectors would be done by DEQ, but that there would be no formal certification of inspectors. As with the exhaust emission training, DEQ would conduct periodic training sessions for noise inspectors. Also, repairs would be done during the normal maintenance schedule within the year certification was needed, but there was nothing in the agreement requiring Tri-Met to pull noncomplying buses off the street until they were repaired.

Chairman Petersen expressed concern with the way the agreement was drawn. He said it was not as tight as it could have been to make sure there was little chance for problems. He was concerned how the Department would know the buses were in good working order. Chairman Petersen said that because of problems with the agreement, he would be voting against it.

Mr. Hector said originally Tri-Met wanted an informal, voluntary agreement, but the public felt that monitoring the fleet inspection was essential. Mr. Hector said the Department felt the agreement would protect the public, and the Department could rely on Tri-Met's good faith to abide by the agreement.

Commissioner Buist said she was sympathetic to Chairman Petersen's concerns, but that the agreement seemed to her to be a reasonable approach. She was reassured that new buses would be quieter. Commissioner Buist said the agreement was not perfect, but it was a reasonable plan to deal with the problem and she would be voting yes.

Commissioner Buist also noted that the acceptable decibel (db) standard for occupational health was 90 db, which results in no hearing impairment.

It was MOVED by Commissioner Buist, seconded by Commissioner Bishop and passed with Chairman Petersen dissenting, that the Director's Recommendation be approved.

AGENDA ITEM H: Request for extension of a variance for the miscellaneous products and metal parts industry from OAR 340-22-170(4)(j) which limits solvent content of coatings.

On November 18, 1983, the Commission granted a class variance to the Miscellaneous Products and Metal Parts Industry from the Volatile Organic Compounds (VOC) rule which limits the solvent content of subsurface coatings. The variance expires on July 1, 1985. The industry was to be considered in the revised ozone State Implementation Plan (SIP) for the Portland area. Since the revised SIP will not be completed in time to support rule changes by July 1, 1985, an extension of the variance until December 31, 1985 is requested.

The change to low solvent coatings has proven to be "technology forcing" rather than reasonably available control technology (RACT).

Director's Recommendation

Based upon the findings in the summation in the staff report, it is recommended that the Commission grant an extension of variance for the Miscellaneous Products and Metal Parts Industry with the following conditions:

1. The requirements of OAR 340-22-170(4)(j) be waived for all affected sources until January 31, 1986.

2. The Department include the Miscellaneous Products and Metal Parts Industry in its alternative control strategy analysis for the Portland ozone SIP and rule revision, due to be completed by October of 1985 and presented to the Commission for final adoption no later than January 31, 1986.

It was MOVED by Commissioner Denecke, seconded by Commissioner Buist, and passed unanimously that the Director's Recommendation be approved.

AGENDA ITEM G AND AGENDA ITEM I:

Chairman Petersen noted for the record that these items had been removed from the Commission's agenda.

AGENDA ITEM J: Request from John Noce III for reduced amount of security for operation of private sewerage facility.

In 1982, the Commission approved a reduced level of surety bond for a large septic tank and drainfield serving a houseboat moorage. The new owner, Mr. John Noce, III, has requested approval of the same reduced level of security.

Director's Recommendation

Based upon the summation in the staff report, it is recommended that the Commission approve the amount of $5,000 as the required security for the sewerage system serving the Paradise Moorage.

Mr. Noce was not present.

It was MOVED by Commissioner Bishop, seconded by Commissioner Buist, and passed unanimously that the Director's Recommendation be approved.

AGENDA ITEM K: Request for approval of preliminary plan, specifications and schedule for sanitary sewers to serve the health hazard annexation area know as North Vernonia Road area, contiguous to City of St. Helens, Columbia County.

An unincorporated area--North Vernonia road area--contiguous to the City of St. Helens, has been found by the State Health Division to pose a danger to public health due to failing septic tank and drainfield systems.

The City of St. Helens has been required to prepare preliminary plans and specifications together with a time schedule for removing or alleviating the problem and are submitting these to the Commission for review.

The statutes (ORS 222.898) require the Commission to determine the adequacy of the time schedule and plans for correcting this health hazard. If approved the Commission must certify same to the City.

The staff has reviewed the plans, specifications and timetable and consider them satisfactory.

Director's Recommendation

Based upon the findings in the summation in the staff report, it is recommended that the Commission approve the proposal of the City of St. Helens and certify approval to the City.

Relating to this matter, Commissioner Denecke asked if it was worthwhile to consider asking the Legislature to change this authority from the Commission to the Director. Chairman Petersen replied that he felt the Commission was the proper forum in case of possible disagreement with the Department.

It was MOVED by Commissioner Bishop, seconded by Commissioner Buist, and passed unanimously that the Director's Recommendation be approved.

AGENDA ITEM L: Request of East County Sanitary Sewer Consortium for extension of deadline for submittal of additional information regarding Mid-Multnomah County sewerage plans, cost estimates and financing options from July 1, 1985 to September 1, 1985.

This item requests the Commission to extend the deadline for required information to September 1, 1985. The East County Sanitary Sewer Consortium made the request because it took considerable time to assemble a strong project team. The Department believes it is important to have the best possible information available to the Commission and public.

The Department supports this request.

Director's Recommendation

It is recommended that the Commission grant an extension of the deadline for submittal of the required additional information from July 1, 1985 to September 1, 1985.

Some discussion followed as to when the Department expected hearings to be held on this matter. Chairman Petersen said he would like to see hearings held at a special meeting in October so a decision could be made quickly. Director Hansen agreed to move as quickly as possible and still turn out quality work.

Commissioner Denecke commented that if all Commission members were present at the hearing, the hearing summary would not have to be as detailed as it was for the last hearings when he was the only member present for the continuation of the hearing.

The Commission tentatively agreed to keep October 17 and 18 open as possible hearing dates.

It was MOVED by Commissioner Buist, seconded by Commissioner Bishop, and passed unanimously that the Director's Recommendation be approved.

AGENDA ITEM M: Informational Report: Update on field burning and analysis of smoke-caused traffic accidents.

This is an informational report which includes a discussion of plans for the upcoming field burning season and an evaluation and recommendations for addressing the problem of traffic accidents resulting from burning near highways and roads.

Director's Recommendation

It is recommended that the Commission concur in the courses of action proposed by the Department in sections I and II of the staff report.

Commissioner Buist asked who determined if an accident was smoke-related. Sean O'Connell of the Department's Field Burning Office replied that the determination was made by the Highway Patrol or police officer who responds to the accident. In response to Commissioner Buist, Mr. O'Connell said that he believed accidents outlined in the report were directly smoke-related, and that there may be more than what appear in the data the Department gets from the Highway Division.

Commissioner Bishop asked if the rate of accidents would increase, and if the ban on Sunday burning plan would help. Mr. O'Connell replied he did not feel the Sunday burning ban would have much effect, but that the coordination with fire districts, growers and transportation people would help. The biggest problem area was along the Cascade Highway and the two fire districts involved in that area were very interested in helping. Mr. O'Connell continued that work was being done to develop signs that were large enough to be effective, but despite everyone's best efforts, there will be some people who will go through anyway.

The Commission concurred with the Director's Recommendation and thanked Mr. O'Connell for his report.

AGENDA ITEM N: Informational Report: Report to 63rd Oregon Legislative Assembly on status of the Oregon Recycling Opportunity Act and waste reduction programs.

ORS 459.055(4) requires the Department to report to the Legislature on siting of landfills in farm use zones and the level of compliance with waste reduction programs. ORS 459.168(3) requires the Commission to report to the Legislature on compliance with the provisions of the Oregon Recycling Opportunity Act. We have combined the Department's and the Commission's report into a single document. The Department is seeking Commission concurrence in the submission of the report to the Legislature.

Director's Recommendation

It is recommended that the Commission concur in the submission of the report to the Legislature.

Director Hansen commented that it was encouraging to know that there was no legislation introduced this session to amend SB 405, the Opportunity to Recycle Act.

Chairman Petersen asked if the Department had received inquiries from other states about the Opportunity to Recycle Act. Director Hansen replied that both he and Bill Bree of the Department's Hazardous and Solid Waste Division, had been out of state speaking to various groups about the Recycling Act, and the Department frequently receives written inquiries about the Act.

Commissioner Bishop suggested some kind of commendation be made to communities such as West Linn, Baker and Bend who are making it easier for other areas to come up with plans of their own.

The Commission concurred with the Director's Recommendation and thanked Mr. Bree for his report.

AGENDA ITEM O: Emergency repeal of motorcycle noise testing requirements for the Vehicle Inspection Program, OAR 340-24-311 and 24-337(2).

On November 2, 1984, the Commission adopted rules incorporating noise testing of motorcycles into the inspection program with an effective date of July 1, 1985. As directed by the Commission, the Department sought supplemental budget authority to carry out the motorcycle inspection task. Budget approval was not granted by the Legislature and thus, the Department is not now in a position to test and inspect motorcycles.

ORS 481.190 directs the Motor Vehicles Division not to renew the vehicle registration of a vehicle which does not have a Certificate of Compliance attesting to conformance with the noise control and emission standards adopted under ORS 468.370. Thus, after July 1, 1985, motorcycle owners who live in the Portland Metropolitan area would be severely prejudiced by not being able to renew their motorcycle registrations.

The Commission is being asked to:

1. Enter a finding that failure to act promptly will result in serious prejudice to the public interest because motorcycle owners within the Portland area would not be able to re-register their motorcycles;

2. Issue an emergency repeal or suspension of OAR 340-24-311 and 24-337(2); and

3. Authorize the Department to hold public hearings on this matter.

Since the signing of this report, the Director was asked to reconsider his recommendation to repeal this rule. In light of the public support for motorcycle noise inspection, the Director was persuaded

to recommend an emergency rule amendment that would suspend rather than repeal this rule. This proposed rule amendment reads as follows:

Proposed Amendment to Rule 340-24-311
Motorcycle Noise Emission Control
Test Method

(6) This rule and subsection (2) of rule 340-24-337 shall become effective upon the approval of necessary budget limitations and staff by the Oregon Legislative Assembly.

This amendment will allow the motorcycle standards, that have been approved after considerable public testimony, to remain in the rules and become effective after budget issues are resolved.

Chairman Petersen noted that the Commission had received additional written testimony on this matter from John Broome, Tualatin; Chad Metzger, Lake Oswego; Jane Cease, District 10 Senator; and Else Coleman, Commissioner Mike Lindberg's office.

Carolyn Johnson, Citizen's Association of Portland, testified that her group's purpose was to protect and enhance the livability of Portland neighborhoods. They felt it was imperative to reduce noise pollution from all sources, including motorcycles, heavy trucks and buses. They were opposed to the omission of any category of vehicle from the noise inspection program.

Jim Owens, President of Oregon Environmental Council (OEC), said that the compromise rule amendment proposed by the Director was acceptable. The OEC did not want to see motorcycle noise testing deleted and asked that the Commission do whatever was necessary to implement motorcycle noise inspection along with all other vehicles. Mr. Owens continued that OEC would support the Department asking for Emergency Board approval for funding to conduct motorcycle noise testing. He asked if it was possible to implement the program with existing resources.

Commissioner Denecke asked if the legislative Ways and Means Committee had taken any position on this matter. Director Hansen replied that the Ways and Means Subcommittee had not approved the supplemental budget request the Department submitted which contained funding for motorcycle noise testing. He felt the subcommittee clearly thought the program was a bigger regulatory burden than they were willing to approve.

It was Mr. Hansen's belief that by the full Legislature approving the Department's budget, they also approved the actions of the Ways and Means Subcommittee, and the Legislature would not expect the program to go ahead as presented in the Department's supplemental budget request. If the Department were to ask for Emergency Board approval, it would have to be in a different form.

Director Hansen said the options were to ask for Emergency Board approval, or wait until the next Legislative session and present the matter again.

Chairman Petersen commented that he thought the Commission had the statutory authority to regulate motorcycle noise.

Commissioner Denecke asked about revenue from fees. Director Hansen replied that the Department could collect fees, but had to have authority from the Legislature to spend those fees and hire the personnel necessary to conduct the testing. He said the Commission could direct the Department to go ahead with the testing, understanding with no additional personnel the testing time per vehicle would be slower. However it was his feeling that going ahead in any fashion at this time would not be appropriate in view of the Legislature's action.

Chairman Petersen said he was not sure the Legislature had sent a clear message not to conduct the program; only that they would not fund it.

Linore Allison, Livable Streets Coalition, testified that her group did not want to see a repeal of motorcycle testing as it was really important to the public. She said something needed to be done soon; people could not wait forever. Ms. Allison was not convinced the full legislative assembly felt the same way the Ways and Means Subcommittee did, as all the legislators she spoke with were supportive of the program. She expressed willingness to work with the Department to implement the program and to lobby the Legislature. In response to Commissioner Denecke, Ms. Allison said it was probably too late in the session to get Ways and Means to reverse its decision on this matter. She said Senator Jane Cease had recommended keeping the rule as it stands and asking for Emergency Board approval to implement the program.

Molly O'Riley suggested that if testing was started, the different circumstances would be created which could be taken to the E-Board.

The Commission discussed the ramifications and it was decided that to maintain good relations with the legislature, patience should be exercised.

It was MOVED by Commissioner Denecke, seconded by Commissioner Bishop and passed unanimously that the effective date of July 1, 1985 be suspended to some later date when the Commission shall take action.

Michael Huston, Assistant Attorney General, reminded the Commission this was a temporary rule which would be in effect for 180 days.

AGENDA ITEM P: Request by the City of Klamath Falls for modification of the approved time schedule for alleviating the health hazard in the Pelican City area.

In May 1983, the Commission approved plans and time schedule submitted by the City of Klamath Falls for alleviating the health hazard in Pelican City. The City has attempted to obtain grant funding to finance the project, but was unsuccessful until early this year when they received design money from the Department of Housing and Urban Development (HUD). Design work should be completed by December of this year, after which the City will apply to HUD for the construction grant.

Since the City cannot meet the previously approved schedule, it has requested an alternative schedule for alleviating the health hazard.

Director's Recommendation

Based upon the findings in the summation in the staff report, it is recommended that the Commission approve the revised time schedule of the City of Klamath Falls for extending sewers to the Pelican City area.

Chairman Petersen asked when funds were expected to be available for this project. Richard Nichols of the Department's Central Region Office, replied that Department of Housing and Urban Development (HUD) funds become available annually, and hopefully funding from that source would come next year. There was also some possibility of funding through the Department's construction grants program.

It was MOVED by Commissioner Buist, seconded by Commissioner Brill and passed unanimously that the Director's Recommendation be approved.

There being no further business, the formal meeting was adjourned.

The Commission had lunch at the DEQ offices, where Director Hansen updated them on legislative activities.

Respectfully submitted,

Carol A. Splettstaszer
EQC Assistant

CAS:d

THESE MINUTES ARE NOT FINAL UNTIL APPROVED BY THE EQC

MINUTES OF THE ONE HUNDRED SIXTY-FOURTH MEETING

OF THE

OREGON ENVIRONMENTAL QUALITY COMMISSION

April 19, 1985

On Friday, April 19, 1985, the one hundred sixty-fourth meeting of the Oregon Environmental Quality Commission convened in the Autzen Senate Chamber of the George Putnam University Center, Willamette University, 900 State Street, Salem, Oregon. Present were Commission Chairman James Petersen, Vice Chairman Arno Denecke, and Commission members Mary Bishop, Wallace Brill, and Sonia Buist. Present on behalf of the Department were Director Fred Hansen and several members of the Department staff.

The staff reports presented at this meeting, which contain the Director's recommendations mentioned in these minutes, are on file in the Office of the Director of the Department of Environmental Quality, 522 SW Fifth Avenue, Portland, Oregon. Written information submitted at this meeting is hereby made a part of this record and is on file at the above address.

BREAKFAST MEETING

The Commission did not hold a breakfast meeting.

FORMAL MEETING

AGENDA ITEM A: Minutes of the March 8, 1985 EQC Meeting.

It was MOVED by Commissioner Bishop, seconded by Commissioner Buist, and passed unanimously that the Minutes of the March 8, 1985 EQC meeting be approved.

AGENDA ITEM B: Monthly Activity Report for January and February 1985.

In reference to the hazardous waste disposal requests, Commissioner Denecke asked if it was normal that so many requests come from the State of Washington. Michael Downs of the Department's Hazardous and Solid Waste Division, replied that as one of the Northwest Compact states, Oregon has agreed to take hazardous wastes from the State of Washington in exchange for Washington taking Oregon's radioactive wastes for disposal at Hanford, as there is no disposal site for radioactive wastes in Oregon.

It was MOVED by Commissioner Denecke, seconded by Commissioner Brill, and passed unanimously that the Monthly Activity Report for January and February 1985 be approved.

AGENDA ITEM C: Tax Credit Applications.

It was noted that Boise Cascade asked that their request for solid waste preliminary certification for replacement of PCB-containing transformers be withdrawn. The Company will resubmit another time, claiming the project as a water quality facility.

Commissioner Buist asked why this project would be eligible under water quality. Director Hansen replied that if moving the transformer would remove a potential hazard to waters of the state, it would be eligible. However, the Company was originally applying for the replacement of transformers containing PCB's with transformers that did not contain PCB's. Neither state nor federal law mandate such replacement. Being required by state or federal law is one of the requirements for eligibility for pollution control tax relief.

In a related question, Chairman Petersen asked why PCB's were not identified as a hazardous waste under Oregon's rules. Director Hansen replied that PCB's are regulated federally under the Toxic Substance Control Act (TSCA) which by definition does not regulate hazardous wastes. Hazardous wastes are controlled only under RCRA, which gives only those wastes the technical definition "hazardous waste." The Department has applied to EPA for permission to regulate PCB's as a hazardous waste so they could come under RCRA requirements. EPA has not granted that request. Federal law does not clearly permit a state to adopt requirements that are more stringent than the federal standard and thereby potentially frustrate the removal of PCB's throughout the Nation.

In response to Chairman Petersen, Director Hansen replied that PCB's were hazardous and it was merely the technical terminology of which federal act they fall under. Chairman Petersen commented that this would tend to confuse the public and the Department needed to be careful so the public does not get the impression that PCB's are not hazardous.

It was MOVED by Commissioner Bishop, seconded by Commissioner Brill, and passed unanimously that the Director's Recommendation be approved.

PUBLIC FORUM:

No one appeared.

AGENDA ITEM D: Request for Authorization to Hold a Public Hearing on the Construction Grants Management and Priority List for FY86.

This item is a request for authorization to hold a public hearing on the priority system and list for allocating federal grants to construct sewage treatment facilities.

The draft priority list is presently being compiled and will be mailed to all cities and counties on May 8. The public hearing is planned to be held on June 10.

Although federal funds have not yet been authorized or appropriated by Congress, the Department expects that the funding level of approximately $27 million for Oregon will be continued for FY86.

Director's Recommendation

Based on the summation in the staff report, the Director recommends that the Commission authorize a public hearing to solicit public comment on the FY86 priority list and management system to be held on June 10, 1985. All testimony entered into the record by 5 p.m. on June 12, 1985, will be considered by the Commission.

It was MOVED by Commissioner Bishop, seconded by Commissioner Buist, and passed unanimously that the Director's Recommendation be approved.

Chairman Petersen asked how this would affect any special funding for East Multnomah County. Harold Sawyer of the Department's Water Quality Division, replied that because of the federal deadline on this list, the Department proposed to prioritize needs as best it could at this time because the decision on the threat to drinking water in East Multnomah County would be made after the deadline. Depending on when the decision is made, a request could be made to either modify this list, or put the project on the next list.

Director Hansen emphasized the Department did not want to disrupt any smaller projects which had been moving up the list and waiting for funding.

In response to Commissioner Brill, Mr. Sawyer said he did not know at this time what effect the Federal sanctions in the Medford area would have on sewer funding.

Commissioner Denecke asked who traditionally appear at public hearings on this matter. Mr. Sawyer replied that it was mostly local governments commenting on either their position on the list, or asking to be put on the list. The hearing summary the Commission would receive would reflect any corrections made as a result of public comment, Mr. Sawyer said.

Commissioner Denecke said he assumed that Congress would not reduce below last year's funding. Mr. Sawyer said the Department had no reason to believe the amount would be reduced. He said the Clean Water Act was up for reauthorization by Congress, and some adjustment could be made at that time. One of the things Congress could do in this process, Mr. Sawyer continued, was to change the formula that is used for allocating dollars; taking the $2.4 billion and dividing it differently among the states and territories. Therefore, there could be some adjustment in the dollars Oregon receives out of that, but the Department does not expect it at this point.

Director Hansen informed the Commission that President Reagan's administration had proposed phasing this program out but at the present time the program appears to be holding flat.

AGENDA ITEM E: Request for Authorization to Hold a Public Hearing to Amend OAR 340-25-315, Veneer and Plywood Manufacturing Operations, to include Emission Standards for Veneer Dryers Located in Special Problem Areas.

This requests authorization to hold a public hearing to amend the rules for veneer and plywood manufacturing operations. The proposed amendments would extend specific emission standards for veneer dryers to include dryers located in special problem areas. An additional part of the amendment would delete an outdated reference to implementation of veneer dryer air emission compliance.

Director's Recommendation

Based on the summation in the staff report, the Director recommends that the Commission authorize a hearing to consider modifying the Veneer and Plywood Manufacturing Operations Regulation to include veneer dryers located within special problem areas and to delete the dated requirement for submittal of a program and time schedule for emission control equipment installations.

Commissioner Buist commented that the "blue haze" emissions are carcinogenic, and inquired if the Department considered the emissions to be reactive hydrocarbons. She also asked how, and in what quantity they are emitted, and how controlled. Tom Bispham of the Department's Air Quality Division, replied that "blue haze" was volatile hydrocarbons--naturally occurring organics in the woods--and although he did not have specifics on the quantities with him, the Department did have data for every mill in the state. Lloyd Kostow of the Department's Air Quality Division, said emissions from uncontrolled veneer dryers were about 30 tons per year as opposed to about 10 tons per year for controlled dryers. Mr. Kostow said the visible opacity standard was an easy way to regulate. In order to control fugitive emissions, he continued, the Department needed to assure that the doors on the veneer dryers were properly sealed and a visible inspection was the best way to assure this. Stack emissions could be controlled with a scrubber system.

Commissioner Buist asked at what frequency someone was measuring the emissions from these dryers. Mr. Bispham said that monitoring frequency varied from plant to plant according to their individual permit requirements. Some plants may be required to monitor every shift. Mr. Kostow said wood-fired dryers were difficult to bring into compliance and may have more stringent regulations applied to them than others.

In response to Commissioner Denecke, Mr. Bispham said that the proposed standards were the same in special areas as in other areas.

Chairman Petersen asked what the difference was between Highest and Best Practicable Control Technology (HBPCT) and Best Available Control Technology (BACT). Mr. Kostow replied that BACT comes from the Federal Clean Air Act and applies to new sources, HBPCT is from the DEQ rules and can be the same as BACT--meaning the highest level of control presently available in common use. Chairman Petersen asked if companies have a good idea of what these terms mean. Mr. Bispham said the Department meets with companies to establish appropriate controls and the companies are well aware of what is required. Misunderstanding of terms has not been a problem, he said.

In response to a question from Chairman Petersen about the difference in cost between a baghouse and a scrubber, Mr. Kostow said that in looking for emission controls that will meet standards, companies may choose the most cost-effective method they want, as long as it is technically feasible. The Department does not recommend one method over another, but would advise if it thought a chosen control might not work. In any event, a company is free to choose whatever control technology they feel will do the job.

Mr. Kostow emphasized that at the present all types of controls for veneer dryers have problems; there is no perfect control system.

In a related matter, Commissioner Denecke asked if the new owners of Mt. Mazama were complying with standards. Mr. Kostow replied that The Murphy Company, the new owners, were purchasing the plant from Oregon Bank and have funding for pollution control equipment. However, they need to operate for awhile to get cash flow. The Department agreed to let them do that if controls were installed quickly. Mr. Kostow assured the Commission that the plant was on its way to compliance, but it may take several months, and the Department would be watching their progress.

Commissioner Buist asked if the Lane Regional Air Pollution Authority (LRAPA) rules were the same as DEQ's. Mr. Bispham replied that they were the same, or in some cases more stringent than DEQ rules. Mr. Bispham also informed the Commission that LRAPA was having some funding problems. They receive funding from the cities and county, along with the state, and their resources are gone and they are looking for increases from the cities and county. Even though LRAPA seems to have solved their problems, Mr. Bispham continued, if they should fold, DEQ would have to take over their air quality control efforts in Lane County.

It was MOVED by Commissioner Buist, seconded by Commissioner Denecke, and passed unanimously that the Director's Recommendation be approved.

AGENDA ITEM F: Informational Report: Review of FY86 State/EPA Agreement and Opportunity for Public Comment.

The State/EPA Agreement is the contractual document which outlines what work the state will perform during Fiscal Year 86 supported partially by federal dollars.

Identified interested parties were notified and the public was offered the opportunity to comment on the draft of the agreement at this meeting.

Director's Recommendations

It is recommended that the Commission:

1. Provide opportunity for public comment on the draft State/EPA Agreement; and

2. Provide staff its comments on the policy implications of the draft agreement.

No one appeared to testify on this matter.

Commissioner Bishop, referring to the charts in the document indicating sources of emissions in nonattainment areas which reflected 1981 data, asked what the current status was, especially for the Medford/Ashland area. Tom Bispham, of the Department's Air Quality Division, replied that woodheating was now a larger contributor to the particulate problem, and industry was a smaller contributor. Medford/Ashland was now in attainment for ozone. Mr. Bispham said the final document would contain data updated to 1983.

Commenting on news reports that there appears to be more of a problem with Superfund cleanup sites than originally thought, Commissioner Buist asked if Oregon had a larger problem than anticipated. Michael Downs of the Department's Hazardous and Solid Waste Division, replied that Superfund deals with past disposal practices, and based on staff surveys, Oregon was not in bad shape. Other than staff time, Mr. Downs continued, DEQ was not presently using state money for Superfund sites. At some future time the state will have to match EPA funds for them to proceed further. For example, with the United Chrome site in Corvallis which is on public property, the state will have to match approximately $500,000 to $1 million from some sort of supplemental funds for the cleanup to be completed.

The Commission accepted this informational report.

AGENDA ITEM G: Status Report and Proposed Amendments to the Portland International Airport Noise Abatement Program.

In August 1983, the Commission approved the noise abatement program for the Portland International Airport. In that approval, the Commission required a review of the program.

Staff evaluation of the program concluded that significant noise reduction (almost a 50% reduction of people exposed) has been achieved by the program. However, some aspects of the plan have been somewhat delayed. Therefore, the Department is recommending amendments to update the implementation schedule of these items.

Director's Recommendation

Based on the summation in the staff report, it is recommended that the Commission approve the amended implementation schedule dates for the following elements of the Portland International Airport Noise Abatement Program:

1. Visual River Approach to Runway 28R and 28L shall be implemented by October 31, 1985.

2. The revisions to the Portland Noise Overlay Zone ordinance shall be pursued by the Port of Portland.

3. The Lemon Island houseboat moorage shall be relocated by January 31, 1986.

4. The noise insulation program for homes within the Ldn 70 decibel contour shall be initiated by April 30, 1986, subject to federal grant approval.

5. The proposed legislation required in the plan shall be pursued by the Port of Portland with the 1985 Legislative Assembly.

The Commission noted they had received written testimony from Roger S. Parsons, member of the Noise Abatement Advisory Committee, Outer East Multnomah County, concerned with the implementation schedule for the "River Visual Approach" procedure in the Portland Airport noise abatement plan. When the Commission approved the plan on August 19, 1983, this procedure was scheduled to be implemented by mid-1984. The schedule has now slipped to a proposed October 1985 date. Mr. Parsons wants the airport to use an interim procedure until the final procedure is in place.

Mr. John Newell of the Port of Portland appeared in support of the staff report. He showed charts indicating reductions in noise affected areas since the plan had been implemented. Mr. Newell indicated they were ahead of schedule as noisy planes were being replaced sooner than anticipated. He said the impacted area was 13% smaller, and affected 87,000 less population--almost one-half.

Regarding the "River Visual Approach" procedure on the north runway, Mr. Newell said that presently pilots are instructed to intercept the final approach course beyond eight miles and make a straight-in approach, with the north runway being predominant for arrivals when landing to the west. The north runway pattern has very little direct community overflight, except from the eight to ten mile point. The "River Visual Approach" in the plan would bring the aircraft out much further beyond the residential areas to a point out in the Columbia River, intercept the River, then follow the river down to the airport. Mr. Newell said the FAA had cited three factors why they felt implementation of this procedure should be delayed. The first is a recent FAA air traffic control order which outlines specific requirements in order to achieve a charted visual procedure such as this. Secondly, he continued, the procedure, without using a navigational aid installed at the airport, cannot be flown at night because pilots must be able to visually identify the turn point, Reed Island in the Columbia River. This island is visible during the day but blends into the shoreline at night. However, the procedure will be able to be used at night once the navigational aid is installed. The third reason, Mr. Newell said, is the workload impact on the controllers because of the verbal instructions they would have to give.

Chairman Petersen asked what the impact would be if the aircraft were turned on approach closer in than eight miles. Mr. Newell replied that several years ago pilots were turning closer in, but it generated a lot of complaints because the area is so built up. At eight miles out they are not turning over heavily populated residential areas.

Commissioner Brill asked if there were any zoning ordinances that would prevent further population density in the area north of the runway. Multnomah County has an ordinance, Mr. Newell said, that would prohibit any rezoning of property in the area to residential without the builder granting a noise easement to the Port of Portland, and also requires the builder to file with the county a noise disclosure statement to warn buyers. He said the City of Portland was working on updating a similar ordinance.

Commissioner Buist said it had been her experience that most of the problem was caused by military aircraft. Mr. Newell said there was no federal noise standard for military aircraft as there is for commercial, however the military has cooperated with the noise abatement plan at the Portland Airport. In response to another question by Commissioner Buist, Mr. Newell said there was no phase-out planned for military aircraft at the Portland Airbase, however they do not fly after 10 p.m. unless it is a national emergency, or they are testing (which occurs a few times a year).

Chairman Petersen asked about Mr. Parsons' suggestion for an interim approach procedure. Mr. Newell replied that the Port is reevaluating the military flight patterns and it may be possible to shift them out of the south to the north. But it was doubtful that any interim River Visual Approach Procedure could be implemented because of the FAA review process. The Port would be in support of an interim procedure if one was possible.

It was MOVED by Commissioner Denecke, seconded by Commissioner Bishop, and passed unanimously that the Director's Recommendation be approved.

AGENDA ITEM H: Proposed Adoption of Amendments to the Vehicle Inspection Program Operating Rules (OAR 340-24-300 through 24-350).

This item contains proposed amendments to the Vehicle Inspection Program rules.

1. The extension of a special test procedure, currently limited to 1981 through 1983 Ford vehicles to include through the 1985 model year and also to include 1984 through 1986 Honda Prelude automobiles.

2. The adoption of provisions to provide for alternative criteria for vehicle owners when factory pollution control equipment or acceptable alternatives are unavailable due to discontinuation of parts inventory.

3. A modification of the calibration frequency requirements for licensed self-inspecting fleets resulting in an increase over the once a month minimum.

4. A provision which would limit noise inspections to the Portland tri-county area.

5. The addendum to the report requests that the Director be given authority to establish specific noise test standards. This is similar to the structure used in the gaseous emissions standards section.

In addition to these proposed rule changes, the report contains the summary of the public hearing of February 19, 1985. Besides the rule amendments, testimony was received on the appropriateness of including both heavy duty diesel vehicles and motorcycles into the testing program. The staff will be conducting studies to develop appropriate test methods and estimate emission benefit for these vehicle classes. It is projected that the Department will report back to the Commission prior to May 1986 on these two subjects.

Director's Recommendation

Based upon the summation in the staff report, it is recommended that the proposed rule modifications be adopted. The effective date of these rule changes would be April 29, 1985.

Chairman Petersen asked why noise testing was excluded from the proposed program for the Medford area. Director Hansen replied that in the City of Portland, the Commission was specifically requested by citizens to include noise testing in the vehicle inspection program, and that the Department would expect to do the same if petitioned by the people in Medford. Commissioner Brill suggested it was appropriate to take one problem at a time in Medford.

Regarding the proposed amendment which would delegate to the Director the establishment of standards, Chairman Petersen asked what the legality of that would be. Arnold Silver, Assistant Attorney General, replied that authority could not be delegated to the Director to adopt standards that the law states the Commission should adopt. Chairman Petersen then asked why it was necessary to delegate to the Director the power to set specific standards as opposed to asking the Commission to set those standards. Director Hansen replied that there were certain classes of vehicles which were manufactured to be louder than Commission standards allow. When faced with such a factual situation, he continued, the Director would establish a procedure that basically allowed for the same policy direction the Commission had given the Department.

Director Hansen did not believe that all those classes of vehicles could be identified at this time so that the Commission could set those standards. Ron Householder of the Department's Vehicle Inspection Program, said that the Department was not sure at this time that these vehicles would not meet the existing standards, but if it was determined that they would not without some extraordinary action on the part of the vehicle owner, then the Department would be in conflict with the intent of the regulations, and the need to respond to the vehicle owner in a timely manner. Chairman Petersen said he understood the need for speed in some cases. However, the Commission had adopted interim emergency rules in other cases and was wondering why this would be different. Chairman Petersen was also concerned about the legal authority for such delegation, and even if the legal authority was there, if it was a good policy decision.

Director Hansen responded that ORS 467.060(2) does specifically say that the Commission may by rule delegate to the Department of Environmental Quality on such conditions as the Commission may find appropriate the power to grant a variance and to make findings required by ..." Even though the Commission may not choose to use it, the legal authority was there.

At the request of Director Hansen, Mr. Householder told the Commission the Department hoped under this procedure to handle the few vehicle cases that come up, but will have to be dealt with in a timely manner when they are discovered. Unfortunately, it is very difficult to discover these vehicle classes ahead of time. Once those problem vehicle classes are discovered, he continued, rule changes would be brought to the Commission.

It was MOVED by Commissioner Buist, seconded by Commissioner Bishop, and passed unanimously that the Director's Recommendation, including the amendment, be approved.

AGENDA ITEM I: Approval of Amendments to Lane Regional Air Pollution Authority Rules for Air Conveying Systems as a Revision of the State Implementation Plan.

Lane Regional Air Pollution Authority has revised its air conveying system rule relating to particulate emissions. The Department has reviewed this rule change and has concluded that it meets all applicable state regulations. Therefore, the Department recommends approval of this rule change and direct the Department to submit the revised rule to EPA as a State Implementation Plan revision.

Director's Recommendation

It is recommended that the EQC approve LRAPA's rule revision for air conveying systems based on a finding that they are equal to or more stringent than state rules, and further, that the EQC direct the Department to submit the revised rule to EPA as a SIP revision.

It was MOVED by Commissioner Bishop, seconded by Commissioner Buist, and passed unanimously that the Director's Recommendation be approved.

AGENDA ITEM J: Proposed Facilities and Time Schedule to Remove or Alleviate Condition Alleged Dangerous to Public Health at 842-952 Connecticut Court, SE, near Salem, Marion County, Oregon; Certification of Approval to Health Division in Accordance with ORS 431.720.

In this item the Commission is requested to review a preliminary plan, specifications and time schedule from Marion County and determine if they are adequate to remove or alleviate conditions alleged dangerous to public health near Salem.

The Commission's approval is needed before the Health Division holds hearings and makes a finding as to whether a health hazard actually exists. (This procedure differs with city health hazard annexations where the Commission's approval is requested after health hazard findings are made.)

Director's Recommendation

Based upon findings in the summation in the staff report, it is recommended that the Commission approve the proposal of Marion County, certify said approval to the Health Division, and inform Marion County of said approval.

Commissioner Brill asked if the City also needed to approve this. Harold Sawyer of the Department's Water Quality Division, replied that in this case the applicable agency was a service district which contracts with the City of Salem for waste treatment. Under the forced annexation proceedings in general, he continued, this can occur without the consent of the City.

It was MOVED by Commissioner Denecke, seconded by Commissioner Bishop, and passed unanimously that the Director's Recommendation be approved.

There being no further business, the formal meeting was adjourned.

After the formal meeting Director Hansen reviewed for the Commission the status of legislative activity. The Commission then had lunch with several members of the Legislature.

Respectfully submitted,

Carol A. Splettstaszer
EQC Assistant

CAS:d

THESE MINUTES ARE NOT FINAL UNTIL APPROVED BY THE EQC

MINUTES OF THE SPECIAL MEETING

OF THE

OREGON ENVIRONMENTAL QUALITY COMMISSION

March 22, 1985

On March 22, 1985, a special meeting of the Oregon Environmental Quality Commission convened in room 1400 of the Department of Environmental Quality offices at 522 SW Fifth Avenue in Portland, Oregon. Present were Commission Chairman James Petersen, Vice Chairman Arno Denecke, and Commission Members Mary Bishop, Wallace Brill and Sonia Buist. Present on behalf of the Department were Michael Downs, acting for Director Fred Hansen, and several members of the Department staff.

The purpose of this special meeting was to continue deliberation and reach a decision in the matter of the denial of 401 Certification to the Lava Diversion Project, Federal Energy Regulatory Commission No. 5205, Deschutes County.

The Commission's Order and a verbatim transcript of this meeting are made a part of the record in this matter.

For the record, Chairman Petersen disqualified himself. One of Chairman Petersen's partners in his law practice is the Bend City Attorney. Subsequent to the Commission's May 8, 1985 meeting when this item was originally discussed, Chairman Petersen discovered that the City of Bend had joined with Deschutes County in the FERC proceeding and was supporting Deschutes County's position in delaying the application on this particular item. While Chairman Petersen did not believe there was a conflict, in the interest of avoiding any appearance of impropriety and questions because of that relationship to the City of Bend, he decided not to vote or to participate in the argument or deliberations. The rest of the Commission agreed with Chairman Petersen's decision.

The following decisions were made by the Commission.

1. Sustain the Department's decision to deny 401 Certification under the Clean Water Act for failure to comply with the requirements of Oregon land use law.
   Vote: Commissioners Bishop, Brill, Buist - yes
   Commissioner Denecke - no
   Chairman Petersen - abstain

2. Deny Deschutes County intervenor status.
   Vote: Commissioners Bishop, Brill, Buist, Denecke - yes
   Chairman Petersen - abstain

3. The Commission will not rule one way or the other on the allegation that, as a matter of law, Deschutes County erred in failing to grant a statement of land use compatibility.
   Vote: Commissioners Bishop, Brill, Buist, Denecke - yes
   Chairman Petersen - abstain

4. The Department did not violate the consistency standard of Oregon Administrative Procedure Act, Section 183.484, by not requiring previous 401 applicants to obtain a Statement of Compatibility.
   Vote: Commissioners Bishop, Brill, Buist, Denecke - yes
   Chairman Petersen - abstain

There being no further business, the meeting was adjourned.

Respectfully submitted,

Carol A. Splettstaszer
EQC Assistant

CAS:y

BEFORE THE ENVIRONMENTAL QUALITY COMMISSION
OF THE STATE OF OREGON

In Re:	)	
	)	
LAVA DIVERSION PROJECT	)	STIPULATED FACTS,
FERC No. 5205	)	CONCLUSIONS OF LAW,
Deschutes County, Oregon	)	AND FINAL ORDER

BACKGROUND

A hearing in the above case was held before the Environmental Quality Commission on March 3, 1985 in Portland, Oregon. Oral argument was heard at that time. The appellant, Arnold Irrigation District, was represented by Neil R. Bryant, and the respondent, the Department of Environmental Quality (DEQ) was represented by Michael B. Huston. Just prior to the hearing, Deschutes County submitted a memorandum to the commission raising additional issues and requesting intervenor party status. The commission continued deliberation on these matters to a meeting on March 22, 1985. The decisions reached by the commission at that time are set forth below.

STIPULATED FACTS

General Energy Development, Inc. (GED) holds Permit No. 5205 issued by the Federal Energy Regulatory Commission (FERC) to plan and design the Lava Diversion Hydro Project on the Deschutes River south of Bend, Oregon. Arnold Irrigation District is involved with GED in the development of this project. By letter of November 23, 1983, GED applied to DEQ for water quality compliance certification pursuant to § 401 of the Clean Water

I HEREBY CERTIFY THAT THE ABOVE IS A FULL AND TRUE COPY OF THE ORIGINAL AND OF THE WHOLE THEREOF

JAMES E. PETERSEN, Chairman

Act. 33 USC 1341. Before FERC may issue a license to construct, GED must provide FERC this certification of compliance.

By letter of November 27, 1984, DEQ denied issuance of certification on two bases. First, eight areas of potential technical water quality impacts were not adequately addressed by GED. These areas were addressed to the satisfaction of DEQ prior to the commission's hearing and were not at issue. Second, GED did not supply DEQ a statement of compatibility with the Deschutes County comprehensive plan and land use ordinances. Oregon law requires that any state agency decision which affects land use be made in accordance with local comprehensive plans and ordinances. DEQ's land use procedures provide the statement of compatibility shall be issued by the appropriate local government. Since GED did not supply DEQ this statement of compatibility, § 401 certification of compliance was withheld.

In December of 1983, Deschutes County passed ordinance Nos. 83-058 and 83-066. These ordinances limit hydroelectric development on the Deschutes River pending the completion of a study assessing the cumulative impacts upon the environment of the numerous planned projects. Until the study is completed (expected to occur in July of 1985), any project must meet the special standards of the ordinance and obtain a conditional use permit. GED requested a statement of compatibility from Deschutes County, but the request was denied.

By letter of December 14, 1984, Arnold Irrigation District appealed DEQ's denial of certification to the commission pursuant

to OAR chapter 340, division 11. To meet obligations with FERC, the appellant requested that expedited procedures be used in this case. Appellant agreed to limit the case to the three issues discussed below and to waive all rights to contested case procedures, except the right to appeal any final commission decision to the courts. With the agreement of the department, the case was briefed and submitted to the commission under such expedited procedures.

CONCLUSIONS OF LAW

For the reasons stated below and in the department's brief, the commission adopted the following conclusions:*

1. DEQ properly denied § 401 Clean Water Act certification for failure to comply with the requirements of Oregon land use law.

2. DEQ did not violate the consistency standard of ORS 183.484 by not requiring previous § 401 certification applicants to obtain statements of compatibility.

3. The commission will not rule one way or the other on the allegation that, as a matter of law, Deschutes County erred in failing to grant a statement of land use compatibility.

4. Deschutes County's petition to intervene is denied. Therefore, it is not necessary or appropriate to rule on the additional issues raised by the county.

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*Chairman Petersen abstained from all voting in this matter to avoid any appearance of conflict resulting from his law firm's representation of the City of Bend in related matters.

The first conclusion was adopted by a 3-1 vote. Commissioner Denecke did not agree with the majority's opinion that DEQ properly denied GED's § 401 certification for failure to comply with the requirements of Oregon land use law, and therefore he voted "no." All other conclusions were adopted by a 4-0 vote.

OPINION

The commission holds the DEQ correctly denied GED § 401 compliance certification for failure to comply with the requirements of Oregon land use law.

§ 401(d) provides that § 401 certification shall set forth limitations and requirements necessary to assure compliance with appropriate requirements of state law. Oregon land use law requires DEQ to consider comprehensive plans and land use ordinances when making decisions affecting land use. DEQ's coordination agreement with the Land Conservation Development Commission (LCDC), required by statute, lists § 401 certification as a decision affecting land use. Thus, § 401 allows states to consider "other appropriate requirements of state law", and in Oregon, land use considerations have been directly linked to water quality considerations.

DEQ did not violate the consistency standard of ORS 183.484. In this case, DEQ adequately explained by letter to GED the reasons for its change in procedure. The change in procedure was designed to correct prior inadequate or erroneous procedures.

The commission will not decide whether Deschutes County erred in failing to grant GED a statement of compatibility. The commission has no basis in this case to question the county's interpretation of its own plan and ordinances. Appellant's concerns are more appropriately addressed to the county or other forums.

Deschutes County's petition to intervene is denied. The county's interests were adequately represented by DEQ and the outcome sought by the county has been achieved. Therefore, the county's interests have not been prejudiced by denial of party status. Because the county is denied party status, it is not necessary or appropriate to rule on the additional issues raised by the county.

ORDER

The decision of DEQ to deny issuance of certification of compliance with § 401 of the Clean Water Act to GED for failure to obtain a statement of compatibility with the Deschutes County comprehensive plan and ordinances from Deschutes County is hereby affirmed.

DATED April 16, 1985.

James E. Petersen
Chairman James Petersen

NOTICE: You are hereby entitled to judicial review of this order. Judicial review may be obtained by filing a petition for review within 60 days from the service of this order. Judicial review is pursuant to the provisions of ORS 183.482.

CERTIFICATE OF MAILING

I hereby certify that I served the foregoing Stipulated Facts, Conclusions of Law, and Final Order on:

Neil Bryant
Gray, Fancher, Holmes & Hurley
Attorneys at Law
P. O. Box 1151
Bend, Oregon 97709-1151

Richard L. Isham
Deschutes County Legal Counsel
Deschutes County Courthouse Annex
Bend, Oregon 97701

Michael Huston
Assistant Attorney General
500 Pacific Building
520 S.W. Yamhill
Portland, Oregon 97204

on the 17th day of April, 1985, by mailing to them true and correct copies thereof, certified by me as such.

/s/ James E. Petersen

VICTOR ATIYEH
GOVERNOR

Environmental Quality Commission

Mailing Address: BOX 1760, PORTLAND, OR 97207
522 SOUTHWEST 5th AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

MEMORANDUM

TO: Environmental Quality Commission

FROM: Director

SUBJECT: Agenda Item No. B, June 7, 1985, EQC Meeting

March and April 1985 Program Activity Report

Discussion

Attached are the March and April 1985 Program Activity Reports.

ORS 468.325 provides for Commission approval or disapproval of plans and specifications for construction of air contaminant sources.

Water Quality and Solid Waste facility plans and specifications approvals or disapprovals and issuance, denials, modifications and revocations of air, water and solid waste permits are prescribed by statutes to be functions of the Department, subject to appeal to the Commission.

The purposes of this report are:

1. To provide information to the Commission regarding the status of reported activities and an historical record of project plan and permit actions;

2. To obtain confirming approval from the Commission on actions taken by the Department relative to air contaminant source plans and specifications; and

3. To provide logs of civil penalties assessed and status of DEQ/EQC contested cases.

Recommendation

It is the Director's recommendation that the Commission take notice of the reported program activities and contested cases, giving confirming approval to the air contaminant source plans and specifications.

Fred Hansen

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My414
229-6484
Attachment

DEPARTMENT OF ENVIRONMENTAL QUALITY

Monthly Activity Report

March and April 1985

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DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Air Quality, Water Quality, Hazardous and Solid Waste Divisions
(Reporting Unit)

March 1985
(Month and Year)

SUMMARY OF PLAN ACTIONS

	Plans Received		Plans Approved		Plans Disapproved		Plans
	Month	FY	Month	FY	Month	FY	Pending
Air							
Direct Sources	7	63	4	63	0	0	28
Small Gasoline Storage Tanks Vapor Controls	-	-	-	-	-	-	-
Total	7	63	4	63	0	0	28
Water							
Municipal	17	116	19	108	0	4	23
Industrial	6	49	4	47	0	0	15
Total	23	165	23	155	0	4	38
Solid Waste							
Gen. Refuse	4	32	1	24	-	-	18
Demolition	-	-	-	-	-	-	1
Industrial	2	23	1	19	-	-	11
Sludge	-	1	-	2	-	-	-
Total	6	56	2	45	-	-	30
Hazardous Wastes	1	7	-	6	-	-	1
GRAND TOTAL	37	291	29	269	-	4	97

MY413 (5/85)

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION

MONTHLY ACTIVITY REPORT
DIRECT SOURCES
PLAN ACTIONS COMPLETED

COUNTY	NUMBER	SOURCE	PROCESS DESCRIPTION	DATE OF ACTION	ACTION
DOUGLAS	014	GREGORY TIMBER RESOURCES	VENEER DRYER CONVERSION	02/26/85	APPROVED
	015		AIR SYSTEM MODIFICATION	02/21/85	APPROVED
WASHINGTON	029	HERVIN COMPANY	EXHAUST CONTROL SYSTEM	03/13/85	APPROVED
COLUMBIA	042	BOISE CASCADE CORP	NG-FIRED STEAM GENERATOR	03/20/85	APPROVED

TOTAL NUMBER QUICK LOOK REPORT LINES 4

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Air Quality Division (Reporting Unit) — March 1985 (Month and Year)

SUMMARY OF AIR PERMIT ACTIONS

	Permit Actions Received Month	Permit Actions Received FY	Permit Actions Completed Month	Permit Actions Completed FY	Permit Actions Pending	Sources Under Permits	Sources Reqr'g Permits
Direct Sources							
New	3	26	3	25	14		
Existing	0	23	7	29	14		
Renewals	10	130	15	134	105		
Modifications	5	21	3	52	12		
Total	18	200	28	240	145	1073	1122
Indirect Sources							
New	0	3	0	4	0		
Existing	0	0	0	0	0		
Renewals	0	0	0	0	0		
Modifications	0	1	0	1	0		
Total	0	4	0	5	0	228	228
GRAND TOTALS	18	204	28	245	145	1301	1350

Number of Pending Permits	Comments
36	To be reviewed by Northwest Region
8	To be reviewed by Willamette Valley Region
15	To be reviewed by Southwest Region
5	To be reviewed by Central Region
5	To be reviewed by Eastern Region
19	To be reviewed by Program Operations Section
45	Awaiting Public Notice
12	Awaiting end of 30-day Public Notice Period
145	

MAR.5 (8/79)
AA4407

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION

MONTHLY ACTIVITY REPORT
DIRECT SOURCES
PERMITS ISSUED

COUNTY	SOURCE	PERMIT NUMBER	APPL. RECEIVED	STATUS	DATE ACHIEVED	TYPE APPL.	PSEL
KLAMATH	NU-MIX CONCRETE	18 0043	02/26/85	PERMIT ISSUED	02/26/85	EXT	
MULTNOMAH	ROSS ISLAND SAND GRAVEL	26 1941	02/26/85	PERMIT ISSUED	02/26/85	RNW	
PORT.SOURCE	ROSEBURG SAND & GRAVEL	37 0126	02/26/85	PERMIT ISSUED	02/26/85	RNW	
PORT.SOURCE	MERIDIAN ROCK INC	37 0191	02/26/85	PERMIT ISSUED	02/26/85	MOD	
			02/26/85	PERMIT ISSUED	02/26/85	MOD	
COLUMBIA	ST HELENS ASPHALT INC	05 2588	03/06/85	PERMIT ISSUED	03/06/85	EXT	
MARION	TRUS JOIST CORP	24 3025	03/06/85	PERMIT ISSUED	03/06/85	NEW	
WASHINGTON	INTEL CORPORATION	34 2691	03/06/85	PERMIT ISSUED	03/06/85	EXT	
PORT.SOURCE	WARM SPRINGS CRSH & CNSTR	37 0332	03/06/85	PERMIT ISSUED	03/06/85	EXT	
CLACKAMAS	PARKER-NORTHWEST PAVING	03 1760	03/07/85	PERMIT ISSUED	03/07/85	RNW	
CLACKAMAS	CONSTRUCTION AGGREGATES	03 1919	03/07/85	PERMIT ISSUED	03/07/85	RNW	
CLACKAMAS	DEEP CREEK SAND & GRAVEL	03 2666	03/07/85	PERMIT ISSUED	03/07/85	EXT	
COLUMBIA	ELLSON CEDAR PRODUCTS INC	05 2584	03/07/85	PERMIT ISSUED	03/07/85	EXT	
GRANT	BLUE MOUNTAIN HOSPITAL	12 0020	03/07/85	PERMIT ISSUED	03/07/85	RNW	
LAKE	OSTRANDER CONSTRUCTION CO	19 0011	03/07/85	PERMIT ISSUED	03/07/85	RNW	
LINN	NORTH SANTIAM SAND&GRAVEL	22 6310	03/07/85	PERMIT ISSUED	03/07/85	RNW	
MULTNOMAH	NORWEST PUBLISHING CO	26 1892	03/07/85	PERMIT ISSUED	03/07/85	MOD	
POLK	VALLEY CONCRETE & GRAVEL	27 4095	03/07/85	PERMIT ISSUED	03/07/85	RNW	
POLK	DERRY WAREHOUSE CO	27 6008	03/07/85	PERMIT ISSUED	03/07/85	RNW	
UMATILLA	PENDLETON GRAIN GROWERS	30 0063	03/07/85	PERMIT ISSUED	03/07/85	RNW	
UNION	R-D MAC INC	31 0020	03/07/85	PERMIT ISSUED	03/07/85	RNW	
WASHINGTON	ALLEN FOREST PRODUCTS CO	34 2688	03/07/85	PERMIT ISSUED	03/07/85	EXT	
KLAMATH	GILCHRIST TIMBER CO.	18 0005	03/11/85	PERMIT ISSUED	03/11/85	RNW	
MULTNOMAH	ROSS ISLAND SAND & GRAVEL	26 3006	03/11/85	PERMIT ISSUED	03/11/85	RNW	
COOS	GEORGIA-PACIFIC RESINS C	06 0037	03/19/85	PERMIT ISSUED	03/19/85	NEW	
WASHINGTON	TIMBERBEST, INC	34 2680	03/19/85	PERMIT ISSUED	03/19/85	NEW	
MULTNOMAH	HERCULES INCORPORATED	26 1814	03/20/85	PERMIT ISSUED	03/20/85	RNW	
MULTNOMAH	BIRD & SON INC.	26 2043	03/21/85	PERMIT ISSUED	03/21/85	RNW	

TOTAL NUMBER QUICK LOOK REPORT LINES 29

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Water Quality Division (Reporting Unit) — March 1985 (Month and Year)

PLAN ACTIONS COMPLETED 23

County	Name of Source/Project /Site and Type of Same	Date of Action	Action
INDUSTRIAL WASTE SOURCES 4			
Tillamook	Steve Harris Dairy Manure Control System Tillamook	3-11-85	Approved
Tillamook	James Durrer Dairy Manure Control System Tillamook	3-11-85	Approved
Tillamook	Donald Wyss Manure Control Facility Tillamook	3-11-85	Approved
Benton	City of Philomath Filter Backwash Control System, Philomath	3-11-85	Approved

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Water Quality Division (Reporting Unit) — March 1985 (Month and Year)

PLAN ACTIONS COMPLETED 23

County	Name of Source/Project /Site and Type of Same	Date of Action	Action
MUNICIPAL WASTE SOURCES 19			
Douglas	Green Sanitary District Winston Maintenance Station	3-11-85	Provisional Approval
Douglas	Glendale Rex Morningstar Property	3-11-85	Provisional Approval
Lane	Cottage Grove Davidson Avenue Ext.	3-21-85	Provisional Approval
Clackamas	Oaklodge Sanitary Dist. Hidden Oaks Estates	3-21-85	Provisional Approval
Clackamas	Boring (CCSD) Collection, Treatment and Outfall	3-21-85	Provisional Approval
Clatsop	Westport Service Dist. Collection, Treatment and Outfall	3-25-85	Comments to Engineer
Umatilla	Echo Lagoon Sealing, Disinfection Facility and Outfall	3-27-85	Provisional Approval
Wasco	Rajneesh (Antelope) Diogenes Grove Treatment Facility	3-29-85	Comments to Engineer
Wasco	The Dalles E. 10th/Oregon Ave.	3-30-85	Provisional Approval
Wasco	The Dalles Old Durfur Rd./Thompson St.	3-30-85	Provisional Approval
Wasco	The Dalles E. 18th/Thompson St.	3-30-85	Provisional Approval
Lincoln	Waldport Norwood Hts., 2nd Ed.	3-30-85	Provisional Approval

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Water Quality Division (Reporting Unit) — March 1985 (Month and Year)

PLAN ACTIONS COMPLETED

County	Name of Source/Project /Site and Type of Same	Date of Action	Action
MUNICIPAL WASTE SOURCES (Cont.)			
Wasco	The Dalles E. 18th/Thompson St.	3-30-85	Provisional Approval
Lincoln	Waldport Norwood Hts., 2nd Ed.	3-30-85	Provisional Approval
Malheur	Ontario Eastside Dev. Project	3-30-85	Provisional Approval
Deschutes	Sunriver Fairway Point Village IV	3-30-85	Provisional Approval
Deschutes	Sunriver The Pines, Phase II	3-30-85	Provisional Approval
Deschutes	Sunriver Circle Four Ranch	3-30-85	Provisional Approval
Clackamas	Lake Oswego Carmon Oaks Ext.	3-30-85	Provisional Approval
Umatilla	Stanfield Rehabilitation of STP and Disinfection FAcility	4-1-85	Provisional Approval
Josephine	Redwood SSSD James Klapatch	4-8-85	Provisional Approval

SUMMARY OF ACTIONS TAKEN ON WATER PERMIT APPLICATIONS IN MAR 85

SOURCE CATEGORY &PERMIT SUBTYPE	NUMBER OF APPLICATIONS FILED — MONTH			NUMBER OF APPLICATIONS FILED — FISCAL YEAR			NUMBER OF PERMITS ISSUED — MONTH			NUMBER OF PERMITS ISSUED — FISCAL YEAR			APPLICATIONS PENDING PERMIT ISSUANCE (1)			CURRENT TOTAL OF ACTIVE PERMITS		
	NPDES	WPCF	GEN	NPDES	WPCF	GEN	NPDES	WPCF	GEN	NPDES	WPCF	GEN	NPDES	WPCF	GEN	NPDES	WPCF	GEN
DOMESTIC																		
NEW	0	0	0	1	8	2	0	1	1	3	5	4	1	7	0			
RW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
RWO	2	0	0	24	13	0	7	3	0	28	10	0	33	15	0			
MW	0	0	0	1	1	0	0	0	0	1	0	0	1	1	0			
MWO	1	0	0	13	4	0	0	1	0	6	4	0	6	0	0			
TOTAL	3	0	0	39	26	2	7	5	1	38	19	4	41	23	0	239	143	69
INDUSTRIAL																		
NEW	0	1	3	4	11	18	1	2	3	1	4	30	5	13	3			
RW	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0			
RWO	1	0	0	31	19	0	2	0	0	23	10	0	32	15	0			
MW	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0			
MWO	3	0	0	18	6	0	1	2	0	10	8	0	5	1	0			
TOTAL	4	1	3	54	36	18	4	4	3	35	22	30	43	29	3	172	142	269
AGRICULTURAL																		
NEW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
RW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
RWO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
MW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
MWO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	11	60
GRAND TOTAL	7	1	3	93	62	20	11	9	4	73	41	34	84	52	3	413	296	398

1) DOES NOT INCLUDE APPLICATIONS WITHDRAWN BY THE APPLICANT, APPLICATIONS WHERE IT WAS DETERMINED A PERMIT WAS NOT NEEDED, AND APPLICATIONS WHERE THE PERMIT WAS DENIED BY DEQ.

IT DOES INCLUDE APPLICATIONS PENDING FROM PREVIOUS MONTHS AND THOSE FILED AFTER 31-MAR-85.

NEW - NEW APPLICATION
RW - RENEWAL WITH EFFLUENT LIMIT CHANGES
RWO - RENEWAL WITHOUT EFFLUENT LIMIT CHANGES
MW - MODIFICATION WITH INCREASE IN EFFLUENT LIMITS
MWO - MODIFICATION WITHOUT INCREASE IN EFFLUENT LIMITS

CAT	PERMIT NUMBER	TYPE	SUB-TYPE	SOURCE ID	LEGAL NAME	CITY	COUNTY/REGION	DATE ISSUED	DATE EXPIRES
					GENERAL: FILTER BACKWASH				
DOM	200	GEN02	NEW	100048	PHILOMATH, CITY OF	PHILOMATH	BENTON /WVR	13-MAR-85	31-DEC-85
					GENERAL: PLACER MINING				
IND	600	GEN06	NEW	100056	BUCKNER, MAX		BAKER /ER	26-MAR-85	31-JUL-86
					GENERAL: SUCTION DREDGES				
IND	700	GEN07	NEW	100055	THOMPSON, MIKE		JACKSON /SWR	22-MAR-85	31-JUL-86
					GENERAL: OILY STORMWATER RUNOFF				
IND	1300	GEN13	NEW	68473	PENNZOIL COMPANY	PORTLAND	MULTNOMAH /NWR	28-MAR-85	31-JUL-88
					NPDES				
DOM	100036	NPDES	RWO	19821	COOS BAY, CITY OF	EMPIRE	COOS /SWR	01-MAR-85	30-NOV-89
DOM	100037	NPDES	RWO	34630	GRANTS PASS, CITY OF	GRANTS PASS	JOSEPHINE /SWR	01-MAR-85	30-NOV-89
DOM	100038	NPDES	RWO	73412	RAINIER, CITY OF	RAINIER	COLUMBIA /NWR	11-MAR-85	30-NOV-89
IND	100039	NPDES	NEW	100025	PORT OF PORTLAND	PORTLAND	MULTNOMAH /NWR	11-MAR-85	31-JAN-90

CAT	PERMIT NUMBER	TYPE	SUB-TYPE	SOURCE ID	LEGAL NAME	CITY	COUNTY/REGION	DATE ISSUED	DATE EXPIRES
IND	2791	NPDES	MWO	15810	CHAMPION INTERNATIONAL CORPORATION	DEE	HOOD RIVER/CR	20-MAR-85	30-APR-81
DOM	100044	NPDES	RWO	36646	HANSEN, HOMER P.	EUGENE	LINN /WVR	28-MAR-85	31-DEC-89
IND	100045	NPDES	RWO	42188	INTERNATIONAL PAPER COMPANY	GARDINER	DOUGLAS /SWR	28-MAR-85	30-NOV-89
DOM	100046	NPDES	RWO	96010	LARRANCE, ART	BUTTEVILLE	MARION /WVR	28-MAR-85	31-DEC-89
DOM	100047	NPDES	RWO	86840	SWEET HOME, CITY OF	SWEET HOME	LINN /WVR	28-MAR-85	31-JAN-90
IND	100048	NPDES	RWO	83345	SOUTHERN OREGON SALES, INC.	MEDFORD	JACKSON /SWR	28-MAR-85	31-MAR-90
DOM	100049	NPDES	RWO	17318	CLOVERDALE SANITARY DISTRICT	CLOVERDALE	TILLAMOOK /NWR	28-MAR-85	30-JUN-89
					WPCF				
DOM	3649	WPCF	MWO	76940	CAINE, PETER R.		KLAMATH /CR	01-MAR-85	31-JAN-88
DOM	3816	WPCF	NEW	97231	WILLAMETTE PASS SKI CORPORATION		KLAMATH /CR	01-MAR-85	28-FEB-89
IND	100035	WPCF	NEW	10106	BORDEN, INC.	LA GRANDE	UNION /ER	01-MAR-85	31-DEC-87
IND	3276	WPCF	MWO	97066	WILLAMETTE INDUSTRIES, INC.	BEND	DESCHUTES /CR	11-MAR-85	30-SEP-85
IND	100040	WPCF	NEW	93738	WARD, WARREN D.		DOUGLAS /SWR	15-MAR-85	31-JAN-90
IND	3787	WPCF	MWO	9584	STALEY, A. E. MANUFACTURING COMPANY	STANFIELD	UMATILLA /ER	20-MAR-85	31-DEC-88
DOM	100041	WPCF	RWO	77740	SALEM DEVELOPMENT, INC.	SALEM	MARION /WVR	28-MAR-85	31-MAR-90
DOM	100042	WPCF	RWO	90930	U. S. DEPARTMENT OF AGRICULTURE		JACKSON /SWR	28-MAR-85	31-JAN-90
DOM	100043	WPCF	RWO	5450	BAKER COUNTY	SUMPTER	BAKER /ER	28-MAR-85	31-AUG-89

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Hazardous and Solid Waste Division (Reporting Unit) — March 1985 (Month and Year)

SUMMARY OF SOLID AND HAZARDOUS WASTE PERMIT ACTIONS

	Permit Actions Received		Permit Actions Completed		Permit Actions Pending	Sites Under Permits	Sites Reqr'g Permits
	Month	FY	Month	FY			
General Refuse							
New	1	7	-	11	2		
Closures	1	2	2	8	7		
Renewals	2	24	5	12	29		
Modifications	1	3	1	4	1		
Total	5	36	8	35	39	168	168
Demolition							
New	-	-	-	-	-		
Closures	-	1	-	2	2		
Renewals	-	-	-	-	-		
Modifications	-	1	-	1	-		
Total	-	2	-	3	2	12	12
Industrial							
New	1	5	1	5	4		
Closures	1	3	2	8	5		
Renewals	1	8	-	7	12		
Modifications	-	3	-	2	1		
Total	3	19	3	22	22	100	100
Sludge Disposal							
New	-	-	-	1	-		
Closures	-	-	-	2	-		
Renewals	-	-	-	4	-		
Modifications	-	-	-	-	-		
Total	-	-	-	7	-	17	17
Hazardous Waste							
New	1	5	-	3	7		
Authorizations	128	1185	128	1185	-		
Renewals	-	-	-	-	1		
Modifications	-	-	-	-	-		
Total	129	1190	128	1188	8	15	19
GRAND TOTALS	137	1247	139	1255	71	312	316

SC2166.B
MAR.5S (11/84)

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Hazardous and Solid Waste Division (Reporting Unit) — March 1985 (Month and Year)

PERMIT ACTIONS COMPLETED

County	Name of Source/Project /Site and Type of Same	Date of Action	Action
Clatsop	Astoria Landfill Existing facility	3/6/85	Permit amended
Klamath	Weyerhaeuser, Klamath Falls Existing facility	3/18/85	Closure permit issued
Curry	Champion International Jerry's Flat Landfill Closed facility	3/21/85	Closure permit issued
Curry	Nesika Beach T.S. Existing transfer site	3/21/85	Permit renewed
Lincoln	S. Lincoln Landfill Existing facility	3/21/85	Permit renewed
Columbia	Cheryl J. Davis Panoply Farms New woodwaste site	3/26/85	Letter authorization issued
Curry	Agness Transfer Station Existing facility	3/28/85	Permit renewed
Klamath	Keno Transfer Station Existing facility	3/28/85	Permit renewed
Wallowa	Lostine Transfer Station Existing facility	3/28/85	Permit renewed
Jackson	Butte Falls Landfill Existing facility	3/29/85	Closure permit application rejected
Yamhill	Whiteson Landfill Closed facility	3/29/85	Closure permit application rejected

SC2166.D
MAR.6 (5/79)

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Hazardous and Solid Waste Division (Reporting Unit) — March 1985 (Month and Year)

HAZARDOUS WASTE DISPOSAL REQUESTS

CHEM-SECURITY SYSTEMS, INC., GILLIAM CO.

WASTE DESCRIPTION

Date	Type	Source	Quantity Present	Quantity Future
TOTAL REQUESTS GRANTED - 127				
OREGON - 45				
3/4	Butoxyethanol, aminoethanol, water, inert absorbent material	Electronic co.	1 drum	0
3/4	Small PCB capacitors less than 3 lb. each	Electric util.	1 drum	0
3/4	Battery casings with lead oxide, mud, rubber & plastic	Battery recyc.	2000 tons	0
3/4	Heavy metal hydroxide sludge	Electroplating	0	24 drums
3/4	Fenthion-O, O-dimethyl O-(3-methyl-4-(methylthio phenyl) phosphorothioate, aromatic petroleum distillate, inert ingredients	Chemical co.	2 drums	0
3/4	Metal (Zr, Mg, Ti, Cb, Hf) scrap & fines	Mfg. of non-ferrous metals	0	7 cu.yd.
3/4	Hydrofluoric acid, water	Electronic co.	0	416,000 gal.
3/4	Hydraulic fluid, tetrachlorophenol, pentachlorophenol	Lumber preserv.	1 drum	0

SC2166.E
MAR.15 (1/82)

Date	Type	Source	Quantity Present	Quantity Future
3/4	Water, pentachlorophenol (Permatox 180)	Lumber preserv.	10.000 gal.	0
3/4	Waste sulfuric acid & caustic soda	Vehicle maintnc.	0	1 drum
3/4	Sodium sulfite, hydroquinone, boric acid, sulfuric acid, acetic acid, hydroxylamine sulfate, formaldehyde, methanol, organo silicon fluid	Photo films processing	0	1 drum
3/4	Soil, Permatox 180 pentachlorophenol-contaminated clothing	Lumber preserv.	10 cu.yd.	0
3/4	Contaminated wood residue containing tetrachlorophenol, pentachlorophenol	Lumber anti-stain oper.	0	60 drums
3/4	Spill cleanup material consisting of phosphorous oxychloride, absorbent material and broken inert containers	Electronic co.	1 drum	0
3/4	Ethyl alcohol, methyl alcohol, acetone, pigment residue, resin residue, mineral spirit, lead octoate, 111-trichloroethane	Mfg. of business forms	4 drums	0
3/4	Xylene, Diazinon, Kelthane, Malathion, Dursban, 2,4-D, salts, esters and water	Chemical co.	0	1500 gal.
3/4	Octachloro-4,7-methanol-tetrahydrindane, petroleum distillate, inert ingred.	Chemical co.	1 drum	0
3/4	Xylene, Diazinon, Kelthane, Malathion, Dursban, 2,4-D, salts, esters and water	Chemical co.	0	26 drums

Date	Type	Source	Quantity Present	Quantity Future
3/4	Red powder epoxy paint consisting of cadmium, epoxy resin, silica & calcium carbonate and dicyan-diamide	Mfg. of chain saw	1 drum	0
3/4	Mixture of trichloro-ethylene, 2-propanol alcohol, acetone & methanol	Electronic co.	5 drums	0
3/4	Spill cleanup material consisting of phos-phorous oxychloride, absorbent material and broken inert containers	Electronic co.	1 drum	0
3/5	Plating bath contain-ing water, ammonium persulfate, copper sulfate	Electroplating	0	10 drums
3/5	Less than 500 ppm PCB in core and coils remainder metal, paper	Mfg. of elect. equipment	36,000 lb.	0
3/5	Fire debris contami-nated with misc. pesticides	Greenhouse fire	5 cu.yd.	0
3/5	Plating bath contain-ing water, hydrogen peroxide, sulfuric acid, copper sulfate	Electroplating	0	12 drums
3/7	Copper oxide, zinc oxide, chromium-HEX, aluminum oxide	Ammonia plant	8 cu.yd.	0
3/11	Water, HF	Semicond. mfg.	0	100 drums
3/11	Pyrethrins, piperonyl butoxide, ether petroleum distillate, inert ingredients, 0,0-diethyl-0-(2-iso-propyl-6-methyl-4-pyrimidinyl) phosphoro-thioate (Diazinon)	Chemical co.	1 drum	0

Date	Type	Source	Quantity Present	Quantity Future
3/14	Sand, Zep Presto carb cleaner consisting of water (10%), methylene chloride (85%), wetting agent (4%), crysilic acid (1%)	Automotive repair shop	110 gal.	0
3/14	Lab chemicals in lab pack including propylene glycol, methyl ethyl ketone, pyridine, methyl glycol, F04 diffusion silicone and ethylene glycol monomethyl ether	Food processing	1 drum	0
3/14	Permatox 180 mixed with wood residue (waste pentachlorophenol)	Lumber anti-stain treatment	2100 gal.	0
3/14	Permatox 180 mixed with water, residue (waste pentachlorophenol)	Lumber anti-stain treatment	2100 gal.	0
3/14	Misc. chemicals	Dept. store	0	200 gal.
3/14	Herbicide lab samples containing clay, eptam, roneet, vernam	Chemical co.	10 drums	0
3/14	Waste sludge containing acrylic and vinyl resins, solvents: butyl cellosolve, MEK, n-butyl alcohol, toluene, xylene, cellosolve, acetate, mineral spirits (MIBK)	Can production	0	150 drums
3/21	Off-spec. Eptam technical product	Chemical co.	10 drums	0
3/21	Misc. chemicals (lab pack)	Dept. store	0	1200 gal.
3/21	PCB-contaminated transformers containing less than 500 ppm	Electronic co.	0	10,000 cu.ft.
3/21	PCB-contaminated transformers and oil	State agency	150 gal.	0

Date	Type	Source	Quantity Present	Quantity Future
3/21	Chromic acid sludge consisting of water, silicon, chromium, sulfur, lead, calcium, sodium, iron, barium, aluminum	Electroplating	0	2 drums
3/21	Dirt, clay contaminated with 10-24 gal. of tetrachlorophenol	Spill	200 cu.yd.	0
3/26	Sodium methyl dithiocarbanate, clay, paper	Chemical co.	1 drum	0
3/26	Chlorobenzene, inert absorbent	Electronic co.	0	24 drums
3/26	Lab packs	Electronic co.	0	1 drum
3/26	Water, trichloroethylene, SDA 30 ethanol, isopropyl alcohol, elemental silicon, sodium silicates, trichlorotrifluoroethane, aluminum sulfate, acetone	Chemical co.	0	31,000 gal.
WASHINGTON - 52				
3/4	Waste mercury metal, contaminated rags, fluorescent bulbs	Defense Dept.	0	25 drums
3/4	Clothing contaminated with lead	" "	0	20 drums
3/4	Spent electrolytic pot lining containing F^-, CN, C, Al_2O_3, Al	Aluminum co.	0	3900 tons
3/4	Limestone, lignin pitch, carboxy methyl cellosolve, Al powder, Na_2CO_3	Construction	17,900 lb.	0
3/4	Mercury batteries containing water, mild boric acid solution	Defense Dept.	0	100 drums

Date	Type	Source	Quantity Present	Quantity Future
3/4	Metal preservative containing paraffinic mineral oil, lead tallate, sodium pertolium sulfenate, barium dinonyl naphthanline sulforate	Defense Dept.	0	50 drums
3/4	Tank degreaser containing cresylic acid, potassium hydroxide, fatty acids, methylene chloride, methyl alcohol, sodium nitrite, water	Degreasing	0	500 gal.
3/4	Bromochloromethane	Defense Dept.	0	50 drums
3/4	Beryllium compound-contaminated clothing, rags, polyethylene bags	" "	0	10 drums
3/4	Sodium arsenate, inert	TSD facility	0	2 drums
3/4	Acetonitrile & water, acetonitrile, water & tetrahydrofuran, allyl alcohol, N-butyl methacrylate, carbon disulfide, dimethyldichlorosilane, dimethylformamide, dioxane, ethylene glycol monomethyl ether, glycol methacrylate, methanol waste, nitromethane, pyridine	Cancer research	0	12 drums
3/4	Drained PCB transformer	Heavy equipment dealer	1 unit	0
3/4	Pentachlorophenol, other chlorophenols, inert ingredients	Defense Dept.	0	10 drums
3/4	Trichloroethylene	Shipping lines	0	20 drums
3/4	Nonleaking capacitors, 500 ppm polychlorinated biphenyls	City gov't.	0	50 drums

Date	Type	Source	Quantity Present	Quantity Future
3/4	Contaminated Nalco product #7763 composed mainly of copolymer of acrylamide & sodium acrylate	Chemical co.	0	300 gal.
3/4	PCB oil more than 500 ppm	Marine equip. supplier	1 drum	0
3/4	Chrome sludge containing water, chrome, calcium, sodium, aluminum, iron	Electronic co.	0	3000 gal.
3/4	Used nickel/cadmium batteries, various sizes	Defense Dept.	0	50 drums
2/19	Wastewater treatment plant sludge consisting of water, oil, grease, lime, calcium sulfate & metal hydroxides	Wastewater treatment	10,000 cu.yd.	3,000 cu.yd.
3/5	Diphenylmethane, diisocyanate, polyisocyanate	Aluminum co.	0	30 drums
3/5	Shop cleaning containing trichloroethylene & chlorinated solvents	Transport. co.	0	200 drums
3/5	Water, sodium carbonate sodium chloride, concrete pieces, nickel chloride, iron chloride	Chemical co.	0	4000 gal.
3/7	Spill cleanup debris containing petroleum oil, vermiculite, "floor dry"	Oil spill	0	8 drums
3/7	Lab pack	Chemistry lab	1 drum	0
3/7	Methylene chloride	Aluminum co.	0	10 drums
3/7	Tank bottom sludges containing chromated copper arsenate, chromated zinc chloride, mud, sand, water, wood chips & sawdust	Wood preserv. co.	0	48 drums

Date	Type	Source	Quantity Present	Quantity Future
3/7	Rinse water from chlorinated hydrocarbon tank cars	Chemical co.	0	50.000 gal.
3/7	Lab packs containing poisonous liquids & solids	Chemistry lab	4 drums	0
3/11	Perchloroethylene, photopolymers, synthetic rubber, paraffin wax, acrylates, metharcralates, organic fillers, plastic bags	Recycling	0	180 drums
3/11	Lab packs-flammable liquids	College	5 drums	0
3/11	Tetraethyl pyrophosphate, other ethyl phosphates	Agricultural co.	1 gal.	0
3/11	Tetraethyl pyrophosphate, other ethyl phosphates	" "	2 gal.	0
3/11	Endrin: hexachloro-epoxyoctahydro-enro, endo-dimethanonapthalene, petroleum hydrocarbons, inert	" "	3 gal.	0
3/11	(Carbaryl) 1-naphthyl n-methyl, carbamate, inert	" "	350 lb.	0
3/11	Thiodan: (endosulfan) 6,7,8,9.10.10-hexachloro-1,5,5a,6,9,9a-hexahydro-6,9-methano-2,4.3-benzo(e)-dioxathiepin-3-oxide, Zineb: zinc ethylene bisdithio, carbamate, sulfur, inert	" "	100 lb.	0
3/11	Diethyl diphenyl dichloroethane, related reaction products, aromatic petroleum solvents, inert	" "	33 gal.	0

Date	Type	Source	Quantity Present	Quantity Future
3/11	Brake cleaning sludge containing water & volatile organica, non-colatile organics, silica S102, iron FeO, zinc ZNO, copper CuD, lead PbO, sodium Na_2O, tetrachloroethylene	City gov't.	0	12 drums
3/11	Waterglass batch containing silica sand, soda carbonate, calcium carbonate, nepheline syenite, zinc oxide, sodium bichromate	Mfg. colored flat glass	0	50 drums
3/11	Spent trichloroethylene and sludge consisting of greases, oils & dirt	Degreasing	0	550 gal.
3/11	Dewatered lime sludge from electroplating solution consisting of heavy metals, lime, ferrous sulfate, caustic (NaOH), water and cement dust	Waste treatment	0	1600 tons
3/11	Wastewater treatment plant sludge with contaminated soil, concrete & debris	" "	0	5400 tons
3/14	Coater plant capsule waste containing water, polyurethane capsules, polyvinyl alcohol, dye intermediates, aliphatic hydrocarbon, aromatic hydrocarbon, latex, starch, vegetable gum	Paper co.	0	50,000 gal.
3/14	Magnesium pellets coated with potassium chloride, magnesium chloride & trace of sodium chloride, dirt & gravel	Track spill accident	100 drums	0

Date	Type	Source	Quantity Present	Quantity Future
3/20	PCB solids: steel cabinets contaminated with PCB	Electric util.	130 cu.yd.	0
3/20	Sodium hydroxide, aluminum, metal sulfides, heavy metals, dirt, debris, water	Waste treatment co.	0	180,000 gal.
3/20	PCB solids: concrete contaminated with PCB	Electric util.	50 tons	0
3/26	PCB solids: steel cabinets contaminated with PCB	Electric util.	130 cu.yd.	0
3/26	PCB solids: concrete contaminated with PCB	Electric util.	50 tons	0
3/26	Diatomaceous earth, metals, halogenated hydrocarbons	Acetylene production	8 drums	0
3/26	MEK sludge	Electronic co.	0	25 drums
3/26	Sulfuric acid, heavy metals	Electroplating	0	10 drums
OTHER STATES - 30				
3/4	Damaged mercury bulbs containing mercury, glass bulbs, electrical wiring, metal framing, wood, boxes, paper, electrical motors & electrical equipment	Public trans. system (B.C.)	400 cu.ft.	0
3/4	Misc. flammables & combustibles (lab pack)	Envir. gov't. agency (B.C.)	1 drum	0
3/4	Pentachlorophenol-contaminated solid waste containing wood, paper, cardboard & equipment	" "	1 drum	0
3/4	Lab packs	" "	540 gal.	0

Date	Type	Source	Quantity	
			Present	Future
3/4	Soil contaminated with DDT	Public works dept. (B.C.)	30 cu.yd.	0
3/4	Lab waste containing sulfate, chloride, nitrate nitrite, phosphate ORT, sulfuric acid, hydrochloric acid, nitric acid	University (Alberta)	0	1 drum
3/4	Xylene, DDT waste	Public works dept. (B.C.)	270 gal.	0
3/4	Lab packs	University (B.C.)	0	9 drums
3/4	Water, iron, aluminum, machine cutting fluid, filter paper & vermiculite	Electronic co. (ID)	0	6000 gal.
3/4	Polynuclear aromatic hydrocarbons	Chemical co. (UT)	0	1650 gal.
3/4	Water, iron, aluminum, machine cutting fluid, vermiculite	Electronic co. (ID)	0	6000 gal.
3/4	Floor sweepings containing organophosphates, carbamates, chlorinated hydrocarbons, petroleum distillates, misc. herbicides, synthetic pyrethroids, spray oil diluents and absorbents	Chemical co. (ID)	0	5 drums
3/4	Misc. waste sulfide & cyanide chemicals in lab packs designated as DRUM # K011, K175 & K062A	Envir. gov't. agency (B.C.)	3 drums	0
2/1	Waste flammable liquid poisonous, N.O.S. with dirt, rock, sand, debris, iron scale & water	Oil co. (WY)	30 tons	0

Date	Type	Source	Quantity	
			Present	Future
3/5	Cleanup material containing wood, plastic, paint chips, sulfur powder, clothing, brushes	Defense Dept. (B.C.)	2 drums	0
3/5	Waste asbestos pipe insulation	Chemical co. (AK)	0	2000 cu.ft.
3/7	Inert plastic resin from mold core release	Defense Dept. (Guam)	0	50 drums
3/11	PCB-contaminated solids containing dirt, gravel, concrete rebar	Research facil. (ID)	0	2000 tons
3/14	Lab packs-combustible	University (ID)	0	150 cu.ft.
3/14	Hydrocarbons (saturated paraffins)	Defense Dept. (Guam)	0	50 drums
3/21	Mercury-contaminated rags, gloves, sorbents	Electric util. (B.C.)	0	10 drums
3/21	Lab waste containing sulfate, chloride, nitrate nitrite, phosphate ORT, sulfuric acid, hydrochloric acid, nitric acid	University (Alberta)	0	5 drums
3/21	Lab waste containing sulfate, chloride, nitrate nitrite, phosphate ORT, sulfuric acid, hydrochloric acid, nitric acid	University (Alberta)	0	5 drums
3/21	Lab waste containing sulfate, chloride, nitrate nitrite, phosphate ORT, sulfuric acid, hydrochloric acid, nitric acid	University (Alberta)	0	5 drums

Date	Type	Source	Quantity	
			Present	Future
3/21	Lab waste containing sulfate, chloride, nitrate nitrite, phosphate ORT, sulfuric acid, hydrochloric acid, nitric acid	University (Alberta)	0	2 drums
3/26	Diethylenetriamine, sodium hydroxide, water	Defense Dept. (AK)	0	400 gal.
3/26	Diethylenetriamine, sodium hydroxide, water	Defense Dept. (AK)	0	400 gal.
3/26	Aluminum sulfate, water	Defense Dept. (AK)	0	100 gal.
3/26	Ammonium thiosulfate, acetic acid, water	Defense Dept. (AK)	0	100 gal.
3/26	Water, earth/rust, sawdust	Oil refinery (MT)	0	33 drums
3/26	$C_{10}H_6Cl_8$, 1,2,4,5,6-7,8,8-octachloro-4,7-methano-3a,4,7,7a-tetrahydroindane	Defense Dept. (AK)	0	1000 gal.

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Noise Control Program (Reporting Unit) — March, 1985 (Month and Year)

SUMMARY OF NOISE CONTROL ACTIONS

Source Category	New Actions Initiated		Final Actions Completed		Actions Pending	
	Mo	FY	Mo	FY	Mo	Last Mo
Industrial/ Commercial	10	91	1	48	165	156
Airports				11	1	1

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Noise Control Program (Reporting Unit) — March, 1985 (Month and Year)

FINAL NOISE CONTROL ACTIONS COMPLETED

County	Name of Source and Location	Date	Action
Multnomah	Riviera Plaza Building Portland	3/85	In Compliance

CIVIL PENALTY ASSESSMENTS

DEPARTMENT OF ENVIRONMENTAL QUALITY
1985

CIVIL PENALTIES ASSESSED DURING MONTH OF MARCH, 1985:

Name and Location of Violation	Case No. & Type of Violation	Date Issued	Amount	Status
Lang and Gangnes Corporation dba/ Medply White City, Oregon	AQ-SWR-85-15 Numerous violations of company air contaminant discharge permit and Department's rules.	3/4/85	$3,050	Contested 3/20/85.
Sessler, Inc. White City, Oregon	AQOB-SWR-85-12 Open burned prohibited materials.	3/11/85	$350	Paid 3/20/85.
Central Dock Co. Coos Bay, Oregon	AQOB-SWR-84-155 Open burned prohibited materials and disposing of solid waste at unauthorized site.	3/21/85	$750	Awaiting response to notice.
Melvin L. Collatt dba/Roto Rooter Coos Bay, Oregon	SS-SWR-85-23 Installed a holding tank without first obtaining a permit.	3/21/85	$100	Paid 3/29/85.
Peter O. Haney Portland, Oregon	AQOB-NWR-84-163 Open burned prohibited materials on several days.	3/28/85	$1,500	Served on 4/11/85. Awaiting response to notice.

VAK:b
GB4538

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Air Quality, Water Quality, Hazardous and Solid Waste Divisions
(Reporting Unit)

April 1985
(Month and Year)

SUMMARY OF PLAN ACTIONS

	Plans Received		Plans Approved		Plans Disapproved		Plans Pending
	Month	FY	Month	FY	Month	FY	
Air							
Direct Sources	6	69	8	71	0	0	26
Small Gasoline Storage Tanks Vapor Controls	-	-	-	-	-	-	-
Total	6	69	8	71	0	0	26
Water							
Municipal	15	131	7	115	0	4	32
Industrial	7	56	8	55	0	0	13
Total	22	187	15	170	0	4	45
Solid Waste							
Gen. Refuse	4	36	2	26	-	-	20
Demolition	1	1	1	1	-	-	1
Industrial	3	26	1	20	-	-	12
Sludge	-	1	-	2	-	-	-
Total	8	64	4	49	-	-	34
Hazardous Wastes	1	8	2	8	-	-	-
GRAND TOTAL	37	328	29	298	-	4	105

MY417 (5/85)

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION

MONTHLY ACTIVITY REPORT
DIRECT SOURCES
PLAN ACTIONS COMPLETED

COUNTY	NUMBER	SOURCE	PROCESS DESCRIPTION	DATE OF ACTION	ACTION
MULTNOMAH	013	NICOLAI COMPANY	WOOD WASTE SYSTEM	03/10/34	APPROVED
MULTNOMAH	048	LAKESIDE INDUSTRIES	PLANT REPLACEMENT	03/12/85	APPROVED
LINN	053	WILLAMETTE INDUSTRIES	VACUUM PICKUP FANS	04/01/85	APPROVED
DOUGLAS	059	INTERNATIONAL PAPER	TRS EMISSION CONTROL	04/04/85	APPROVED
JACKSON	061	BOISE CASCADE CORP	REPLACE PLANAR SYS. ETC	03/22/85	APPROVED
BENTON	062	EVANS PRODUCTS CO	NEW & UPGRADE EQUIPMENT	04/09/85	APPROVED
MULTNOMAH	064	BATEMAN	MULT. INC. CHAMBER	03/25/85	APPROVED
DOUGLAS	076	INTERNATIONAL PAPER	CO MONITORS	04/11/85	APPROVED

TOTAL NUMBER QUICK LOOK REPORT LINES 8

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Air Quality Division (Reporting Unit) — April 1985 (Month and Year)

SUMMARY OF AIR PERMIT ACTIONS

	Permit Actions Received Month	Permit Actions Received FY	Permit Actions Completed Month	Permit Actions Completed FY	Permit Actions Pending	Sources Under Permits	Sources Reqr'g Permits
Direct Sources							
New	6	32	2	27	17		
Existing	3	26	2	31	15		
Renewals	18	133	10	144	118		
Modifications	4	25	3	55	14		
Total	31	231	17	257	164	1077	1109
Indirect Sources							
New	4	7	0	4	4		
Existing	0	0	0	0	0		
Renewals	0	0	0	0	0		
Modifications	1	2	0	1	1		
Total	5	9	0	5	5	228	232
GRAND TOTALS	36	240	17	262	169	1305	1341

Number of Pending Permits	Comments
37	To be reviewed by Northwest Region
12	To be reviewed by Willamette Valley Region
18	To be reviewed by Southwest Region
6	To be reviewed by Central Region
5	To be reviewed by Eastern Region
22	To be reviewed by Program Operations Section
28	Awaiting Public Notice
36	Awaiting end of 30-day Public Notice Period
164	

AP61/MAR.5
SB:p

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION

MONTHLY ACTIVITY REPORT
DIRECT SOURCES
PERMITS ISSUED

COUNTY	SOURCE	PERMIT NUMBER	APPL. RECEIVED	STATUS	DATE ACHIEVED	TYPE APPL.	PSEL
MULTNOMAH	WESTERN LINE CORP	26 3123	03/26/85	PERMIT ISSUED	03/26/85	NEW	
DOUGLAS	GUIDO ENTERPRISES INC	10 0115	04/02/85	PERMIT ISSUED	04/02/85	RNW	
LINN	SOUTHWEST FOREST INDUSTR.	22 0513	04/02/85	PERMIT ISSUED	04/02/85	RNW	
WASHINGTON	SIEMENS-ALLIS, INC.	34 2661	04/02/85	PERMIT ISSUED	04/02/85	RNW	
CLACKAMAS	P.E.D. MANUFACTURING LTD	03 2505	04/12/85	PERMIT ISSUED	04/12/85	RNW	
MULTNOMAH	THOMAS INDUSTRIES INC	26 2435	04/12/85	PERMIT ISSUED	04/12/85	RNW	
MULTNOMAH	GUNDERSON INC	26 2944	04/12/85	PERMIT ISSUED	04/12/85	MOD	
TILLAMOOK	COAST WIDE READY MIX	29 0034	04/12/85	PERMIT ISSUED	04/12/85	RNW	
YAMHILL	CASCADE STEEL MILLS	36 5034	04/12/85	PERMIT ISSUED	04/12/85	RNW	
BAKER	BAKER VALLEY RENDERING	01 0012	04/18/85	PERMIT ISSUED	04/18/85	NEW	
BAKER	L&S WOODWORTH INC	01 0034	04/18/85	PERMIT ISSUED	04/18/85	EXT	
COLUMBIA	O & T PROPERTIES INC	05 2585	04/18/85	PERMIT ISSUED	04/18/85	EXT	
DESCHUTES	DAW FOREST PRODUCTS CO	09 0003	04/18/85	PERMIT ISSUED	04/18/85	MOD	
GRANT	BLUE MTN FOREST PRODUCTS	12 0022	04/18/85	PERMIT ISSUED	04/18/85	MOD	
MULTNOMAH	DARIGOLD FEED CO	26 3010	04/18/85	PERMIT ISSUED	04/18/85	RNW	
MULTNOMAH	FUEL PROCESSORS INC	26 3048	04/18/85	PERMIT ISSUED	04/18/85	RNW	
UNION	BOISE CASCADE CORPORATION	31 0006	04/18/85	PERMIT ISSUED	04/18/85	RNW	

TOTAL NUMBER QUICK LOOK REPORT LINES 17

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Water Quality Division (Reporting Unit) — April 1985 (Month and Year)

PLAN ACTIONS COMPLETED 15

County	Name of Source/Project /Site and Type of Same	Date of Action	Action
MUNICIPAL WASTE SOURCES 7			
Jackson	Eagle Point Phase I Upgrade (Preliminary)	4-30-85	Verbal Comments to Engineer
Clatsop	Windjammer Treatment & Disposal System	4-30-85	Verbal Comments to Engineer
Umatilla	Fred's Market at Milton-Freewater Sand Filter	4-3-85	Comments to Region
Linn	Scio Wastewater Treatment Facility Upgrading	4-10-85	Provisional Approval
Josephine	Harbeck-Fruitdale S.D. Southridge Subdivision	4-15-85	Provisional Approval
Clackamas	Lake Oswego Palisades Terrace IV	4-26-85	Provisional Approval
Douglas	Myrtle Creek South Second Sewer Reconstruction	4-15-85	Provisional Approval

MAR.3 (5/79)

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Water Quality Division (Reporting Unit) — April 1985 (Month and Year)

PLAN ACTIONS COMPLETED - 15

County	Name of Source/Project /Site and Type of Same	Date of Action	Action
INDUSTRIAL WASTE SOURCE 8			
Washington	Tektronix, Inc. Gray Water Chromium Analyzer Beaverton	4-4-85	Approved
Marion	Stayton Canning Irrigation System Stayton	4-8-85	Approved
Malheur	Ontario Animal Products Rapid Infiltration Bed System Ontario	4-17-85	Approved
Douglas	Svaneholm, Inc. Winery Waste Water Pond, Drain	4-17-85	Approved
Multnomah	Portland General Electric Oil Spill Containment Facilities, Riverview Substation	4-18-85	Approved
Clackamas	Portland General Electric Oil Spill Containnment Facilities, Faraday Substation	4-18-85	Approved
Clackamas	Portland General Electric Oil Spill Containment Facilities, Canemah Substation	4-18-85	Approved
Douglas	International Paper Biological Secondary Treatment and Associated Equipment Gardiner	4-25-85	Approved

MAR.3 (5/79)

SUMMRY-F

SUMMARY OF ACTIONS TAKEN
ON WATER PERMIT APPLICATIONS IN APR 85

6 MAY 85

SOURCE CATEGORY &PERMIT SUBTYPE	NUMBER OF APPLICATIONS FILED						NUMBER OF PERMITS ISSUED						APPLICATIONS PENDING PERMIT ISSUANCE (1)			CURRENT TOTAL OF ACTIVE PERMITS		
	MONTH			FISCAL YEAR			MONTH			FISCAL YEAR								
	NPDES	WPCF	GEN	NPDES	WPCF	GEN	NPDES	WPCF	GEN	NPDES	WPCF	GEN	NPDES	WPCF	GEN	NPDES	WPCF	GEN
DOMESTIC																		
NEW	1	1	0	2	9	2	0	2	0	3	7	4	2	6	0			
RW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
RWO	2	3	0	25	16	0	6	9	0	34	19	0	28	9	0			
MW	1	0	0	2	1	0	0	0	0	1	0	0	2	1	0			
MWO	1	1	0	14	5	0	0	0	0	6	4	0	7	1	0			
TOTAL	5	5	0	43	31	2	6	11	0	44	30	4	39	17	0	240	145	69
INDUSTRIAL																		
NEW	0	0	3	4	13	21	1	0	0	2	4	33	4	14	3			
RW	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0			
RWO	3	3	0	34	21	0	5	4	0	28	14	0	30	13	0			
MW	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0			
MWO	1	1	0	19	7	0	2	0	0	12	8	0	4	1	0			
TOTAL	4	4	3	58	41	21	8	4	0	43	26	33	39	28	3	172	142	272
AGRICULTURAL																		
NEW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
RW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
RWO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
MW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
MWO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	11	60
GRAND TOTAL	9	9	3	101	72	23	14	15	0	87	56	37	78	45	3	414	298	401

1) DOES NOT INCLUDE APPLICATIONS WITHDRAWN BY THE APPLICANT, APPLICATIONS WHERE IT WAS DETERMINED A PERMIT WAS NOT NEEDED, AND APPLICATIONS WHERE THE PERMIT WAS DENIED BY DEQ.

IT DOES INCLUDE APPLICATIONS PENDING FROM PREVIOUS MONTHS AND THOSE FILED AFTER 30-APR-85.

NEW - NEW APPLICATION
RW - RENEWAL WITH EFFLUENT LIMIT CHANGES
RWO - RENEWAL WITHOUT EFFLUENT LIMIT CHANGES
MW - MODIFICATION WITH INCREASE IN EFFLUENT LIMITS
MWO - MODIFICATION WITHOUT INCREASE IN EFFLUENT LIMITS

CAT	PERMIT NUMBER	TYPE	SUB-TYPE	SOURCE ID	LEGAL NAME	CITY	COUNTY/REGION	DATE ISSUED	DATE EXPIRES
					NPDES				
IND	3266	NPDES	MWO	58890	MURPHY PLYWOOD COMPANY	SUTHERLIN	DOUGLAS /SWR	15-APR-85	31-OCT-85
IND	3516	NPDES	MWO	87693	TEXACO REFINING AND MARKETING INC.	PORTLAND	MULTNOMAH /NWR	15-APR-85	30-APR-87
DOM	100059	NPDES	RWO	3300	ARCH CAPE SERVICE DISTRICT	ARCH CAPE	CLATSOP /NWR	17-APR-85	31-JAN-90
IND	100060	NPDES	RWO	33415	GILCHRIST TIMBER COMPANY	GILCHRIST	KLAMATH /CR	17-APR-85	30-APR-90
IND	100061	NPDES	RWO	34355	GRAY & COMPANY - WESTNUT DIVISION	DUNDEE	YAMHILL /WVR	17-APR-85	31-MAR-90
IND	100062	NPDES	RWO	58217	MOORE ORCHARDS, INC.	HOOD RIVER	HOOD RIVER/CR	17-APR-85	31-MAR-90
DOM	100063	NPDES	RWO	90940	U. S. DEPARTMENT OF AGRICULTURE - UMPQUA NATIONAL FOREST	STEAMBOAT	DOUGLAS /SWR	17-APR-85	31-MAR-90
DOM	100064	NPDES	RWO	90964	U. S. DEPARTMENT OF AGRICULTURE - UMPQUA NATIONAL FOREST	WOLF CREEK JCT	DOUGLAS /SWR	17-APR-85	31-MAR-90
IND	100065	NPDES	RWO	32300	GATX TANK STORAGE TERMINALS CORPORATION	PORTLAND	MULTNOMAH /NWR	24-APR-85	31-MAR-90
IND	100066	NPDES	NEW	100021	OREGON TRAIL MUSHROOM COMPANY	VALE	MALHEUR /ER	25-APR-85	28-FEB-90
DOM	100067	NPDES	RWO	81118	SHORELINE SANITARY DISTRICT	CULLABY LAKE	CLATSOP /NWR	25-APR-85	31-JAN-90
DOM	100068	NPDES	RWO	96151	WESTON, CITY OF	WESTON	UMATILLA /ER	25-APR-85	31-JAN-90
DOM	100074	NPDES	RWO	58707	MT. ANGEL, CITY OF	MT ANGEL	MARION /WVR	29-APR-85	30-SEP-89
IND	100075	NPDES	RWO	460	ACME TRADING & SUPPLY COMPANY	PORTLAND	MULTNOMAH /NWR	29-APR-85	30-NOV-89
					WPCF				
IND	100050	WPCF	RWO	84890	STEINFELD'S PRODUCTS COMPANY	SCAPPOOSE	COLUMBIA /NWR	15-APR-85	31-JUL-89
DOM	100051	WPCF	NEW	100036	DELAWARE PACIFIC CORPORATION		CLACKAMAS /NWR	15-APR-85	31-JAN-87

CAT	PERMIT NUMBER	TYPE	SUB-TYPE	SOURCE ID	LEGAL NAME	CITY	COUNTY/REGION	DATE ISSUED	DATE EXPIRES
IND	100052	WPCF	RWO	59417	MULTNOMAH PLYWOOD CORPORATION	ST HELENS	COLUMBIA /NWR	15-APR-85	31-JAN-90
DOM	100053	WPCF	RWO	88776	UNITED STATES DEPT OF AGRICULTURE	GOVERNMENT CAMP	CLACKAMAS /NWR	15-APR-85	31-DEC-89
DOM	100054	WPCF	RWO	90982	U. S. ARMY CORPS OF ENGINEERS	COTTAGE GROVE	LANE /WVR	15-APR-85	31-JAN-90
DOM	100055	WPCF	RWO	21565	CULVER, CITY OF	CULVER	JEFFERSON /CR	17-APR-85	31-MAR-90
IND	100056	WPCF	RWO	59198	MUIRHEAD CANNING CO.	THE DALLES	WASCO /CR	17-APR-85	31-MAR-90
DOM	100057	WPCF	RWO	74280	REDMOND, CITY OF	REDMOND	DESCHUTES /CR	17-APR-85	30-JUN-90
DOM	100058	WPCF	RWO	93863	WASCO, CITY OF	WASCO	SHERMAN /CR	17-APR-85	31-AUG-89
DOM	100069	WPCF	RWO	27115	OREGON BANK, THE	CRESWELL	LANE /WVR	25-APR-85	31-JAN-90
IND	100070	WPCF	RWO	27874	ESTACADA ROCK PRODUCTS INC.	ESTACADA	CLACKAMAS /NWR	25-APR-85	31-JAN-90
DOM	100071	WPCF	RWO	33396	GILCHRIST TIMBER COMPANY	GILCHRIST	KLAMATH /CR	25-APR-85	30-APR-90
DOM	100072	WPCF	RWO	63015	OCHOCO WEST SANITARY DISTRICT	PRINEVILLE	CROOK /CR	25-APR-85	30-APR-90
DOM	100073	WPCF	RWO	64719	OREGON STATE DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION		UMATILLA /ER	25-APR-85	31-AUG-89
DOM	100076	WPCF	NEW	100046	RAJNEESH NEO-SANNYAS INTERNATIONAL COMMUNE	RAJNEESHPURAM	WASCO /CR	29-APR-85	31-AUG-89

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Hazardous and Solid Waste Division (Reporting Unit) — April 1985 (Month and Year)

SUMMARY OF SOLID AND HAZARDOUS WASTE PERMIT ACTIONS

	Permit Actions Received Month	Permit Actions Received FY	Permit Actions Completed Month	Permit Actions Completed FY	Permit Actions Pending	Sites Under Permits	Sites Reqr'g Permits
General Refuse							
New	-	7	-	11	2		
Closures	2	4	1	9	8		
Renewals	6	30	3	15	32		
Modifications	-	3	-	4	1		
Total	8	44	4	39	43	178	178
Demolition							
New	-	-	-	-	-		
Closures	1	2	-	2	3		
Renewals	-	-	-	-	-		
Modifications	-	1	-	1	-		
Total	1	3	-	3	3	12	12
Industrial							
New	-	5	-	5	4		
Closures	2	5	-	8	7		
Renewals	3	11	1	8	14		
Modifications	-	3	-	2	1		
Total	5	24	1	23	26	102	102
Sludge Disposal							
New	-	-	-	1	-		
Closures	-	-	-	2	-		
Renewals	-	-	-	4	-		
Modifications	-	-	-	-	-		
Total	-	-	-	7	-	15	15
Hazardous Waste							
New	-	5	-	3	7		
Authorizations	78	1263	78	1263	-		
Renewals	-	-	-	-	1		
Modifications	-	-	-	-	-		
Total	78	1268	78	1266	8	15	19
GRAND TOTALS	92	1339	83	1338	80	322	326

SC2216.B
MAR.5S (11/84)

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Hazardous and Solid Waste Division (Reporting Unit)

April 1985 (Month and Year)

PERMIT ACTIONS COMPLETED

County	Name of Source/Project /Site and Type of Same	Date of Action	Action
Multnomah	Oregon Waste Management Existing processing facility	4/1/85	Permit renewed
Wallowa	Wallowa Transfer Station Existing facility	4/11/85	Permit renewed
Columbia	Coates Tire Site Existing facility	4/15/85	Permit renewed
Jefferson	Box Canyon Landfill Existing facility	4/24/85	Permit renewed
Polk	Valsetz Landfill Closed facility	4/25/85	Closure permit issued

SC2216.D
MAR.6 (5/79)

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Hazardous and Solid Waste Division (Reporting Unit) — April 1985 (Month and Year)

HAZARDOUS WASTE DISPOSAL REQUESTS

CHEM-SECURITY SYSTEMS, INC., GILLIAM CO.

WASTE DESCRIPTION

Date	Type	Source	Quantity Present	Quantity Future
TOTAL REQUESTS GRANTED - 75				
OREGON - 15				
4/3	Clothing, rags, bulk bags, soil contaminated with trichloroethylene	Electronic co.	5 drums	0
4/3	Leaded gasoline, sodium hydroxide, water	Tank cleaning contractor	10,000 gal.	0
4/3	Tank bottoms, sodium hydroxide, water, leaded gasoline	" "	6 drums	0
4/9	Floor dry, visqueen, protective clothing, stained wood, rags, sorbent pads, cardboard	Railroad co.	8-55 gal. drums 1-85 gal. drum	0
4/9	Rags, gloves, plastic bottles, solid pieces of claycoat, paper contaminated with toluene	Wood product co.	0	48 drums
4/9	Water, isopropanol, ammonia, urea, methylene diisocyanate	Paper co.	1 drum	0
4/9	Water, Cd, Cr, Pb, Cu, Ni, Zn, Fe	Electrical equip. mfg.	3000 gal.	0

Date	Type	Source	Quantity Present	Quantity Future
4/9	Hydrofluoric acid, ammonium fluoride, deionized water	Electronic co.	350 gal.	0
4/16	Sawdust, asphalt, dirt, plywood, wood, gravel, rocks	Wood product co.	50 tons	0
4/22	H_2O, inert organics, acid heavy metal hydroxides	Electronic co.	0	4000 gal.
4/22	Petroleum slack wax, lignosulfonate, formaldehyde, formic acid or sodium hydroxide for pH adjust., amerstat 233, water	Transportation co.	4000 gal.	0
4/22	Volcanic ash, soil, liquid, sorbant	Dept. of Defense	14 drums	0
4/22	Xylene, 2,4-D acid, butyl isooctyl esters, water	Chemical co.	4 drums	0
4/22	Water, 2,4-D acid, butyl esters, isooctyl esters	" "	16 drums	0
4/22	Lab pack	Waste disp. co.	0	110 drums
WASHINGTON - 39				
4/1	Ethylene dichloride, carbon tetrachloride	Bakery	1 drums	0
4/1	Hardened bituminous emulsified asphalt	University	1 drum	0
4/1	PCB solids - fluorescent light ballasts	US Dept. of Ag	0	4 drums
4/1	Lab packs - poison	Chemical research	0	7 drums
4/1	Lab packs - flammable	" "	0	4 drums
4/1	Lab packs - corrosives	" "	0	3 drums
4/1	Lab packs - oxidizer	" "	0	2 drums

Date	Type	Source	Quantity	
			Present	Future
4/1	Sodium hydroxide, aluminum, metal sulfides, heavy metals, dirt, debris, water	Waste treatment	0	180,000 gal.
4/1	Corrosives - liquid and solid	College	1 drum	0
4/1	White thermosetting vinyl, gloss polyester melamine, matte polyester melamine	Mfg. of labels	0	1600 gal.
4/2	Sulfonic acid, toluene, water, H_2SO_4, sulfones	Wood prod. co.	9 drums	0
4/2	PCB-contaminated clothing, rags, diapers and absorbents	State agency	0	10 drums
4/3	A mixture of 5.2 parts by weight (83.0%) of ammoniates of (ethylene bis(dithio carbamato)-zinc with 1 part by weight (16.1%) ethylene bis(dithio carbamic acid) bimolecular and trimolecular cyclic anhydrosulfides disulfides - inert: talc	Agricultural co.	4,150 lb.	0
4/3	Crow Chex: copper oxolate, inert, ferric oxide, silicone dioxide, aluminum oxide, acid insolubles	" "	1 overpack	0
4/3	Maneb: (manganese ethylene bisdithlocar-bamate) Inert: (talc metallic sic 0.2% equiv.)	" "	15,350 lb.	0
4/3	Light ballasts containing PCB liquids	School	0	200 drums
4/3	Chrome bath-chromic acid, sulfuric acid	Electroplating	0	25 drums
4/3	Lab packs	Plant nursery	0	20 drums

Date	Type	Source	Quantity	
			Present	Future
4/3	Grease contaminated with metals	Metal fab.	150 drums	0
4/9	Water, sodium persulfate, copper, sulfuric acid	Electronic co.	0	20 drums
4/9	Water, hydrogen peroxide, sulfuric acid, copper	" "	0	20 drums
4/9	Captan: cis-n-(trichloromethyl)thio)-4-cyclohexane-1,2-dicarboximide, inert	Ag. co.	1 drum	0
4/9	Mineral spirits, petroleum naptha, methyl chloroform, methylene chloride	Chemical co.	400 gal.	0
4/9	Mineral spirits, petroleum naptha, methyl chloroform, methylene chloride	Chemical co.	6 drums	0
4/9	Hydrofluoric acid (as F), water	" "	3 drums	0
4/9	Sodium metasilicate, surfactants, glycols, EDTA, water	" "	7 drums	0
4/9	Sulfuric acid, fluoride salt (as F), phosphoric acid, butyl cellosolve, water	" "	7 drums	0
4/17	Fiberglass or calcium silicate insulation, broken glass, broken wood, protective clothing and other inert materials contaminated with benzoic acid, benzyl alcohol, benzaldehyde, benzoate esters, sodium benzoate	Chemical co.	0	1000 drums

Date	Type	Source	Quantity Present	Quantity Future
4/17	Nitric acid, hydrofluoric acid, iron in solution, chromium in solution, nickel in solution, iron oxides, hydroxides, nickel oxides, water	Mfg. of metal tubings	0	40,000 gal.
4/17	Perchloroethylene sludge	Dry cleaning	0	24 drums
4/17	Mercury, nitric acid, water	Gold amalgam recovery	0	20 drums
4/17	Plating waste treatment, solids, water soil solid	Electroplating	100 cu.yd.	0
4/22	PCB more than 500 ppm	Removal from service	0	2000 gal.
4/22	Drained PCB transformers - less than 500 ppm	Mfg. of elect. equip.	0	250 cu.yd.
4/22	Lab packs (Poison B)	State agency	0	1000 gal.
4/22	Bottles, vials, IV tubing, syringes, gauze, paper towels - contaminated with suspected carcinogenic chemotherapy drugs	Medical center	0	100 drums
4/22	Quik-sorb clay absorbent, water, copper, sulfuric acid	Electronic co.	0	220 gal.
4/22	Phenolic polymers, vanillin, divanillin, water, caustic, absorbent	Chemical co.	0	1000 tons 1000 drums

Date	Type	Source	Quantity Present	Quantity Future
4/22	Acetone, C1 to C8, butyl acetate, butyl alcohol, cellosolve acetate, butoxyethanol, lacquer thinner, MEK, disobutyl ketone, ethylene dichloride, dioxane, isocyanates, toluene, xylene, napthsa, oil-grease, water	Waste treatment co.	0	3600 drums
4/24	Pentachlorophenol, creosote, soil	Wood prod. co.	2600 tons	0
OTHER STATES - 21				
4/1	Al_2O_3, Na_2O, H_2O	Chemical co. (Alberta)	0	2 drums
4/1	Aryl phosphate	" "	0	6 drums
4/1	Di(2-ethyl hexyl) phthalate	Research facil. (ID)	1 drum	0
4/2	Tetrachlorodifluoroethane	" "	7 gal.	0
4/2	H_2SO_4, water	" "	1 drum	0
4/2	Solution-water, HNO_3, water, $Al(NO_3)_3$ Solution absorbed in non-neutralizing sorbent pillows and Chem-wipes	" "	1 drum	0
4/2	Lab pack - potassium cyanide, inert ingred.	Interior Dept. (ID)	1 drum	0
4/2	Lab pack - sodium cyanide, inert ingred.	Interior Dept. (ID)	2 drums	0
4/3	Lab packs	Gov't agency (BC)	1.4 cu.yd.	0
4/3	Lab packs	" "	7 drums	0

Date	Type	Source	Quantity Present	Quantity Future
4/9	Lab packs	Gov't agency (BC)	1 drum	0
4/9	Lab packs - Poison	" "	1 drum	0
4/9	Lab packs - corrosive liquids NOS	" "	2 drums	0
4/9	Inert ingredients, lead, gasoline, water	Oil co. (HI)	4 drums	0
4/1	Water, undissolved solids, aluminum, fluoride, zirconium, nitrate, chloride, sulfate	Research facil. (ID)	0	275 gal.
4/17	Sulfuric acid, water	Chem. co. (MT)	25,692 gal.	0
4/22	Water, mineral oil, isopropanol, butyl cellosolve, amides, amines nitrite mixture, vermiculite and Cr^{+6}	Electronic co. (ID)	0	4000 gal.
4/22	Tank debris and fittings contaminated with phenol	" "	14 drums	0
4/22	Water, potassium chronate, sodium sulfate, hydrochloric acid, potassium iodide	Research facil. (ID)	3 drums	0
4/22	Water, formaldehyde, mercuric nitrate	" "	0	30 drums
4/22	Naptha, lacquer thinner, turpentine, paint sludge, water	Mfg. of farm equipment (ID)	0	2 drums

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Noise Control Program (Reporting Unit) — April, 1985 (Month and Year)

SUMMARY OF NOISE CONTROL ACTIONS

Source Category	New Actions Initiated		Final Actions Completed		Actions Pending	
	Mo	FY	Mo	FY	Mo	Last Mo
Industrial/ Commercial	15	106	7	55	172	164
Airports				11	1	1

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Noise Control Program (Reporting Unit) — April, 1985 (Month and Year)

FINAL NOISE CONTROL ACTIONS COMPLETED

County	Name of Source and Location	Date	Action
Clackamas	Stanley Hydraulic Tools Milwaukie	4/85	In compliance
Multnomah	S.L. Clark Auto Repair Portland	4/85	Referred to City of Portland
Multnomah	Gunderson, Inc. N.W. Portland	4/85	In compliance
Multnomah	Lynden Farms, Swan Island Portland	4/85	No violation
Washington	Western Foundry Co. Tigard	4/85	In compliance
Marion	YMCA, Court St. N.E. Salem	4/85	Nighttime Compliance, daytime exception granted
Yamhill	Amity Coop Warehouse Amity	4/85	No violation

CIVIL PENALTY ASSESSMENTS

DEPARTMENT OF ENVIRONMENTAL QUALITY
1985

CIVIL PENALTIES ASSESSED DURING MONTH OF APRIL, 1985:

Name and Location of Violation	Case No. & Type of Violation	Date Issued	Amount	Status
Vincent Burrill Arlene Burrill White City, Oregon	AQOB-SWR-85-14 Unauthorized open burning.	4/1/85	$100	Paid 4/15/85.
Brundidge & Sons, Inc. dba/A-1 Sanitation Service Co. Multnomah County	SS-NWR-85-43 Installed 2 holding tanks without obtaining permits.	4/15/85	$200	Paid 5/2/85.

GB4656

March/April 1985
DEQ/EQC Contested Case Log

	ACTIONS	LAST MONTH	PRESENT
1	Preliminary Issues	5	3
2	Discovery	0	0
3	Settlement Action	6	7
4	Hearing to be scheduled	1	2
5	Hearing scheduled	3	9
6	HO's Decision Due	4	6
7	Briefing	1	0
8	Inactive	8	8
	SUBTOTAL of cases before hearings officer.	28	35
9	HO's Decision Out/Option for EQC Appeal	1	1
10	Appealed to EQC	1	1
11	EQC Appeal Complete/Option for Court Review	0	0
12	Court Review Option Pending or Taken	0	1
13	Case Closed	4	0
	TOTAL Cases	34	38

15-AQ-NWR-81-178	15th Hearing Section case in 1981 involving Air Quality Division violation in Northwest Region jurisdiction in 1981; 178th enforcement action in the Department in 1981.
$	Civil Penalty Amount
ACDP	Air Contaminant Discharge Permit
AG1	Attorney General 1
AQ	Air Quality Division
AQOB	Air Quality, Open Burning
CR	Central Region
DEC Date	Date of either a proposed decision of hearings officer or a decision by Commission
ER	Eastern Region
FB	Field Burning
Hrng Rfrl	Date when Enforcement Section requests Hearing Section schedule a hearing
Hrngs	Hearings Section
NP	Noise Pollution
NPDES	National Pollutant Discharge Elimination System wastewater discharge permit.
NWR	Northwest Region
OSS	On-Site Sewage Section
P	Litigation over permit or its conditions
Prtys	All parties involved
Rem Order	Remedial Action Order
Resp Code	Source of next expected activity in case
SS	Subsurface Sewage (now OSS)
SW	Solid Waste Division
SWR	Southwest Region
T	Litigation over tax credit matter
Transcr	Transcript being made of case
Underlining	New status or new case since last month's contested case log
WQ	Water Quality Division
WVR	Willamette Valley Region

CONTES.B

March/April, 1985

DEQ/EQC Contested Case Log

Pet/Resp Name	Hrng Rqst	Hrng Rfrrl	Hrng Date	Resp Code	Case Type & No.	Case Status
WAH CHANG	04/78	04/78		Prtys	16-P-WQ-WVR-78-2849-J NPDES Permit Modification	Current permit in force. Hearing deferred.
WAH CHANG	04/78	04/78		Prtys	03-P-WQ-WVR-78-2012-J NPDES Permit Modification	Current permit in force. Hearing deferred.
SPERLING, Wendell dba/Sperling Farms	11/25/81	11/25/81	03/17/83	Dept	23-AQ-FB-81-15 FB Civil Penalty of $3,000	Department to draft proposed order reflecting EQC decision mitigating penalty to $200.
OLINGER, Bill Inc.	09/10/82	09/13/82	10/20-21/83 11/2-4/83 11/14-15/83 5/24/84	Hrngs	33-WQ-NWR-82-73 WQ Civil Penalty of $1,500	Decision due.
HAYWORTH FARMS, INC., and HAYWORTH, John W.	01/14/83	02/28/83	04/04/84	Hrngs	50-AQ-FB-82-09 FB Civil Penalty of $1,000	Decision due.
McINNIS ENT.	06/17/83	06/21/83		Prtys	52-SS/SW-NWR-83-47 SS/SW Civil Penalty of $500	Hearing deferred pending conclusion of court action.
McINNIS ENTERPRISES, LTD., et al.	09/20/83	09/22/83		Prtys	56-WQ-NWR-83-79 WQ Civil Penalty of $14,500	Hearing deferred pending conclusion of court action.
McINNIS ENTERPRISES, LTD., et al.	10/25/83	10/26/83		Prtys	59-SS-NWR-83-33290P-5 SS license revocation	Hearing deferred pending conclusion of court action.

March/April, 1985

DEQ/EQC Contested Case Log

Pet/Resp Name	Hrng Rqst	Hrng Rfrrl	Hrng Date	Resp Code	Case Type & No.	Case Status
WARRENTON, City of	8/18/83	10/05/83		Prtys	57-SW-NWR-PMT-120 SW Permit Appeal	Warrenton Commision has approved a closure plan to be evaluated by Department.
CLEARWATER IND., Inc.	10/11/83	10/17/83		Prtys	58-SS-NWR-83-82 SS Civil Penalty of $1000	Hearing deferred pending conclusion of related court action.
CLEARWATER IND., Inc.	01/13/84	01/18/84		Prtys	02-SS-NWR-83-103 SS Civil Penalty of $500	Hearing deferred pending conclusion of related court action.
MALPASS, David C.	03/26/84	03/28/84		Prtys	05-AQ-FB-83-14 FB Civil Penalty of $500	Scheduled hearing deferred to allow approval of negotiated settlement.
SIMMONS, Wayne	03/27/84	04/05/84	03/14/85	Hrngs	07-AQ-FB-83-20 FB Civil Penalty of $300	Department's post-hearing memo filed 4/4/85. Decision due.
COON, Mike	03/29/84	04/05/84	4/9/85	Prtys	08-AQ-FB-83-19 FB Civil Penalty of $750	Hearing postponed. Negotiated order to be submitted to EQC 6/7/85.
BIELENBERG, David	03/28/84	04/05/84	12/11/84	Hrngs	09-AQ-FB-83-04 FB Civil Penalty of $300	Decision Due.
BRONSON, Robert W.	03/28/84	04/05/84	05/21/85	Prtys	10-AQ-FB-83-16 FB Civil Penalty of $500	Hearing scheduled.

March/April, 1985

DEQ/EQC Contested Case Log

Pet/Resp Name	Hrng Rqst	Hrng Rfrrl	Hrng Date	Resp Code	Case Type & No.	Case Status
NEWTON, Robert	03/30/84	04/05/84	03/12/85	Hrngs	11-AQ-FB-83-13 FB Civil Penalty of $500	Record closed 4/30/85. Decision due.
KAYNER, Kurt	04/03/84	04/05/84	01/08/85	Hrngs	12-AQ-FB-83-12 FB Civil Penalty of $500	Decision due.
GORACKE, Jeffrey dba/Goracke Bros.	04/10/84	04/12/84	04/30/85	Hrngs	15-AQ-FB-83-22 FB Civil Penalty of $500	Decision due.
TRANSCO Industries, Inc.	06/05/84	06/12/84	02/27/85	Prtys	17-HW-NWR-84-45 HW Civil Penalty of $2,500	Partys requested hearing postponement to allow conclusion of negotiations.
TRANSCO Industries, Inc.	06/05/84		02/27/85	Prtys	18-HW-NWR-84-46 HW Compliance Order	Partys requested hearing postponement to allow conclusion of negotiations.
INTERNATIONAL PAPER CO.	06/12/84	06/12/84		Resp	19-WQ-SWR-84-29 WQ Civil Penalty of $7,450	Respondent advises it has agreed to pay a $5,075 penalty.
VANDERVELDE, Roy	06/12/84	06/12/84		Hrngs	20-WQ-WVR-84-01 WQ Civil Penalty of $2,500	To be scheduled.
WESTERN PACIFIC LEASING CORP., dba/Killingsworth Fast Disposal	06/01/84	07/23/84		Hrngs	22-SW-NWR-84 Solid Waste Permit Modification	To be scheduled.

March/April, 1985

DEQ/EQC Contested Case Log

Pet/Resp Name	Hrng Rqst	Hrng Rfrrl	Hrng Date	Resp Code	Case Type & No.	Case Status
NORTHWEST BASIC INDUSTRIES, dba/Bristol Silica and Limestone Co.	08/21/84	08/28/84		Resp	23-AQ-SWR-84-82 AQ Civil Penalty of $1,000	Respondent's request for dismissal denied pending completion of binding settlement agreement or payment of penalty.
CLEARWATER INDUSTRIES, INC.	10/11/84	10/11/84		Prtys	24-SS-NWR-84-P Sewage Disposal Service License Denial	Hearing deferred pending conclusion of court actions.
LAVA DIVERSION PROJECT	12/14/84	12/27/84			25-WQ-CR-FERC-5205	EQC certification denial appealed to Court of Appeals.
JAY MILLER BUILDER, INC.	02/05/85			Resp	01-AQOB-NWR-84-154	Order of dismissal issued 4/24/85.
UNITED CHROME PRODUCTS, INC.		02/19/85		Prtys	02-HW-WQ-WVR-84-158 $6,000 civil penalty	Interim order on default issued 4/15/85.
NOFZIGER, Mark	03/15/85		06/11/85	Prtys	03-AQ-FB-84-144	Hearing scheduled.
CATHCART, Channing and Douglas	03/11/85	03/11/85	06/14/85	Prtys	04-AQ-FB-84-137	Hearing scheduled.
FUNRUE, Amos	03/15/85	03/19/85	06/20/85	Prtys	05-AQ-FB-84-141	Hearing scheduled.
BLADES, Wallace	03/18/85	03/19/85	06/21/85	Prtys	06-AQ-FB-84-139	Hearing scheduled.
DOMES, William	03/20/85	03/21/85	06/18/85	Prtys	07-AQ-FB-84-151	Hearing scheduled.
SMITH, Jack		03/19/85	06/25/85	Prtys	08-AQ-FB-84-136	Hearing scheduled.

March/April, 1985

DEQ/EQC Contested Case Log

Pet/Resp Name	Hrng Rqst	Hrng Rfrrl	Hrng Date	Resp Code	Case Type & No.	Case Status
LANG & GANGES CORP., dba/Medply	03/20/85	03/21/85		Resp	09-AQ-SWR-85-15	Respondent's answer due by 5/6/85.
WARRENTON LANDFILL	02/28/85	04/04/85		Prtys	10-57-SW-NWR-83-PMT-120	Preliminary issues.
COOK, Robert	04/10/85	04/16/85	06/26/85	Prtys	11-AQ-FB-84-138	Hearing scheduled.
KANGAS, M. R.	05/02/85	05/03/85	05/28/85	Prtys	12-AQ-FB-84-145	Hearing scheduled.

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VICTOR ATIYEH
GOVERNOR

Environmental Quality Commission

Mailing Address: BOX 1760, PORTLAND, OR 97207
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MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Agenda Item C, June 7, 1985 EQC Meeting

Tax Credit Applications

Director's Recommendations

It is recommended that the Commission take the following action:

1. Issue tax credit certificate for a facility subject to the old tax credit law:

Appl. No.	Applicant	Facility
T-1725	Brownlee Bush Dairy	Animal waste control

2. Issue tax credit certificates for facilities subject to new tax credit laws:

Appl. No.	Applicant	Facility
T-1723	Carl Fenk	Animal waste control
T-1727	International Paper	Optical density/opacity monitor

3. Revoke Pollution Control Facility Certificates 853 and 1034 issued to Champion International Corp., Champion Building Products and reissue them to Hanel Lumber Company. (letters attached)

4. Revoke Pollution Control Facility Certificate 1027 issued to Publishers Paper. The facility has been shut down and will not be operated again. (letter attached)

Fred Hansen

Proposed June 7, 1985 Totals:

Air Quality	$16,033.29
Water Quality	27,696.90
Hazardous/Solid Waste	-0-
Noise	-0-
	$43,730.19

1985 Calendar Year Totals:

Air Quality	$137,131.79
Water Quality	347,352.00
Hazardous/Solid Waste	295,798.00
Noise	-0-
	$780,281.79

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

---

1. Applicant

Carl Fenk
11420 Chance Road
Tillamook, OR 97141

The applicant owns and operates a dairy farm in Tillamook, Oregon.

Application was made for tax credit for a water pollution control facility.

2. Description of Claimed Facility

The facility described in this application is an animal waste manure control facility consisting of the following:

(a) Dry manure storage area.
- 67' x 62' concrete slab with 6' concrete retaining walls.
- 26 Ga. galvanized steel roof (with gutters) and associated structural support facilities.

(b) Roof over two existing concrete slab confinement area.
- 42' x 69' 26 Ga. galvanized steel roof (with gutters) and associated structural support facilities.

Request for Preliminary Certification for Tax Credit was made June 4, 1984 and approved August 9, 1984. Facility is subject to the 1983 tax credit law. Construction was initiated on the claimed facility September 10, 1984, completed October 31, 1984 and the facility was placed into operation October 31, 1984.

Total Facility Cost: $44,308 (Accountant's Certification was provided).

Eligible Facility Cost: $13,419

The accountant's certification showed a total project cost of $44,308.00 However, the U. S. Department of Agriculture Stabilization and Conservation Service reimbursed the applicant $30,889 ($44,308 - $30,889= $13,419.00).

3. Evaluation of Application

Prior to installation of the claimed facilities, waste manure was spread onto saturated fields during the winter months due to the lack of manure storage facilities. Contaminated runoff would enter the Trask River. The dry manure storage system allows the storage of

manure for over 100 days. The roof over the storage area and the roof over the existing concrete confinement area divert rainfall to minimize the contamination of runoff water. These facilities have allowed the spreading of manure during dry months when the fields are not saturated. This system has greatly reduced the quantity of contaminated runoff entering the Trask River. There is no significant return on investment from this project. The sole purpose of these facilities is to control wastes from the farm operation to reduce the contamination of the Tillamook Bay Drainage Basin.

The Department conducted water quality surveys in Tillamook Bay during 1979 - 1980. The surveys concluded that dairy operations were a major cause of high bacterial contamination in the drainage basin which threatened the oyster industry. The Department required the development of a Tillamook Bay Drainage Basin Agricultural Non-Point Source Pollution Abatement Plan which was incorporated into the North Coast Basin Water Quality Management Plan by the Environmental Quality Commission on August 28, 1981.

4. Summation

a. Facility was constructed in accordance with the requirements of ORS 468.175, regarding preliminary certification.

b. Facility was constructed on or after January 1, 1967, as required by ORS 468.165(1)(a).

c. Facility is designed for and is being operated for the sole purpose of preventing, controlling, or reducing water pollution and was required by DEQ.

d. The facility is necessary to satisfy the intents and purposes of ORS Chapter 468 and the rules adopted under that chapter and complies with these requirements.

e. The portion of the facility cost that is properly allocable to pollution control is 100 percent.

5. Director's Recommendation

Based upon the findings in the Summation, it is recommended that a Pollution Control Facility Certificate bearing the cost of $13,419 with 100 percent allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-1723.

LDP:m
WM74
(503) 229-5374
5-21-85

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

---

1. Applicant

Brownlee Bush Dairy
9375 Trask River Road
Tillamook, OR 97141

The applicant owns and operates a dairy farm in Tillamook, Oregon.

Application was made for tax credit for a water pollution control facility.

2. Description of Claimed Facility

The facility described in this application is an animal waste manure control facility consisting of the following:

(a) Dry manure storage area.
- 36' x 40' concrete slab with 6' concrete retaining walls.
- 26 Ga. galvanized steel roof (with gutters) and associated structural support facilities.

(b) Roofs over two existing concrete slab confinement areas.
- 7.7'x 42' and 21' x 31.5' 26 Ga. galvanized steel roofs (with gutters) and associated structural support facilities.

Request for Preliminary Certification for Tax Credit was made April 5, 1983 and approved May 31, 1983. Facility is subject to the 1981 tax credit law. Construction was initiated on the claimed facility July 1, 1983, completed October 31, 1983 and the facility was placed into operation October 31, 1983.

Total Facility Cost: $25,360.90 (Documentation of Costs was provided).

Eligible Facility Cost: $14,277.90

The total cost of this project was $25,360.90. However, the U. S. Department of Agriculture Stabilization and Conservation Service reimbursed the applicant $11,083.00 ($25,360.90 - $11,083.00= $14,277.90).

3. Evaluation of Application

Prior to installation of the claimed facilities, waste manure was spread onto saturated fields during the winter months due to the lack of manure storage facilities. Contaminated runoff would enter the Trask River. The dry manure storage system allows the storage of

manure for over 100 days. The roof over the storage area and the roof over the existing concrete confinement area divert rainfall to minimize the contamination of runoff water. These facilities have allowed the spreading of manure during dry months when the fields are not saturated. This system has greatly reduced the quantity of contaminated runoff entering the Trask River. There is no significant return on investment from this project.

4. Summation

a. Facility was constructed in accordance with the requirements of ORS 468.175, regarding preliminary certification.

b. Facility was constructed on or after January 1, 1967, as required by ORS 468.165(1)(a).

c. Facility is designed for and is being operated to a substantial extent for the purpose of preventing, controlling, or reducing water pollution and was required by DEQ.

d. The facility is necessary to satisfy the intents and purposes of ORS Chapter 468 and the rules adopted under that chapter and complies with these requirements.

e. The portion of the facility cost that is properly allocable to pollution control is 80 percent or more.

5. Director's Recommendation

Based upon the findings in the Summation, it is recommended that a Pollution Control Facility Certificate bearing the cost of $14,277.90 with 80 percent or more allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-1725.

LDP:m
WM211
(503) 229-5374
5-21-85

Application No. T-1727

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

---

1. Applicant

International Paper Company
Gardiner Paper Mill
Industrial Packaging
77 West 45th Street
New York, NY 10036

The applicant owns and operates an unbleached Kraft liner board mill at Gardiner, Oregon.

Application was made for tax credit for an air pollution control facility.

2. Description of Claimed Facility

The facility claimed in this application is described to be a model no. 1100M Dynatron continuous optical density/opacity monitor installed on the common stack of two recovery boilers.

Request for Preliminary Certification for Tax Credit was made on May 17, 1984 and approved on June 5, 1984.

The facility is subject to the provisions of the new tax credit law, Chapter 637, Oregon Law 1983.

Construction was initiated on the claimed facility on June 8, 1984, completed on July 4, 1984, and the facility was placed into operation on August 6, 1984.

Facility Cost: $16,033.29 (Accountant's Certification was provided). (Complete Documentation by copies of invoices was provided.)

3. Evaluation of Application

Department regulations require continual monitoring of particulate emissions from Kraft mill recovery furnaces. Opacity monitors provide early detection of electrostatic precipitator malfunctions and indicate mass emission rates which fulfill DEQ required reporting requirements.

The recovery furnaces of Gardiner are subject to reporting requirements of the EPA/DEQ new source performance standards (NSPS) for Kraft mills.

The claimed facility, which was installed to meet the needs described above, replaced an early non-operative model Lear Seigler opacity monitor. The applicant chose replacement to obtain compatibility with existing computerized data processing and improved dependability. (The Lear Seigler monitor, RM-4, is no longer produced.)

The old monitor had not been certified for pollution control tax credit.

There is no economic benefit derived by the applicant from the claimed facility. The unit is currently operating in compliance with DEQ requirements.

It is concluded that the sole purpose of the claimed facility is air pollution control and that 100 percent of its cost is eligible for certification as a pollution control facility.

The application was received on March 15, 1985, additional information was received on April 15, 1985, and the application was considered complete on April 15, 1985.

4. Summation

a. The facility was constructed in accordance with the requirements of ORS 468.175, regarding preliminary certification.

b. The facility is designed for and is being operated for the sole purpose of preventing, controlling or reducing a substantial quantity of air pollution.

c. The facility is necessary to satisfy the intents and purposes of ORS Chapter 468 and the rules adopted under that chapter.

d. The portion of the facility cost that is properly allocable to pollution control is 100 percent.

5. Director's Recommendation

Based upon the findings in the Summation, it is recommended that a Pollution Control Facility Certificate bearing the cost of $16,033.29 with 100 percent allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-1727.

L. Kostow:n
AS1393
(503) 229-5186
May 21, 1985

State of Oregon
Department of Environmental Quality

REISSUANCE OF POLLUTION CONTROL FACILITY CERTIFICATES

1. Certificates issued to:

   Champion International/
   Champion Building Products
   P.O. Box 1022
   Eugene, OR 97401

   The certificates were issued for a solid waste and a water pollution control facility.

2. Summation:

   The Environmental Quality Commission has issued 2 certificates to the Champion International Neal Creek Mill which has subsequently been sold to Hanel Lumber Company. The certificates were issued in 1977 and 1979. (Copies attached) Champion has notified the Department of the sale of their mill and Hanel has requested a reissuance of the certificates under their name. (letters attached)

3. It is recommended that Pollution Control Facility Certificate Nos. 853 and 1034 be revoked and reissued to Hanel Lumber Company; the certificates to be valid only for the time remaining from the date of the first issuance.

HANEL LUMBER CO., INC.

LUMBER MANUFACTURERS

4865 Highway 35 · Hood River, Oregon 97031

Phone (503) 354-1484

April 18, 1985

Department of Enviromental Quality
P.O. Box 1760
Portland, OR 97207

Attn: Sherry Chew

We request to have the following two Pollution Control Facility Certificates transferred from Champion International Corporation to Hanel Lumber Co., Inc.

Certificate No. 853
1034

The following information pertains to the transfer of the facilities.

Date of Acquisition:	February 21, 1983
New Owners:	Hanel Lumber Co., Inc. 4865 Hwy. 35 Hood River, OR 97031
Prior Owners:	Champion International Corporation P.O. Box 10228 Eugene, OR 97401

Enclosed please find copies of the certificates, and if you need anything further, please give me a call.

Sincerely,

HANEL LUMBER COMPANY, INC.

Robert L. Hanel

Robert L. Hanel
Secretary

RLH/cgl
Enclosures

P.O. Box 10228
1600 Valley River Drive
Eugene, Oregon 97440
503 687-4611

Champion
Champion International Corporation

Mr. Robert Hanel
Hanel Lumber Co., Inc.
4865 Highway 35
Hood River OR 97031

January 23, 1985

Dear Mr. Hanel:

At the time we sold our Neal Creek mill, we held two Oregon Pollution Control Certificates that qualified us for a tax credit. The buyer of the mill is entitled to use the remaining credit available under these certificates. We had elected to use these credits as a reduction of Oregon income taxes. The following is a summary of the certificates showing the credit available for your use:

Certificate No.	Remaining Credit	Bal. of 1983	Yearly 1984 on
853	$ 5,980	$1,300	$1,560
1034	15,792	2,257	2,708

Certificate #853 credit runs through 1986 and #1034 runs through 1988. Copies of the certificates are enclosed for your files.

Very truly yours,

M. F. Rapp

Marvin F. Rapp

MFR/bd
Enclosures

cc Duane Buttler

P.O. Box 10228
1600 Valley River Drive
Eugene, Oregon 97440
503 687-4611

Champion
Champion International Corporation

Department of Environmental Quality
Box 1760
Portland OR 97207

January 23, 1985

Gentlemen:

This letter is to advise you that two of our mills that have outstanding pollution control facility certificates have been sold. The certificates involved are as follows:

Certificate #	App. No.	Mill Location
818	T-901	Willamina OR
819	T-902	Willamina OR
820	T-903	Willamina OR
824	T-907	Willamina OR
853	T-931	Odell OR
1016	T-1120	Willamina OR
1017	T-1121	Willamina OR
1034	T-1125	Odell OR

The mill at Willamina was sold in May 1983; therefore, our tax department will utilize five-twelfths of the credit available in 1983 as a tax credit. The mill at Odell was sold in February 1983; therefore, our tax department will utilize two-twelfths of the credit available in 1983 as a tax credit.

Copies of the certificates are enclosed for reference.

Very truly yours,

M. F. Rapp

Marvin F. Rapp

MFR/bd
Enclosure

cc John Winter - Stamford Tax Dept.
Duane Buttler

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

Certificate No. 1034

Date of Issue 12/14/79

Application No. T-1125

POLLUTION CONTROL FACILITY CERTIFICATE

Issued To: Champion International Corp. Champion Building Products P. O. Box 10228 Eugene, Oregon 97440	Location of Pollution Control Facility: Odell, Oregon
As: ☐ Lessee ☒ Owner	

Description of Pollution Control Facility:

Wood residue processing equipment including a West Salem Classifier, conveyors, motors, structural steel and concrete.

Type of Pollution Control Facility: ☐ Air ☐ Noise ☐ Water ☒ Solid Waste ☐ Hazardous Waste ☐ Used Oil

Date Pollution Control Facility was completed: 6/30/78 Placed into operation: 6/30/78

Actual Cost of Pollution Control Facility: $ 54,150.00

Percent of actual cost properly allocable to pollution control: 100%

Based upon the information contained in the application referenced above, the Environmental Quality Commission certifies that the facility described herein was erected, constructed or installed in accordance with the requirements of ORS 468.175 and subsection (1) of ORS 468.165, and is designed for, and is being operated or will operate to a substantial extent for the purpose of preventing, controlling or reducing air, water or noise pollution or solid waste, hazardous wastes or used oil, and that it is necessary to satisfy the intents and purposes of ORS Chapters 454, 459, 467 and 468 and rules adopted thereunder.

Therefore, this Pollution Control Facility Certificate is issued this date subject to compliance with the statutes of the State of Oregon, the regulations of the Department of Environmental Quality and the following special conditions:

1. The facility shall be continuously operated at maximum efficiency for the designed purpose of preventing, controlling, and reducing the type of pollution as indicated above.

2. The Department of Environmental Quality shall be immediately notified of any proposed change in use or method of operation of the facility and if, for any reason, the facility ceases to operate for its intended pollution control purpose.

3. Any reports or monitoring data requested by the Department of Environmental Quality shall be promptly provided.

NOTE - The facility described herein is not eligible to receive tax credit certification as an Energy Conservation Facility under the provisions of Chapter 512, Oregon Law 1979, if the person issued the Certificate elects to take the tax credit relief under ORS 316.097 or 317.072.

Signed _____

Title Joe B. Richards, Chairman

Approved by the Environmental Quality Commission on the 14th day of December 1979

DEQ/TC-6 10/79

SP*34311-340

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

Certificate No. 853

Date of Issue 11/18/77

Application No. T-931

POLLUTION CONTROL FACILITY CERTIFICATE

Issued To:	Location of Pollution Control Facility:
Champion International Corporation Champion Building Products Division P. O. Box 10228 Eugene, Oregon 97401	Neal Creek Plant Odell, Oregon
As: ☐ Lessee ☒ Owner	

Description of Pollution Control Facility:

Log deck sprinkling water recycle

Type of Pollution Control Facility: ☐ Air ☐ Noise ☒ Water ☐ Solid Waste

Date Pollution Control Facility was completed: 11/1/76 Placed into operation: 5/1/77

Actual Cost of Pollution Control Facility: $ 31,199.00

Percent of actual cost properly allocable to pollution control: 80% or more

In accordance with the provisions of ORS 468.155 et seq., it is hereby certified that the facility described herein and in the application referenced above is a "Pollution Control Facility" within the definition of ORS 468.155 and that the air or water facility was constructed on or after January 1, 1967, the solid waste facility was under construction on or after January 1, 1973, or the noise facility was constructed on or after January 1, 1977, and the facility is designed for, and is being operated or will operate to a substantial extent for the purpose of preventing, controlling or reducing air, water, noise or solid waste pollution, and that the facility is necessary to satisfy the intents and purposes of ORS Chapter 459, 467 or 468 and the regulations adopted thereunder.

Therefore, this Pollution Control Facility Certificate is issued this date subject to compliance with the statutes of the State of Oregon, the regulations of the Department of Environmental Quality and the following special conditions:

1. The facility shall be continuously operated at maximum efficiency for the designed purpose of preventing, controlling, and reducing the type of pollution as indicated above.
2. The Department of Environmental Quality shall be immediately notified of any proposed change in use or method of operation of the facility and if, for any reason, the facility ceases to operate for its intended pollution control purpose.
3. Any reports or monitoring data requested by the Department of Environmental Quality shall be promptly provided.

Signed _____

Title Joe B. Richards, Chairman

Approved by the Environmental Quality Commission on the 18th day of November, 1977

DEQ/TC-6-10/77

State of Oregon
Department of Environmental Quality

REVOCATION OF POLLUTION CONTROL FACILITY CERTIFICATE

1. Certificate issued to:

   Publishers Paper
   Oregon City Division
   419 Main Street
   Oregon City, Oregon 97045

   The certificate was issued for an air pollution control facility.

2. Summation:

   The Environmental Quality Commission issued a certificate to Publishers Paper December 14, 1979. (A copy of the certificate is attached.) The Department has been notified by the company that their facility has been shut down and has not been operated during any portion of the year 1984. (letter attached)

3. It is recommended that Pollution Control Facility Certificate No. 1027 be revoked.

PUBLISHERS PAPER TIMES MIRROR

April 1, 1985

Mr. Tom Bispham
Air Quality Division
Oregon Department of Environmental Quality
P.O. Box 1760
Portland, Oregon 97207

Dear Mr. Bispham:

RE: PCF Certificate No. 1027
Application No. T-1102
Certified Amount: $24,834

The sulfite pulping process at the Oregon City Division of Publishers has been shut down and was not operated during any portion of the year 1984. Therefore, Pollution Control Facilities Certificate No. 1027, which was granted December 14, 1979 for a mist eliminator on the sulfite recovery boiler system, is no longer valid. We will not claim tax credit for 1984 and subsequent years and we request appropriate Department action with regard to the certificate.

Please call me if you have any questions.

Respectfully submitted,

R. A. Schmall,
Corporate Manager
Environmental & Energy Services

RAS/lew
Att.

cc: M. Carpenter

Certificate No. 1027

Date of Issue 12/14/79

Application No. T-1102

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

POLLUTION CONTROL FACILITY CERTIFICATE

Issued To: Publishers Paper Company Oregon City Division 419 Main Street Oregon City, Oregon 97045	Location of Pollution Control Facility: 419 Main Street Oregon City, Oregon
As: ☐ Lessee ☒ Owner	
Description of Pollution Control Facility: A mist eliminator system installed on the recovery boiler.	
Type of Pollution Control Facility: ☒ Air ☐ Noise ☐ Water ☐ Solid Waste ☐ Hazardous Waste ☐ Used Oil	
Date Pollution Control Facility was completed: 12/27/78	Placed into operation: 12/28/78
Actual Cost of Pollution Control Facility: $24,834.00	
Percent of actual cost properly allocable to pollution control: 80% or more	

Based upon the information contained in the application referenced above, the Environmental Quality Commission certifies that the facility described herein was erected, constructed or installed in accordance with the requirements of ORS 468.175 and subsection (1) of ORS 468.165, and is designed for, and is being operated or will operate to a substantial extent for the purpose of preventing, controlling or reducing air, water or noise pollution or solid waste, hazardous wastes or used oil, and that it is necessary to satisfy the intents and purposes of ORS Chapters 454, 459, 467 and 468 and rules adopted thereunder.

Therefore, this Pollution Control Facility Certificate is issued this date subject to compliance with the statutes of the State of Oregon, the regulations of the Department of Environmental Quality and the following special conditions:

1. The facility shall be continuously operated at maximum efficiency for the designed purpose of preventing, controlling, and reducing the type of pollution as indicated above.

2. The Department of Environmental Quality shall be immediately notified of any proposed change in use or method of operation of the facility and if, for any reason, the facility ceases to operate for its intended pollution control purpose.

3. Any reports or monitoring data requested by the Department of Environmental Quality shall be promptly provided.

NOTE - The facility described herein is not eligible to receive tax credit certification as an Energy Conservation Facility under the provisions of Chapter 512, Oregon Law 1979, if the person issued the Certificate elects to take the tax credit relief under ORS 316.097 or 317.072.

Signed Joe B. Richards

Title Joe B. Richards, Chairman

Approved by the Environmental Quality Commission on the 14th day of December 19 79

VICTOR ATIYEH
GOVERNOR

Environmental Quality Commission

Mailing Address: BOX 1760, PORTLAND, OR 97207
522 SOUTHWEST 5th AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Addendum to Agenda Item C, June 7, 1985 EQC Meeting

Tax Credit Applications

Director's Recommendations

It is recommended that the Commission take the following action:

1. Revoke Pollution Control Facility Certificates 822, 830, 1018, 1019, 1022, 1336, 1339, and 948 issued to Champion International Corporation and reissue them to Freres Lumber Company. (letters attached)

Fred Hansen

SChew
229-6484
11/20/85

State of Oregon
Department of Environmental Quality

REISSUANCE OF POLLUTION CONTROL FACILITY CERTIFICATES

1. Certificates issued to:

   Champion International Corporation
   Champion Building Products
   PO Box 10228
   Eugene, OR 97440

   The certificates were issued for air, water, and solid waste pollution control facilities.

2. Summation:

   The Environmental Quality Commission has issued 8 certificates to the Champion International Corporation in Lebanon and Idanha, Oregon. These facilities have subsequently sold to Freres Lumber Co. The certificates were issued in 1977, 1978, 1979, and 1981. (Copies attached) Champion has notified the Department of the sale of their mill and Freres has requested a reissuance of the certificates under their name. (letters attached)

3. It is recommended that Pollution Control Certificate Nos.822, 830, 1018, 1019, 1022, 1336, 1339, and 948 be revoked and reissued to Freres Lumber Company; the certificates to be valid only for the time remaining from the date of the first issuance.

SChew
229-6484
11/20/85

Timberlands
P.O. Box 849
Eugene, Oregon 97440
503 687-4647

Champion
Champion International Corporation

November 18, 1985

Freres Lumber Company
Box 312
Lyons, OR 97358

Gentlemen:

The pollution control certificates listed below are available for use as a deduction from Oregon Income Tax. If you wish to use the remaining credit, you must ask the DEQ in Portland to transfer the certificates to Freres Lumber Co. I have notified the DEQ that Lebanon and Idanha have been sold to Freres Lumber Co., and listed the certificates available for transfer.

Certificate No.	Credit Remaining 1/1/85	Yearly Credit	Used By CBP	Remaining 1985 Credit
822 2/3 of Cert.	$ 14,814	$ 7,409	$1,852	$ 5,557
830	1,486	743	186	557
1018	19,217	4,805	1,201	3,604
1019	10,054	2,514	629	1,885
1022	30,386	7,597	1,899	5,698
1336	10,720	1,787	447	1,340
1339	145,409	24,235	6,059	18,176
948	30,420	10,140	2,535	7,605

Because Champion operated the mills for three months in 1985, we will take one-fourth of the credit available for 1985. Copies of the certificates are enclosed for reference.

Very truly yours,

Wm. F. Rapp

Marvin F. Rapp

MFR/se
Enclosures
cc W. O. Larson

Freres
LUMBER CO., Inc.

P. O. Box 312 / Lyons, Oregon 97358-0312
503-859-2121

November 20, 1985

Ms. Maggie Conley
Department of Environmental Quality
522 S.W. Fifth Avenue
Portland, OR 97204

Dear Ms. Conley:

Freres Lumber Co., Inc. purchased Champion International's Lebanon and Idanha facilities on September 30, 1985. We request transfer of the enclosed pollution control certificates to our firm for use as a deduction from Oregon Income Tax.

If I may be of any assistance I may be contacted at 859-2121.

Sincerely,

Robert Freres, Jr.
Vice President

Certificate No. 822

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

Date of Issue 9-23-77

Application No. T-905

POLLUTION CONTROL FACILITY CERTIFICATE

Issued To: *Champion International Corporation* Champion Building Products *Division* P. O. Box 10228 Eugene, Oregon 97401	Location of Pollution Control Facility: Lebanon, Oregon
As: ☐ Lessee ☒ Owner	

Description of Pollution Control Facility:

Buffalo No. B-48-20 baghouse filter system on cyclones #37 and #38; LCOANITE
Buffalo No. B-96-20 baghouse filter system on cyclones #44 and #45;
Buffalo No. B-80-20 baghouse filter system on cyclones #24, #25 and #27 3-PLY

Type of Pollution Control Facility: ☒ Air ☐ Water ☐ Solid Waste

Date Pollution Control Facility was completed: February 1972 Placed into operation: February 1972

Actual Cost of Pollution Control Facility: $ 285,970.00

Percent of actual cost properly allocable to pollution control: 80% or more

In accordance with the provisions of ORS 468.155 et seq., it is hereby certified that the facility described herein and in the application referenced above is a "Pollution Control Facility" within the definition of ORS 468.155 and that the air and water or solid waste facility was erected, constructed or installed on or after January 1, 1967, or January 1, 1973 respectively, and on or before December 31, 1980, and is designed for, and is being operated or will operate to a substantial extent for the purpose of preventing, controlling or reducing air, water or solid waste pollution, and that the facility is necessary to satisfy the intents and purposes of ORS Chapters 459, 468 and the regulations thereunder.

Therefore, this Pollution Control facility Certificate is issued this date subject to compliance with the statutes of the State of Oregon, the regulations of the Department of Environmental Quality and the following special conditions:

1. The facility shall be continuously operated at maximum efficiency for the designed purpose of preventing, controlling, and reducing the type of pollution as indicated above.
2. The Department of Environmental Quality shall be immediately notified of any proposed change in use or method of operation of the facility and if, for any reason, the facility ceases to operate for its intended pollution control purpose.
3. Any reports or monitoring data requested by the Department of Environmental Quality shall be promptly provided.

Signed _____

Title Joe B. Richards, Chairman

Approved by the Environmental Quality Commission on the 23rd day of September, 19 77

DEQ/TC-6 1-76

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

Certificate No. 830

Date of Issue 9-23-77

Application No. T-914

POLLUTION CONTROL FACILITY CERTIFICATE

Issued To: *Champion International Corporation* Champion Building Products *Division* P. O. Box 10228 Eugene, Oregon 97401	Location of Pollution Control Facility: Lebanon, Oregon Linn Co
As: ☐ Lessee ☒ Owner	
Description of Pollution Control Facility: Glue waste recirculation	
Type of Pollution Control Facility: ☐ Air ☒ Water ☐ Solid Waste	
Date Pollution Control Facility was completed: October 1973	Placed into operation: October 1973
Actual Cost of Pollution Control Facility: $ 14,859.00	
Percent of actual cost properly allocable to pollution control: 80% or more	

In accordance with the provisions of ORS 468.155 et seq., it is hereby certified that the facility described herein and in the application referenced above is a "Pollution Control Facility" within the definition of ORS 468.155 and that the air and water or solid waste facility was erected, constructed or installed on or after January 1, 1967, or January 1, 1973 respectively, and on or before December 31, 1980, and is designed for, and is being operated or will operate to a substantial extent for the purpose of preventing, controlling or reducing air, water or solid waste pollution, and that the facility is necessary to satisfy the intents and purposes of ORS Chapters 459, 468 and the regulations thereunder.

Therefore, this Pollution Control facility Certificate is issued this date subject to compliance with the statutes of the State of Oregon, the regulations of the Department of Environmental Quality and the following special conditions:

1. The facility shall be continuously operated at maximum efficiency for the designed purpose of preventing, controlling, and reducing the type of pollution as indicated above.
2. The Department of Environmental Quality shall be immediately notified of any proposed change in use or method of operation of the facility and if, for any reason, the facility ceases to operate for its intended pollution control purpose.
3. Any reports or monitoring data requested by the Department of Environmental Quality shall be promptly provided.

Signed _____

Title Joe B. Richards, Chairman

Approved by the Environmental Quality Commission on the 23rd day of September, 19 77

DEQ/TC-6 1-76

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

Certificate No. 1018

Date of Issue 11/16/79

Application No. T-1122

POLLUTION CONTROL FACILITY CERTIFICATE

Issued To:	Location of Pollution Control Facility:
Champion International Corp. Champion Building Products P. O. Box 10228 Eugene, Oregon 97440	Lebanon, Oregon
As: ☐ Lessee ☒ Owner	

Description of Pollution Control Facility:

Two (2) baghouses to control wood dust emissions from cyclones #39 and #47.

Type of Pollution Control Facility: ☒ Air ☐ Noise ☐ Water ☐ Solid Waste ☐ Hazardous Waste ☐ Used Oil

Date Pollution Control Facility was completed: 7/1/77 Placed into operation: 8/3/77

Actual Cost of Pollution Control Facility: $ 96,094.00

Percent of actual cost properly allocable to pollution control: 80% or more

Based upon the information contained in the application referenced above, the Environmental Quality Commission certifies that the facility described herein was erected, constructed or installed in accordance with the requirements of ORS 468.175 and subsection (1) of ORS 468.165, and is designed for, and is being operated or will operate to a substantial extent for the purpose of preventing, controlling or reducing air, water or noise pollution or solid waste, hazardous wastes or used oil, and that it is necessary to satisfy the intents and purposes of ORS Chapters 454, 459, 467 and 468 and rules adopted thereunder.

Therefore, this Pollution Control Facility Certificate is issued this date subject to compliance with the statutes of the State of Oregon, the regulations of the Department of Environmental Quality and the following special conditions:

1. The facility shall be continuously operated at maximum efficiency for the designed purpose of preventing, controlling, and reducing the type of pollution as indicated above.

2. The Department of Environmental Quality shall be immediately notified of any proposed change in use or method of operation of the facility and if, for any reason, the facility ceases to operate for its intended pollution control purpose.

3. Any reports or monitoring data requested by the Department of Environmental Quality shall be promptly provided.

NOTE - The facility described herein is not eligible to receive tax credit certification as an Energy Conservation Facility under the provisions of Chapter 512, Oregon Law 1979, if the person issued the Certificate elects to take the tax credit relief under ORS 316.097 or 317.072.

Signed _____

Title Joe B. Richards, Chairman

Approved by the Environmental Quality Commission on the 16th day of November 19 79

DEQ/TC-6 10/79

SP*54111-340

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

Certificate No. 1019
Date of Issue 11/16/79
Application No. T-1123

POLLUTION CONTROL FACILITY CERTIFICATE

Issued To:	Location of Pollution Control Facility:
Champion International Corporation Champion Building Products P. O. Box 10228 Eugene, Oregon 97440	Lebanon, Oregon
As: ☐ Lessee ☒ Owner	

Description of Pollution Control Facility:

Veneer dryer washdown water recirculation system.

Type of Pollution Control Facility: ☐ Air ☐ Noise ☒ Water ☐ Solid Waste ☐ Hazardous Waste ☐ Used Oil

Date Pollution Control Facility was completed: 10/15/77 **Placed into operation:** 11/28/77

Actual Cost of Pollution Control Facility: $ 50,276.00

Percent of actual cost properly allocable to pollution control:
80% or more

Based upon the information contained in the application referenced above, the Environmental Quality Commission certifies that the facility described herein was erected, constructed or installed in accordance with the requirements of ORS 468.175 and subsection (1) of ORS 468.165, and is designed for, and is being operated or will operate to a substantial extent for the purpose of preventing, controlling or reducing air, water or noise pollution or solid waste, hazardous wastes or used oil, and that it is necessary to satisfy the intents and purposes of ORS Chapters 454, 459, 467 and 468 and rules adopted thereunder.

Therefore, this Pollution Control Facility Certificate is issued this date subject to compliance with the statutes of the State of Oregon, the regulations of the Department of Environmental Quality and the following special conditions:

1. The facility shall be continuously operated at maximum efficiency for the designed purpose of preventing, controlling, and reducing the type of pollution as indicated above.
2. The Department of Environmental Quality shall be immediately notified of any proposed change in use or method of operation of the facility and if, for any reason, the facility ceases to operate for its intended pollution control purpose.
3. Any reports or monitoring data requested by the Department of Environmental Quality shall be promptly provided.

NOTE - The facility described herein is not eligible to receive tax credit certification as an Energy Conservation Facility under the provisions of Chapter 512, Oregon Law 1979, if the person issued the Certificate elects to take the tax credit relief under ORS 316.097 or 317.072.

Signed Joe B. Richards

Title Joe B. Richards, Chairman

Approved by the Environmental Quality Commission on the 16th day of November 1979

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

Certificate No. 1022

Date of Issue 11/16/79

Application No. T-1127

POLLUTION CONTROL FACILITY CERTIFICATE

Issued To:	Location of Pollution Control Facility:
Champion International Corporation Champion Building Products P. O. Box 10228 Eugene, Oregon 97440	Lebanon, Oregon
As: ☐ Lessee ☒ Owner	

Description of Pollution Control Facility:

Clarke Baghouse for control of sanderdust emissions.

Type of Pollution Control Facility: ☒ Air ☐ Noise ☐ Water ☐ Solid Waste ☐ Hazardous Waste ☐ Used Oil

Date Pollution Control Facility was completed: 7/1/77 Placed into operation: 7/15/77

Actual Cost of Pollution Control Facility: $ 151,937.00

Percent of actual cost properly allocable to pollution control: 80% or more

Based upon the information contained in the application referenced above, the Environmental Quality Commission certifies that the facility described herein was erected, constructed or installed in accordance with the requirements of ORS 468.175 and subsection (1) of ORS 468.165, and is designed for, and is being operated or will operate to a substantial extent for the purpose of preventing, controlling or reducing air, water or noise pollution or solid waste, hazardous wastes or used oil, and that it is necessary to satisfy the intents and purposes of ORS Chapters 454, 459, 467 and 468 and rules adopted thereunder.

Therefore, this Pollution Control Facility Certificate is issued this date subject to compliance with the statutes of the State of Oregon, the regulations of the Department of Environmental Quality and the following special conditions:

1. The facility shall be continuously operated at maximum efficiency for the designed purpose of preventing, controlling, and reducing the type of pollution as indicated above.

2. The Department of Environmental Quality shall be immediately notified of any proposed change in use or method of operation of the facility and if, for any reason, the facility ceases to operate for its intended pollution control purpose.

3. Any reports or monitoring data requested by the Department of Environmental Quality shall be promptly provided.

NOTE - The facility described herein is not eligible to receive tax credit certification as an Energy Conservation Facility under the provisions of Chapter 512, Oregon Law 1979, if the person issued the Certificate elects to take the tax credit relief under ORS 316.097 or 317.072.

Signed _____

Title Joe B. Richards, Chairman

Approved by the Environmental Quality Commission on the 16th day of November 1979

DEQ/TC-6 10/79

SP*54311-340

Certificate No. 1336

Date of Issue 12/4/81

Application No. T-1430

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

POLLUTION CONTROL FACILITY CERTIFICATE

Issued To:	Location of Pollution Control Facility:
Champion International Corporation Building Products Division P. O. Box 10228 Eugene, OR 97440	Lebanon, Oregon
As: ☐ Lessee ☒ Owner	

Description of Pollution Control Facility:

A wastewater recirculation system consisting of a Liquatex separator with a 1 1/2 Hp pump, a 15 Hp recirculation pump, piping, an 8'x8'x8' concrete sump with a Brill oil skimmer and a 5 Hp pump.

Type of Pollution Control Facility: ☐ Air ☐ Noise ☒ Water ☐ Solid Waste ☐ Hazardous Waste ☐ Used Oil

Date Pollution Control Facility was completed: Nov. 1979 Placed into operation: Nov. 1979

Actual Cost of Pollution Control Facility: $ 35,735.00

Percent of actual cost properly allocable to pollution control: 80% or more

Based upon the information contained in the application referenced above, the Environmental Quality Commission certifies that the facility described herein was erected, constructed or installed in accordance with the requirements of ORS 468.175 and subsection (1) of ORS 468.165, and is designed for, and is being operated or will operate to a substantial extent for the purpose of preventing, controlling or reducing air, water or noise pollution or solid waste, hazardous wastes or used oil, and that it is necessary to satisfy the intents and purposes of ORS Chapters 454, 459, 467 and 468 and rules adopted thereunder.

Therefore, this Pollution Control Facility Certificate is issued this date subject to compliance with the statutes of the State of Oregon, the regulations of the Department of Environmental Quality and the following special conditions:

1. The facility shall be continuously operated at maximum efficiency for the designed purpose of preventing, controlling, and reducing the type of pollution as indicated above.
2. The Department of Environmental Quality shall be immediately notified of any proposed change in use or method of operation of the facility and if, for any reason, the facility ceases to operate for its intended pollution control purpose.
3. Any reports or monitoring data requested by the Department of Environmental Quality shall be promptly provided.

NOTE — The facility described herein is not eligible to receive tax credit certification as an Energy Conservation Facility under the provisions of Chapter 512, Oregon Law 1979, if the person issued the Certificate elects to take the tax credit relief under ORS 316.097 or 317.072.

Signed /s/ Joe B. Richards

Title Joe B. Richards, Chairman

Approved by the Environmental Quality Commission on the 4th day of December 19 81

Certificate No. 1339

Date of Issue 12/4/81

Application No. T-1433

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

POLLUTION CONTROL FACILITY CERTIFICATE

Issued To: Champion International Corp. Building Products Division P. O. Box 10228 Eugene, OR 97440	Location of Pollution Control Facility: Lebanon, Oregon
As: ☐ Lessee ☒ Owner	

Description of Pollution Control Facility:

Ducting of veneer dryer exhaust gases from six dryers to a hogged fuel boiler for incineration.

Type of Pollution Control Facility: ☒ Air ☐ Noise ☐ Water ☐ Solid Waste ☐ Hazardous Waste ☐ Used Oil

Date Pollution Control Facility was completed: May 1978 Placed into operation: Sept. 1, 1978

Actual Cost of Pollution Control Facility: $ 484,699.00

Percent of actual cost properly allocable to pollution control: 80% or more

Based upon the information contained in the application referenced above, the Environmental Quality Commission certifies that the facility described herein was erected, constructed or installed in accordance with the requirements of ORS 468.175 and subsection (1) of ORS 468.165, and is designed for, and is being operated or will operate to a substantial extent for the purpose of preventing, controlling or reducing air, water or noise pollution or solid waste, hazardous wastes or used oil, and that it is necessary to satisfy the intents and purposes of ORS Chapters 454, 459, 467 and 468 and rules adopted thereunder.

Therefore, this Pollution Control Facility Certificate is issued this date subject to compliance with the statutes of the State of Oregon, the regulations of the Department of Environmental Quality and the following special conditions:

1. The facility shall be continuously operated at maximum efficiency for the designed purpose of preventing, controlling, and reducing the type of pollution as indicated above.
2. The Department of Environmental Quality shall be immediately notified of any proposed change in use or method of operation of the facility and if, for any reason, the facility ceases to operate for its intended pollution control purpose.
3. Any reports or monitoring data requested by the Department of Environmental Quality shall be promptly provided.

NOTE — The facility described herein is not eligible to receive tax credit certification as an Energy Conservation Facility under the provisions of Chapter 512, Oregon Law 1979, if the person issued the Certificate elects to take the tax credit relief under ORS 316.097 or 317.072.

Signed _____

Title Joe B. Richards, Chairman

Approved by the Environmental Quality Commission on the 4th day of December, 1981

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

Certificate No. 948

Date of Issue 12/15/78

Application No. T-1026

POLLUTION CONTROL FACILITY CERTIFICATE

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Issued To:	Location of Pollution Control Facility:
Champion International Corporation Champion Building Products P.O. Box 10228 Eugene, Oregon 97440	P.O. Box 248 Idanha, Oregon 97350
As: ☐ Lessee ☒ Owner	

Description of Pollution Control Facility:

Hog fuel preparation system consisting of (1) Lamb Grays Harbor Hammer Hog (s/n 76115-1), electric motor and related equipment, and (2) Peerless 42.5 unit mono bin, conveyors and related equipment.

Type of Pollution Control Facility: ☐ Air ☐ Noise ☐ Water ☒ Solid Waste

Date Pollution Control Facility was completed: September 1, 1977 Placed into operation: Sept. 1, 1977

Actual Cost of Pollution Control Facility: $ 202,800.32

Percent of actual cost properly allocable to pollution control:

100%

In accordance with the provisions of ORS 468.155 et seq., it is hereby certified that the facility described herein and in the application referenced above is a "Pollution Control Facility" within the definition of ORS 468.155 and that the air or water facility was constructed on or after January 1, 1967, the solid waste facility was under construction on or after January 1, 1973, or the noise facility was constructed on or after January 1, 1977, and the facility is designed for, and is being operated or will operate to a substantial extent for the purpose of preventing, controlling or reducing air, water, noise or solid waste pollution, and that the facility is necessary to satisfy the intents and purposes of ORS Chapter 459, 467 or 468 and the regulations adopted thereunder.

Therefore, this Pollution Control Facility Certificate is issued this date subject to compliance with the statutes of the State of Oregon, the regulations of the Department of Environmental Quality and the following special conditions:

1. The facility shall be continuously operated at maximum efficiency for the designed purpose of preventing, controlling, and reducing the type of pollution as indicated above.
2. The Department of Environmental Quality shall be immediately notified of any proposed change in use or method of operation of the facility and if, for any reason, the facility ceases to operate for its intended pollution control purpose.
3. Any reports or monitoring data requested by the Department of Environmental Quality shall be promptly provided.

Signed _____

Title Joe B. Richards, Chairman

Approved by the Environmental Quality Commission on the 15th day of December, 1978.

VICTOR ATIYEH
GOVERNOR

Environmental Quality Commission

Mailing Address: BOX 1760, PORTLAND, OR 97207
522 SOUTHWEST 5th AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Agenda Item No. D, June 7, 1985, EQC Meeting

Request for Authorization to Conduct a Public Hearing on the Modification and Adoption of Hazardous Waste Management Rules, OAR Chapter 340, Divisions 100-108

Background

Due to a high potential for human health and environmental damage, hazardous waste requires special management controls. In Oregon, this need has been recognized since 1971 when the Legislature initially adopted hazardous waste legislation.

Currently, the U.S. Environmental Protection Agency, under Subtitle "C" of the Resource Conservation and Recovery Act of 1976 (RCRA), has developed a national program for the management of hazardous waste. The act places hazardous waste management in the federal province but includes provisions for EPA to authorize a state program to operate in lieu of a federally operated program.

On April 20, 1984, the Commission adopted a revised set of hazardous waste management rules, codified in OAR Chapter 340, Divisions 100 to 110. The rules established a comprehensive State hazardous waste management program designed to protect the environment of Oregon and the health of its citizens from the adverse effects of improper hazardous waste management practices. Additionally, adoption of the rules enabled DEQ to demonstrate that the State program was equivalent to the federal program, and thus request RCRA Final Authorization from EPA. Achieving Final Authorization of the State's program is in accordance with the wishes of the regulated community and public, as expressed during public hearings, the 1983 Legislature, as expressed in House Bill 2238, and in discussions with the 1985 Legislature pertaining to HB 2145 (which was passed unanimously by the House Energy and Environment Committee, and, as of May 20, has been referred to the Ways and Means Committee for further consideration).

The Department, on June 1, 1984, submitted an application for Final Authorization to EPA. In response to some of EPA's application review comments, modifications to the State's rules were adopted by the Commission on August 22 and November 2, 1984. Additionally, EPA had strong concerns

over the level of Department resources available to operate the State's program, and was reluctant to grant Final Authorization at that time.

The Department and EPA subsequently reached accord on additional actions the State would undertake to receive Final Authorization. DEQ plans to submit a revised application to EPA by September 1, 1985, and hopes to receive Final Authorization by January 31, 1986.

On January 4 and 14, and April 11, 23 and 30, 1985, EPA promulgated regulations modifying the federal program. EPA regulations require, as a condition of authorization, that states modify their programs to incorporate revisions of the federal program, and thus maintain equivalency. States are allowed twelve months following EPA promulgation of regulations to make program revisions. Federal program changes which relax existing requirements are optional for state adoption.

Pursuant to the requirements for State program revisions discussed above, the Department will be required to incorporate the January and April 1985 EPA revisions into the State program by no later than January and April 1986, respectively, in order to maintain Final Authorization once granted. Since this coincides with the expected date for receiving Final Authorization, the Department is proposing to adopt these program revisions now and incorporate them into the State's revised application for Final Authorization. The Department also proposes to adopt less stringent federal regulations regarding "satellite accumulation" promulgated December 20, 1984, and make technical corrections to, and clarifications of, existing rules.

In addition to these substantive rule modifications, the Department proposes to revise the format of existing State rules. The majority of rules in current Divisions 100 to 106 recodify federal requirements in 40 CFR Parts 260-264, 270 and 124. The Department's experience since April 1984 in implementing these rules suggests that adoption of federal requirements through incorporation-by-reference would reduce confusion in the regulated community and allow for easier implementation by DEQ. Additionally, the Secretary of State's office has expressed concern over the length of existing Divisions 100-110, particularly 104. Use of this approach would also allow future State program revisions resulting from new or modified federal regulations to be made with less difficulty and administrative burden on the Department.

The following discussion briefly describes the proposed rule modifications included in Attachment IV. It should be noted that, due to use of the incorporation-by-reference format, the contents of the December 20, 1984, January 4 and 14, and April 11, 23 and 30, 1985 federal rule changes do not appear codified in Divisions 100-107. However, copies of these regulations are provided in Attachment VI for informational purposes.

Federal program changes made in recent months by EPA and proposed for adoption by the Commission address five areas:

1. Redefinition of residues relative to recycling (January 4 and April 11, 1985).

2. Listing certain dioxin-containing wastes as hazardous waste (January 14, 1985).

3. Allowing short-term accumulation of hazardous wastes at the point of generation ("satellite" accumulation) (December 20, 1984).

4. Adoption of a simplified test method to determine if "free liquids" are present in hazardous waste (April 30, 1985).

5. Changes to interim status standards applicable to existing management facilities, to conform to similar existing requirements for permitted facilities (April 23, 1985).

Discussion

1. On January 4, 1985, EPA promulgated a revised definition of solid wastes and established certain management standards for hazardous wastes which are recycled. Use of the term "solid waste" by EPA is akin to use of the term "residue" by Oregon. In each case, hazardous waste is defined as a subset.

   The existing State rules are limited in their regulation of hazardous wastes that are recycled. Wastes that are sludges or listed hazardous wastes are fully regulated up to the point of recycling (i.e., generation, transportation and storage). However, wastes that are hazardous solely because they fail a characteristic (i.e., ignitable, corrosive, reactive, or EP toxic) are subject only to a reduced set of requirements if they are used, reused or reclaimed. The proposed rules would eliminate the distinction between characteristic and listed spent materials and define all spent materials as residues and hazardous wastes.

   The proposed rules use a matrix approach to define which secondary materials would be residues and hazardous wastes when recycled. The matrix, shown in Table 1, considers both the nature of the material involved and the manner in which it is being recycled. Secondary materials which can be wastes include the following:

   a. Spent Material - material which has been used and as a result of contamination can no longer serve the purpose for which it was produced without processing.

   b. Sludge - any solid, semi-solid or liquid waste generated from a municipal, commercial or industrial wastewater treatment plant, water supply treatment plant or air pollution control facility.

   c. Byproduct - a material that is not one of the primary products of a production process and is not solely or separately produced by the production process.

BLE 1

Types of Secondary Materials Defined as Residues and Hazardous Wastes When Recycled and Types of Recycling Activities Constituting Waste Management

SECONDARY MATERIALS	EXAMPLES	RECLAMATION[1]	SPECULATIVE ACCUMULATION[2]	USE CONSTITUTING DISPOSAL[3]	ENERGY RECOVERY AND FUEL[4]
1. Spent Materials					
a. Characteristic	paint thinner, sulfuric acid	Yes	Yes	Yes	Yes[5]
b. Listed	spent methylene chloride used in degreasing (F001)	Yes	Yes	Yes	Yes
2. Sludges					
a. Characteristic	heavy metal sludge from wastewater treatment	No	Yes	Yes	Yes
b. Listed	emission control sludge from primary steelmaking (K061)	Yes	Yes	Yes	Yes
3. Byproducts					
a. Characteristic	slag exhibiting EP Toxicity	No	Yes	Yes	Yes[5]
b. Listed	tank bottoms from petroleum refining (K052)	Yes	Yes	Yes	Yes
4. Listed Commercial Chemical Products	formaldehyde (U122)	No	No	Yes	Yes
5. Scrap Metal	scrap turnings exhibiting EP Toxicity	Yes[6]	Yes[6]	Yes[6]	Yes[6]

Yes = defined as a residue
No = Not defined as a residue

(1) Processing to recover a useable product, or regeneration
(2) Accumulation before being recycled, unless 75% of accumulated material is recycled during a one-year period
(3) Applied to the land in a manner constituting disposal, or contained in a product that is applied to the land
(4) Burned to recover energy or used to produce a fuel
(5) Only listed wastes and sludges are regulated at this time, and only generation, transportation and storage activities are regulated for now
(6) Although defined as a residue, not regulated at this time

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d. Commercial Chemical Product - a chemical substance manufactured or formulated for commercial or manufacturing use which consists of the commercially pure grade, any technical grade, and all formulations of the chemical in which it is the sole active ingredient.

e. Scrap Metal - bits and pieces of metal parts or metal pieces that may be combined together with bolts or soldering, which when worn or superfluous can be recycled.

Certain materials would be defined as residues and hazardous wastes if they are accumulated speculatively, reclaimed, burned or used to produce a fuel, or used in a manner constituting disposal.

Under the proposed rules, certain recycling activities would not be considered waste management and therefore materials recycled in these ways would not be hazardous wastes. These activities include use/reuse as ingredients to make new products, use/reuse as substitutes for commercial products, closed-loop recycling, and reclamation of non-listed sludges and byproducts.

In the areas of use and reuse of secondary materials, the proposed rules would reduce existing State requirements. Under existing 340-101-006, a generator's hazardous waste which is beneficially used or reused is subject to a limited set of requirements. These requirements include the generator obtaining an identification number, using a manifest or shipping papers for shipments off-site greater than 2000 pounds per month, reporting shipments to the Department, and obtaining the Department's authorization if greater than 200 pounds per month is shipped off-site. Rule 340-102-052 specifies the terms of and requirements for the Department's authorization, which includes authorization to inspect the user.

The proposed rules would eliminate these requirements since secondary materials would not be defined as residues (and hence not hazardous wastes) if they are used or reused either as ingredients in an industrial process to make a product, or as effective substitutes for commercial products. In both of these cases, the Department believes the secondary materials are functioning as raw materials and thus are not wastes. It is important to note, however, that if any reclamation is performed prior to use or reuse, the materials would be considered residues and possibly hazardous wastes.

Hazardous wastes being recycled and not exempt from regulation would be subject to either a reduced set of standards (established in 40 CFR Part 266) or the full requirements of existing rules. Spent lead-acid batteries being reclaimed would only be regulated when stored by battery reclaimers. Wastes from which precious metals are recovered would be subject only to the notification, manifest and recordkeeping provisions of existing rules. Some materials which would be exempt temporarily from regulation include scrap metal, used oil exhibiting a characteristic, waste-derived fuels and wastes burned as fuel. The temporary exclusion from regulation is due to ongoing investigations

by EPA to more fully characterize the composition and handling practices of these materials. EPA may propose at a future date to establish substantive and/or administrative controls if appropriate.

The effect of these proposed revisions would be to bring an unknown but estimated small number of persons under regulation, primarily due to the rule provisions dealing with reclamation of spent materials exhibiting a characteristic. For example, spent acetone, which exhibits the characteristic of ignitability, and spent sulfuric acid, which exhibits the corrosivity characteristic, when reclaimed would become regulated as hazardous wastes under the proposed rules.

Generators of these wastes would have to comply with the generator rules in Division 102, e.g., identification number, proper packaging and labeling, recordkeeping, use of the manifest, etc. Also, reclamation facilities which store these characteristic hazardous wastes prior to reclamation would be required to obtain a hazardous waste storage permit. The Department is presently aware of five reclamation facilities which would become subject to the permit requirements.

2. The proposed rules would classify as listed hazardous wastes certain wastes containing particular chlorinated dioxins, chlorinated dibenzofurans, and chlorinated phenols, and specify management standards for these wastes. These wastes would be designated as acute hazardous waste and therefore subject to full regulation in quantities greater than 2.2 pounds. The Department believes that these wastes, which contain potent toxicants, should be appropriately managed as hazardous wastes and in accordance with special standards. To do this, the Commission is asked to make the finding that these residues, because of their quantity, concentration, or physical, chemical, or infectious characteristics, may (ORS 459.410(6)):

   a. Cause or significantly contribute to an increase in mortality or an increase in serious irreversible or incapacitating reversible illness; or

   b. Pose a significant present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed.

   These wastes contain significant concentrations of highly toxic chemicals, including tetra-, penta- and hexachlorodibenzo-p-dioxin (CDDs) and -dibenzofurans (CDFs), and high concentrations of other toxic chemicals, including pentachlorophenol (PCP). EPA has determined that two of the hexachlorodibenzo-p-dioxins (HxCDDs) are carcinogens. There are also reports in the literature which indicate that workers in occupations associated with PCP exposure are at an increased risk of certain types of cancer.

   In addition to their toxicity, these contaminants have been found to be mobile and persistent in the environment. Wastes containing these contaminants have been associated with many damage incidents,

including those at Love Canal, New York, and Times Beach, Missouri. For all of these reasons, the Department believes these wastes could pose (and have posed) a significant hazard to human health and the environment when improperly managed.

3. Another area of rule modification is "satellite accumulation." Adoption of the revision to 40 CFR 262.34 would allow hazardous waste generators to accumulate up to 55 gallons of hazardous waste, or one quart of acutely hazardous waste, in satellite areas at a generator's facility. Waste accumulating in these areas would have to be placed in good containers, be compatible with their containers and the containers marked "Hazardous Wastes." Requirements currently in effect but which would be deleted under the proposed rule modification include preparation of contingency plans, procedures for preparedness, prevention, and emergencies, and personnel training plans. (However, these requirements would be effective once the waste accumulation exceeds 55 gallons and 72 hours.) The Department had previously proposed adoption of the "satellite accumulation" rule, but was advised by EPA that to do so would make the State program less stringent than the federal program, since the rule had not been finalized by EPA at that time.

4. The Department also proposes to adopt a simplified method for determining if free liquids are present in a hazardous waste. The "Paint Filter Liquids Test" was determined to be relatively easy and inexpensive to conduct, in tests by EPA comparing it to other methods. DEQ concurs with the findings and notes the favorable comments on this method made by the regulated community.

5. The last area of rule modification in response to federal program revisions concerns the interim status standards for existing management facilities. Certain standards concerning facility operation, already in place in Division 104, are proposed for inclusion also in Division 105 to ensure consistency.

   These requirements include: (1) Allowing design features or operating requirements to prevent overtopping of surface impoundments; (2) More explicit and stringent requirements governing final cover for landfills and minimization of erosion of the cover; (3) Requiring certification of design features or operating procedures used to prevent ignition or reaction of ignitable or reactive wastes placed in surface impoundments; (4) More explicit requirements governing the placement of empty containers in landfills; and (5) Clarification that "land treatment" of hazardous wastes is interpreted to include immobilization and transformation in addition to degradation of hazardous constituents of the wastes.

As a result of the Department's experience in implementing the April 20, 1984 set of hazardous waste rules, DEQ is proposing technical corrections, minor substantive changes and clarifying changes to existing rules. These

include the following:

Division 100

Revised definition of "existing facility" to include facilities which exist on the date of future State statutory or rule amendments which make the facilities subject to regulation. The revised definition would be consistent with that contained in the federal Hazardous and Solid Waste Amendments of 1984. Under the existing definition, an existing facility must have been in operation or under construction on or before November 19, 1980. If a facility were to begin operating on June 1, 1985, and subsequently become subject to a permit requirement on September 1, 1985, the facility would not qualify as "existing," but would rather be a "new" facility. The result would be that, as a new facility, it would have to be issued a permit prior to construction. The proposed rules would allow the facility to qualify as "existing" and therefore continue to operate.

Division 101

Deletion of the oral, dermal and inhalation toxicity criteria for determining which pesticide residues, not already classified as hazardous, are hazardous wastes. The criteria are admittedly vague and do not identify specific procedures or species for determining if a residue fails the criteria. Additionally, DEQ is not equipped to perform these types of mammalian (generally rat or rabbit) toxicity tests.

The aquatic toxicity criterion, for which DEQ has established a standard test protocol, and which is believed to be more sensitive than the other criteria, would be retained and revised to require use of DEQ's test protocol.

Divisions 104 and 105

Incorporation of the statutory provision (ORS 459.590) requiring conveyance of property deed to the State for hazardous waste disposal sites. This requirement also applies to waste pile or surface impoundment facilities which close as landfills (i.e., require post-closure permits).

Division 105

1. Clarification that the interim status standards of 40 CFR Part 265 are applicable to facilities with State-issued non-RCRA permits. In order to obtain Final Authorization from EPA, DEQ must demonstrate that all facilities which have not been issued a RCRA permit are subject to the requirements of 40 CFR Part 265. A small number of facilities exist which, by present State rule, do not have to comply with Part 265 because they have been issued non-RCRA permits. The proposed rule revision would subject these non-RCRA permitted facilities to Part 265 until a RCRA permit is issued. Although some facilities have voluntarily made efforts

to meet the Part 265 standards, it is likely that further efforts to upgrade facility management will be needed. Therefore, a delayed effective date of September 1, 1985, is proposed.

2. Clarification that existing facilities which as a result of future statutory or regulatory changes become subject to the requirement to have a permit must submit a Part A permit application to the Department within thirty days of the change. The current rule, OAR 340-105-010(5), requires Part A submittal by June 1, 1984, and thus makes no provisions for facilities which become regulated at a future date.

Division 106

1. Incorporation of the statutory provision (ORS 459.550 and .560) that a public hearing on a waste disposal facility permit is mandatory. The existing rule specifies that such a hearing is not mandatory. Therefore, the rule is in conflict with the enabling statute.

2. Clarification of the distinction in permitting authorities between the Commission and the Department. Actions regarding disposal facility permits are reserved for the Commission, while the Department's authorities cover permits for storage and treatment facilities.

3. Extension of the Department's completeness review period for permit applications from 45 to 60 days. Recent applications submitted to DEQ have been quite detailed and comprehensive, necessitating lengthy reviews by staff. DEQ has been unable to meet the 45-day period in the current rule.

Due to the substantial amount of rule deletions and modifications necessitated by incorporating the federal requirements by reference, and at the suggestion of the Secretary of State's office, the proposed rule modifications (with the exception of Division 108) are presented in their new form without displaying deleted material in brackets and new material underscored. The Statement of Need for Rulemaking is attached.

Finally, the Department would like to alert the Commission to possible future changes in the federal hazardous waste program. EPA is considering listing additional wastes and making other substantive changes which would result in greater (or in some cases, reduced) regulation. In order to maintain Final Authorization once granted, DEQ will need to maintain an equivalent State program. As a result, future State rulemaking can be anticipated.

Alternatives and Evaluation

Adoption of the proposed rules regarding (1) dioxin-containing wastes, (2) residues which are hazardous wastes and recycled, (3) test methods for free liquids, and (4) interim status standards would enable DEQ to maintain an equivalent State hazardous waste management program and thus continue to seek RCRA Final Authorization.

Not adopting the rules identified immediately above at this time would not jeopardize a favorable EPA decision on Final Authorization. However, adoption at a later date but prior to early 1986 would be necessary to maintain Final Authorization once granted.

Not adopting the rule making 40 CFR Part 265 applicable to facilities with state-issued non-RCRA permits would preclude Oregon from obtaining Final Authorization. Without this rule change, DEQ's program would not be equivalent to the federal program. EPA requires all facilities not having a RCRA permit to comply with Part 265.

If the satellite accumulation rule is not adopted, generators, including small businesses, would not benefit from a decreased administrative burden and lower costs associated with compliance.

By not clarifying existing rules to make a public hearing mandatory on waste disposal facility permits, the rules would continue to be inconsistent with the statutes. Legislative Counsel has advised that this inconsistency causes the rules to be outside the intent and scope of the enabling legislation.

An alternative to incorporating federal regulations by reference would be to continue recodifying them into State rules. This approach has generated some confusion and misunderstanding in the regulated community. As new federal requirements are promulgated, recodification into State rules would be time-consuming and possibly result in renumbering and modifying existing rules. Additionally, the Secretary of State's office may split Division 104 into separate new divisions to reduce its size.

Summation

1. The DEQ presently operates a comprehensive management program that controls hazardous waste from its generation through transportation, storage, treatment and final disposition.

2. The Department desires and has been advised by the public, regulated community and Legislature to seek RCRA Final Authorization, which requires an equivalent State program.

3. The current State rules are not equivalent to recent changes made by EPA to the federal program.

4. The attached proposed rules are believed to be fully equivalent to and consistent with the federal rules.

5. Use of the recodification approach to rulemaking results in a greater administrative burden on the public, regulated community and Department.

6. Incorporating federal rules by reference reduces this administrative burden.

7. Minor substantive rule changes proposed would clarify existing rules and make the rules consistent with Oregon statutes.

8. To permit the classification of dioxin-containing residues as hazardous wastes, the Commission must find that the residues, because of their quantity, concentration, or physical, chemical, or infectious characteristics, may:

   a. Cause or significantly contribute to an increase in mortality or an increase in serious irreversible or incapacitating reversible illness; or

   b. Pose a significant present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed.

Director's Recommendation

Based on the Summation, it is recommended that the Commission authorize a public hearing to take testimony on the proposed modification of OAR Chapter 340, Divisions 100 to 106 and 108, and the proposed adoption of Division 107.

Michael Downs for
Fred Hansen

Attachments
I. Statement of Need for Rules
II. Statement of Land Use Consistency
III. Draft Public Notice of Rules Modification
IV. Proposed Modifications
V. 40 CFR Parts 260-266, 270 and 124
VI. Revisions to 40 CFR Parts 260-266 and 270

Alan S. Goodman:c
229-5254
May 21, 1985
ZC2217

ATTACHMENT I
Agenda Item No. D
6/7/85 EQC Meeting

BEFORE THE ENVIRONMENTAL QUALITY COMMISSION
OF THE STATE OF OREGON

IN THE MATTER OF MODIFYING OAR CHAPTER 340, DIVISIONS 100 TO 106 AND 108, AND ADOPTING DIVISION 107	))))	STATEMENT OF NEED FOR RULE MODIFICATIONS AND ADOPTION

STATUTORY AUTHORITY:

ORS 459.440 requires the Commission to:

(1) Adopt rules to establish minimum requirements for the treatment storage, and disposal of hazardous wastes, minimum requirements for operation, maintenance, monitoring, reporting and supervision of treatment, storage and disposal sites, and requirements and procedures for selection of such sites.

(2) Classify as hazardous wastes those residues resulting from any process of industry, manufacturing, trade, business or government or from the development or recovery of any natural resources, which may, because of their quantity, concentration, or physical chemical or infectious characteristics:

(a) Cause or significantly contribute to an increase in mortality or an increase in serious irreversible or incapacitating reversible illness; or
(b) Pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed.

(3) Adopt rules pertaining to hearings, filing of reports, submission of plans and the issuance of licenses.

(4) Adopt rules pertaining to generators, and to the transportation of hazardous waste by air and water.

ORS 459.455 authorizes the Commission and the Department to perform any act necessary to gain Final Authorization of a hazardous waste regulatory program under the provisions of the federal Resource Conservation and Recovery Act.

NEED FOR THE RULES:

The management of hazardous waste is currently under both state and federal control but, by being authorized, a state may manage its own hazardous waste in lieu of a federally operated program. The proposed modifications will better enable the Department to demonstrate that its program is equivalent to the federal program as required for Final Authorization.

PRINCIPAL DOCUMENTS RELIED UPON:

Existing federal hazardous waste management rules, 40 CFR Parts 260 to 266, 270, and 124, and existing State rules, OAR Chapter 340, Divisions 100 and 110.

FISCAL AND ECONOMIC IMPACT:

Adoption of these rules may increase the costs of hazardous waste management because some new requirements would be placed on certain hazardous waste recycling activities and on the disposal of highly toxic (dioxin-contaminated) wastes. The provisions for satellite accumulation of hazardous wastes would likely lower generators' operating costs.

The other rule modifications are generally clarifying in nature and will have no measurable fiscal or economic impact.

The small business impact is similar to that noted above.

ASG:c
ZC2217.1

Attachment II
Agenda Item No. D
6/7/85 EQC Meeting

BEFORE THE ENVIRONMENTAL QUALITY COMMISSION
OF THE STATE OF OREGON

IN THE MATTER OF MODIFYING	)	LAND USE CONSISTENCY
OAR CHAPTER 340,	)	
DIVISIONS 100 TO 106 AND 108,	)	
AND ADOPTING DIVISION 107	)	

The proposal described appears to be consistent with all statewide planning goals. Specifically, the rules comply with Goal 6 because they modify existing rules in a manner that ensures the safe management of hazardous waste generation, storage, transportation, treatment and disposal, and thereby provide protection for air, water and land resource quality.

The rules comply with Goal 11 by promoting hazardous waste reduction at the point of generation, beneficial use, recycling, treatment, and by controlling disposal site operations. They also intend to assure that current and long-range waste disposal needs will be accommodated.

Public comment on this proposal is invited and may be submitted in the manner described in the accompanying Public Notice of Rules Adoption.

It is requested that local, state and federal agencies review the proposal and comment on possible conflicts with their programs affecting land use and with statewide planning goals within their jurisdiction. The Department of Environmental Quality intends to ask the Department of Land Conservation and Development to mediate any apparent conflicts thereby brought to its attention.

After public hearing, the Commission may adopt permanent rules identical to the proposal, adopt modified rules on the same subject matter, or decline to act. The Commission's deliberation should come on July 19, 1985, as part of the agenda of a regularly scheduled Commission meeting.

ASG:c
ZC2217.2

ATTACHMENT III
Agenda Item No. D
6/7/85 EQC Meeting

Oregon Department of Environmental Quality

A CHANCE TO COMMENT ON...

Public Hearing on Amendments to the Hazardous Waste Rules

Date Prepared: May 10, 1985
Hearing Date: June 25, 1985
Comments Due: June 25, 1985

WHO IS AFFECTED:

Persons who manage hazardous waste, including generators, and owners and operators of hazardous waste treatment, storage and disposal facilities.

WHAT IS PROPOSED:

The Department of Environmental Quality (DEQ) proposes to amend OAR Chapter 340, Divisions 100-106 and 108, and to adopt Division 107, to include recently promulgated federal requirements. This is necessary to assure equivalence to the federal program in order for the Department to obtain Final Authorization to manage hazardous waste in Oregon.

Minor changes to clarify existing rules and incorporate federal requirements by reference are also proposed.

WHAT ARE THE HIGHLIGHTS:

- o The rules would clarify which secondary materials are residues and hazardous waste when recycled. Management standards would be established for certain hazardous wastes when recycled in specific manners.
- o Certain wastes containing chlorinated dioxins and related toxic chemicals would be defined as hazardous waste and subject to special management standards.
- o Generators would be allowed to accumulate small quantities of waste at the point of generation, subject to certain conditions.
- o All rules in Divisions 100 to 106 which are identical to federal regulations would be adopted by reference to the federal rules rather than restated verbatim.

HOW TO COMMENT:

A public hearing is scheduled for oral comments on:

Tuesday, June 25, 1985
9:00 a.m.
DEQ Portland Headquarters
Room 1400
522 SW Fifth Ave.

Written comments can be submitted at the public hearing or sent to DEQ, Hazardous and Solid Waste Division, Attn: Alan Goodman, PO Box 1760, Portland, Oregon, 97207, by June 25, 1985.

P.O. Box 1760
Portland, OR 97207

8/10/82

FOR FURTHER INFORMATION:

Contact the person or division identified in the public notice by calling 229-5696 in the Portland area. To avoid long distance charges from other parts of the state, call ~~1-800-452-7813~~ 1-800-452-4011 and ask for the Department of Environmental Quality.

For more information, or to receive a copy of the proposed rules, call Alan Goodman at 229-5254.

WHAT IS THE NEXT STEP: After the public hearing, DEQ will evaluate the comments, prepare a response to comments and make a recommendation to the Environmental Quality Commission on July 19, 1985.

ZC2217.3

DIVISION 100
HAZARDOUS WASTE MANAGEMENT

Hazardous Waste Management System: General

Authority: ORS Chapter 468, including 468.020; 459, including 459.440; and 183.

Purpose and scope.

340-100-005 The Department finds that increasing quantities of hazardous waste are being generated in Oregon which, without adequate safeguards, can create conditions that threaten public health and the environment. It is therefore in the public interest to establish a comprehensive program to provide for the safe management of such waste.

The purpose of the management program contained in Divisions 100 to 110 of this Chapter is to control hazardous waste from the time of generation through transportation, storage, treatment and disposal. Waste reduction at the point of generation, beneficial use, recycling and treatment are given preference to land disposal. To this end, the Department intends to minimize the number of disposal sites and to tightly control their operation.

A secondary purpose is to obtain EPA Final Authorization to manage hazardous waste in Oregon in lieu of the federal program.

(Comment: Divisions 100 to 107 and 110 correspond to certain federal regulations as follows: Division 100 (40 CFR Part 260), 101 (261), 102 (262), 103 (263), 104 (264), 105 (270), 106 (124), 107 (266) and 110 (761).

Adoption of United States Environmental Protection Agency Hazardous Waste Regulations.

340-100-010 Except as otherwise modified or specified by OAR Chapter 340, Division 100, the rules and regulations governing the management of hazardous waste, prescribed by the United States Environmental Protection Agency in Title 40 Code of Federal Regulations, Part 260, and amendments thereto promulgated prior to May 1, 1985, are

adopted and prescribed by the Commission to be observed by all persons subject to ORS 459.410 to 459.450, and 459.460 to 459.695.

Confidentiality.

340-100-015 (1) The provisions of this rule replace the provisions of 40 CFR 260.2.

(2) Records, reports, and information submitted pursuant to these rules may be claimed as confidential by the submitter. Such claim must be asserted at the time of submission by stamping the words "confidential business information" or the equivalent on each page containing such information. If no claim is made at the time of submission, the Department may make the information available to the public without further notice. If a claim is asserted, the information will be treated in accordance with ORS 192.500 and 459.460.

(3) Records, reports, and information submitted pursuant to these rules shall be made available to EPA upon request. If the records, reports, or information has been submitted under a claim of confidentiality, the state shall make that claim of confidentiality to EPA for the requested records, reports or information. The federal agency shall treat the records, reports or information that is subject to the confidentiality claim as confidential in accordance with applicable federal law.

(Comment: It is suggested that claims of confidentiality be restricted to that information considered absolutely necessary and that such information be clearly separated from the remainder of the submission.)

Table of contents, Divisions 100 to 110.

340-100-020 The following Divisions comprise the Oregon hazardous waste management program:

Division	Subject
100	Hazardous Waste Management System: General
101	Identification and Listing of Hazardous Waste
102	Standards Applicable to Generators of Hazardous Waste
103	Standards Applicable to Transporters of Hazardous Waste by Air or Water
104	Standards for Owners and Operators of Hazardous Waste Treatment, Storage and Disposal Facilities
105	Management Facility Permits
106	Permitting Procedures
107	Standards for the Management of Specific Hazardous Wastes and Specific Types of Hazardous Waste Management Facilities
108	Spills and Other Incidents
109	Management of Pesticide Wastes
110	Polychlorinated Biphenyls (PCBs)

Meanings.

340-100-025 When used in 40 CFR Part 260, the following terms shall have the meanings given below:

(1) "Administrator" means the Department.

(2) "Regional Administrator" means the Department, except that when used in 40 CFR 260.30 through 260.41, it shall mean the Commission.

Definitions.

340-100-030 (1) The definitions of terms contained in this rule modify, or are in addition to, the definitions contained in 40 CFR 260.10.

(2) When used in Divisions 100 to 110 of this Chapter, the following

terms have the meanings given below:

(a) "Aquatic LC_{50}" (median aquatic lethal concentration) means the concentration of a substance which is expected in a specific time to kill 50% of an indigenous aquatic test population as measured by the DEQ Hazardous Waste Classification Aquatic Toxicity Bioassay. Aquatic LC_{50} is expressed in milligrams of the substance per liter of water.

(b) "Beneficiation of ores and minerals" means the upgrading of ores and minerals by purely physical processes (e.g., crushing, screening, settling, flotation, dewatering and drying) with the addition of other chemical products only to the extent that they are a non-hazardous aid to the physical process (such as flocculants and deflocculants added to a froth-flotation process).

(c) "Collection." See "Storage."

(d) "Commission" means the Environmental Quality Commission.

(e) "Constituent" or "hazardous waste constituent" means a constituent which caused the Commission to list the hazardous waste in Division 101.

(f) "Department" means the Department of Environmental Quality except it means the Commission when the context relates to a matter solely within the authority of the Commission such as: the adoption of rules and issuance of orders thereon pursuant to ORS 459.440, 459.445 and 468.903; the making of findings to support declassification of hazardous wastes pursuant to ORS 459.430(3); the issuance of exemptions pursuant to ORS 459.505(2); the issuance of disposal site permits pursuant to ORS 459.580(2);and the holding of hearings pursuant to ORS 459.560, 459.580(2), 459.620, 459.650, and 459.660.

(g) "Disposal" means the discharge, deposit, injection, dumping, spilling, leaking, or placing of any hazardous waste or hazardous substance into or on any land or water so that the hazardous waste or hazardous

substance or any constituent thereof may enter the environment or be emitted into the air or discharged into any waters of the state as defined in ORS 468.700.

(h) "Existing hazardous waste management (HWM) facility" or "existing facility" means a facility which was in operation or for which construction commenced on or before November 19, 1980, or is in existence on the effective date of statutory or regulatory changes under Oregon law that render the facility subject to the requirement to have a permit. A facility has commenced construction if:

(1) The owner or operator has obtained the federal, state, and local approvals or permits necessary to begin physical construction; and either

(2)(a) A continuous on-site, physical construction program has begun, or

(b) The owner or operator has entered into contractual obligations--which cannot be cancelled or modified without substantial loss--for physical construction of the facility to be completed within a reasonable time.

(i) "Extraction of ores and minerals" means the process of mining and removing ores and minerals from the earth.

(j) "Generator" means the person who, by virtue of ownership, management or control, is responsible for causing or allowing to be caused the creation of a hazardous waste.

(k) "Hazardous substance" means any substance intended for use which may also be identified as hazardous pursuant to Division 101.

(Comments: (1) For purposes of compliance with these rules, quantity calculations involving hazardous substances shall be made in a manner analogous to that in the comment in rule 340-101-015.

(2) These substances may include but are not necessarily the same as

those identified by DOT in 49 CFR 172.101.)

(l) "Hazardous waste" means a hazardous waste as defined in rule 340-101-015.

(m) "Identification number" means the number assigned by EPA to each generator, transporter, and treatment, storage and disposal facility.

(n) "License." See "Permit."

(o) "Management facility" means a hazardous waste treatment, storage or disposal facility.

(p) "Off-site" means any site which is not on-site.

(q) "Oxidizer" means any substance such as a chlorate, permanganate, peroxide, or nitrate, that yields oxygen readily or otherwise acts to stimulate the combustion of organic matter (see 40 CFR 173.151).

(r) "Permit" or "license" means the control document that contains the requirements of ORS Chapter 459 and Divisions 104 to 106. Permit includes permit-by-rule and emergency permit. Permit does not include any permit which has not yet been the subject of final Department action, such as a draft permit or a proposed permit.

(s) "Site" means the land or water area where any facility or activity is physically located or conducted, including adjacent land used in connection with the facility or activity.

(t) "Spill" means unauthorized disposal.

(u) "Storage" or "collection" means the containment of hazardous waste either on a temporary basis or for a period of years, in a manner that does not constitute disposal of the hazardous waste.

(v) "Waste management unit" means a contiguous area of land on or in which waste is placed. A waste management unit is the largest area in which there is a significant likelihood of mixing of waste constituents in the same area. Usually this is due to the fact that each waste management

unit is subject to a uniform set of management practices (e.g., one liner and leachate collection and removal system). The provisions in the Division 104 regulations (principally the technical standards in Subparts K-N of 40 CFR Part 264) establish requirements that are to be implemented on a unit-by-unit basis.

References.

340-100-035 (1) In addition to the publications listed in 40 CFR 260.11, when used in Divisions 100 to 110, the following publications are incorporated by reference:

(a) Code of Federal Regulations, Title 40, U.S. Environmental Protection Agency.

(b) Code of Federal Regulations, Title 49, U.S. Department of Transportation.

(c) DEQ Hazardous Waste Classification Aquatic Toxicity Bioassay.

(2) The references listed in section (1) of this rule and in 40 CFR 260.11 are available for inspection at the Department of Environmental Quality, 522 SW Fifth Ave., Portland, Oregon, 97204. These materials are incorporated as they exist on April 30, 1985.

General.

340-100-040 (1) Any person may petition the Department to approve an equivalent testing or analytical method or may petition the Commission to exclude a waste produced at a particular facility. This rule sets forth general requirements which apply to all such petitions.

(2) Persons submitting petitions shall comply with the requirements of

40 CFR 260.20.

(3) After evaluating all public comments, the Department or Commission as appropriate will make a decision to grant or deny the petition. Persons commenting on the petition will be notified and the decision placed in the public record.

Petitions for equivalent testing or analytical methods.

340-100-045 (1) Any person seeking to add a testing or analytical method to Divisions 101, 104 or 105 shall petition under this rule and rule 340-100-040.

(2) Persons submitting petitions shall comply with the requirements of 40 CFR 260.21.

(3) If the Department permits use of a new testing or analytical method, the method will be made available for public inspection in the manner indicated in rule 340-100-035(2).

(Comment: In most instances, the Department will not consider approving a testing or analytical method until it has been approved by EPA.)

Petitions to amend Division 101 to exclude a waste produced at a particular facility.

340-100-050 (1) Any person seeking to exclude a waste at a particular generating facility from the lists in Subpart D of Part 261 or the lists in Division 101 shall petition under this rule and rule 340-100-040.

(2) Persons submitting petitions shall comply with the requirements of 40 CFR 260.21.

(3) The Commission may (but shall not be required to) grant a temporary exclusion before making a final decision under rule 340-100-040(3) whenever it finds that there is a substantial likelihood that an exclusion will be finally granted. The Commission will place any such temporary exclusion in the public record.

DIVISION 101
HAZARDOUS WASTE MANAGEMENT

Identification and Listing of
Hazardous Waste

Authority: ORS Chapter 468, including 468.020; 459, including 459.440; and 183.

Purpose.

340-101-005 The purpose of this Division is to identity those residues which are subject to regulation as hazardous wastes under Divisions 100 to 108 of this Chapter.

Adoption of United States Environmental Protection Agency Hazardous Waste Regulations.

340-101-010 Except as otherwise modified or specified by OAR Chapter 340, Division 101, the rules and regulations governing the identification and listing of hazardous waste, prescribed by the United States Environmental Protection Agency in Title 40 Code of Federal Regulations, Part 261, and amendments thereto promulgated prior to May 1, 1985, are adopted and prescribed by the Commission to be observed by all persons subject to ORS 459.410 to 459.450, and 459.460 to 459.695.

Definitions and meanings.

340-101-015 (1) The statutory definition of "hazardous waste" is contained in ORS 459.410, and is restated as follows:

A "hazardous waste" does not include radioactive material or the radioactively contaminated containers and receptacles used in the transportation, storage, use or application of radioactive waste, unless the material, container or receptacle is classified as hazardous waste under subsections (1)(a), (b) or (c) of this rule on some basis other than the radioactivity of the material, container or receptacle. Hazardous waste does include all of the following which are not declassified by the

Commission under ORS 459.430(3):

(Comment: The Department may declassify listed wastes produced at a particular facility under rule 340-100-050.)

(a) Discarded, useless or unwanted materials or residues resulting from any substance or combination of substances intended for the purpose of defoliating plants or for the preventing, destroying, repelling or mitigating of insects, fungi, weeds, rodents or predatory animals, including but not limited to defoliants, desiccants, fungicides, herbicides, insecticides, nematocides and rodenticides.

(b) Residues resulting from any process of industry, manufacturing, trade, business or government or from the development or recovery of any natural resources, if such residues are classified as hazardous by order of the Commission, after notice and public hearing. For purposes of the classification, the Commission must find that the residue, because of its quantity, concentration, or physical, chemical or infectious characteristics, may:

(A) Cause or significantly contribute to an increase in mortality or an increase in serious irreversible or incapacitating reversible illness; or

(B) Pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

(c) Discarded, useless or unwanted containers and receptacles used in the transportation, storage, use or application of the substances described in subsections (a) and (b) of this section.

(Comment: For purposes of compliance with these rules, quantity calculation involving hazardous waste shall be made independent of the concentrations of the hazardous constituents. For example, rule 340-101-

040 identifying waste containing a concentration of 3% or greater acrolein (P003) as hazardous with a small quantity exemption of 2 lb/mo. shall be interpreted as requiring the management of 2.1 lb/mo. of a waste containing acrolein as hazardous whether the concentration of acrolein is 3, 30 or 100%.)

(2) The term "residue," when used in section (1) of this rule and in Division 101, shall have the meaning given to the term "solid waste" in 40 CFR 261.2.

(3) For purposes of identifying materials which are considered residues and subsequently residues which are considered hazardous wastes, the provisions of 40 CFR 261.2 and 261.3 shall apply.

(4) When used in 40 CFR Part 261, the following terms shall have the meanings given below:

(a) "Regional Administrator" means the Department.

(b) "Solid waste" means residue.

(c) "Administrator" means the Department, except that when used in 261.10 and 261.11, it shall mean the Commission.

Exclusions.

340-101-020 (1) The provision of 40 CFR 261.4(b)(7) is deleted and replaced with section (2) of this rule.

(2) Residues from the extraction and beneficiation of ores and minerals (including coal), including phosphate rock and overburden from the mining of uranium ore, are not hazardous waste.

(Comment: The State program is more stringent than the federal program in that the latter also excludes residues from processing.)

Special requirements for hazardous waste produced by small quantity generators.

340-101-025 (1) The provisions of 40 CFR 261.5(g) are deleted and replaced with section (2) of this rule.

(2) In order for hazardous waste generated by a small quantity generator to be excluded from full regulation under 40 CFR 261.5, the generator must:

(a)(A) Comply with 40 CFR 262.11; and

(B) If he generates more than 200 pounds in a calendar month, comply with 40 CFR 262.12(a), 262.30, 262.31, and 262.32(a).

(b) If he stores his hazardous waste on-site, store it in compliance with the requirements of 40 CFR 261.5(f); and

(c) If the quantity generated in a calendar month exceeds the small quantity disposal exemptions indicated in rule 340-101-030 of this Division: Either treat or dispose of his hazardous waste in an on-site facility, or ensure delivery to an off-site storage, treatment or disposal facility, either of which is:

(A) Permitted under Division 105;

(B) In interim status under 40 CFR Parts 265 and 270;

(C) Authorized to manage hazardous waste by a state with a hazardous waste management program approved under 40 CFR Part 271;

(d) If the quantity generated in a calendar month is equal to or less than the small quantity disposal exemptions indicated in rule 340-101-030 of this Division:

(A) Either treat or dispose of his hazardous waste in an on-site facility, or ensure delivery to an off-site storage, treatment or disposal facility, either of which is:

(i) Permitted under Division 105;

(ii) In interim status under 40 CFR Parts 265 and 270;

(iii) Authorized to manage hazardous waste by a state with a hazardous waste management program approved under 40 CFR Part 271; or

(iv) Permitted, licensed or registered by a state to manage municipal or industrial solid waste. Additionally, the generator shall:

(I) Securely contain the waste to minimize the possibility of waste release prior to burial; and

(II) Obtain permission from the waste collector or from the landfill permittee, as appropriate, before depositing the waste in any container for subsequent collection or in any landfill for disposal. In the event that the waste collector or landfill permittee refuses to accept the waste, the Department shall be contacted for alternative disposal instructions.

Small quantity disposal exemptions.

340-101-030 The following small quantity exemption levels shall be used for purposes of rule 340-101-025:

Hazardous Waste No.	Small Quantity Disposal Exemption (lb. per month)	Hazardous Waste No.	Small Quantity Disposal Exemption (lb. per month)
D001	25	F001	200
D002	200	F002	200
D003	Determined by the Dept. on an individual basis, but not to exceed 200	F003	25
		F004	200
		F005	25
		F006	200
D004	10	F007	10
D005	200	F008	10
D006	10	F009	10
D007	200	F010	10
D008	200	F011	10
D009	10	F012	10
D010	200	F024	200
D011	200	F020	2
D012	10	F021	2

Hazardous Waste No.	Small Quantity Disposal Exemption (lb. per month)
D013	10
D014	10
D015	10
D016	10
D017	10
K001	10
K002	200
K003	200
K004	200
K005	200
K006	200
K007	200
K008	200
K009	200
K010	200
K011	200
K013	200
K014	200
K015	10
K016	200
K017	200
K018	200
K019	200
K020	200
K021	200
K022	200
K023	200
K024	200
K025	200
K026	200
K027	200
K028	200
K029	200
K093	200
K094	200
K095	200
K096	200
K030	200
K083	200
K103	200
K104	200
K085	200
K105	200
K071	10
K073	200
K106	10
K031	10
K032	10
K033	10
F022	2
F023	2
F026	2
F027	2
F028	10
K034	10
K097	10
K035	10
K036	10
K037	10
K038	10
K039	10
K040	10
K041	10
K098	10
K042	10
K043	10
K099	10
K044	200
K045	200
K046	200
K047	200
K048	200
K049	200
K050	200
K051	200
K052	200
K061	200
K062	200
K069	200
K100	200
K084	10
K101	10
K102	10
K086	200
K060	200
K087	200
K088	200

P001 to P999 -	Commercial chemical products or intermediates	2
P001 to P999 -	Spill cleanup	200
P001 to P999 -	Process waste as defined in 340-101-040(2)(a)	10
U001 to U999 -	Commercial chemical products or intermediates	10
U001 to U999 -	Process waste as defined in 340-101-040(2)(b)	10
All F, K and U listed spill cleanup		2000

Hazardous waste from specific sources.

340-101-035 The following hazardous wastes are added to and made a part of the list of hazardous wastes in 40 CFR 261.32:

K088 . . . Spent potliner from primary aluminum reduction - Hazard code: R, T

Additional hazardous wastes.

340-101-040 (1) The residues identified in sections (2) and (3) of this rule are hazardous wastes.

(2) Any residue, including but not limited to manufacturing process wastes and unused chemicals that has either:

(a) A 3% or greater concentration of any substance or mixture of substances listed in 40 CFR 261.33(e); or

(b) A 10% or greater concentration of any substance or mixture of substances listed in 40 CFR 261.33(f).

(3) Any residue or contaminated soil, water or other debris resulting from the cleanup of a spill into or on any land or water, of either:

(a) A residue identified in subsection (2)(a); or

(b) A residue identified in subsection (2)(b).

(4) The wastes identified in subsections (2)(a) and (3)(a) of this rule are identified as acutely hazardous wastes (H) and are subject to the small quantity exclusion defined in 261.5(e).

(Comment: This rule shall be applied to a manufacturing process waste only in the event it is not identified elsewhere in this Division, but prior to application of rule 340-101-045.)

Pesticides.

340-101-045 (1) A pesticide residue or pesticide manufacturing residue is a toxic hazardous waste if a representative sample of the residue exhibits a 96-hour aquatic LC_{50} equal to or less than 250 mg/l as measured by the DEQ Hazardous Waste Classification Aquatic Toxicity Bioassay.

(2) A pesticide residue or pesticide manufacturing residue identified in section (1) of this rule but not in 40 CFR 261.24 or listed elsewhere in Division 101, has the Hazardous Waste Number of X001.

Discarded commercial chemical products.

340-101-050 The commercial chemical products, manufacturing chemical intermediates, or off-specification commercial chemical products or manufacturing chemical intermediates identified in this rule are added to and made a part of the list in 40 CFR 261.33(e).

P999 . . . . . Nerve agents (such as GB (Sarin) and VX).

Basis for listing hazardous waste.

340-101-055 (1) The wastes identified in section (2) of this rule is hereby added to and made a part of Appendix VII: Basis for Listing Hazardous Wastes to 40 CFR Part 261.

(2)

Hazardous Waste No.	Hazardous constituents for which listed
K088	cyanide

DIVISION 102
HAZARDOUS WASTE MANAGEMENT

Standards Applicable to
Generators of Hazardous Waste

Authority: ORS Chapter 468, including 468.020; 459, including 459.440; and 183.

Purpose.

340-102-005 The purpose of this Division is to establish standards for generators of hazardous waste.

Adoption of United States Environmental Protection Agency Hazardous Waste Regulations.

340-102-010 Except as otherwise modified or specified by OAR Chapter 340, Division 102, the rules and regulations governing persons who generate hazardous waste, prescribed by the United States Environmental Protection Agency in Title 40 Code of Federal Regulations, Part 262, and amendments thereto promulgated prior to May 1, 1985, are adopted and prescribed by the Commission to be observed by all persons subject to ORS 459.410 to 459.450, and 459.460 to 459.695.

Meanings.

340-102-015 When used in 40 CFR Part 262, the following terms shall have the meanings given below:

(1) "Administrator" means the Department.

(2) "Regional administrator" means the Department.

(3) "Solid waste(s)" means residue(s).

(4) "EPA Form 8700-12" means EPA Form 8700-12 as modified by the Department.

Applicability.

340-102-020 (1) In addition to the provisions of 40 CFR 262.10, a person identified in section (2) of this rule who produces a pesticide residue, excluding unused commercial pesticide, that is hazardous solely by application of rule 340-101-045, is exempt from compliance with Divisions 100 to 106 provided such person complies with the requirements of Division 109.

(2) Exemptions under section (1) of this rule: Any person who produces an unwanted pesticide residue from agricultural pest control (for example, on crops, livestock, Christmas trees, commercial nursery plants or grassland); industrial pest control (for example, in warehouses, grain elevators, tank farms or rail yards); structural pest control (for example, in human dwellings); ornamental and turf pest control (for example, on ornamental trees, shrubs, flowers or turf); forest pest control; recreational pest control (for example, in parks or golf courses); governmental (for example, for clearing a right-of-way, or vector, predator, and aquatic pest control); seed treatment; and pesticide demonstration and research.

(3) A person who generates a hazardous waste as defined by Division 101 must comply with the requirements of this Division. Failure to comply will subject a person to the compliance requirements and penalties prescribed by ORS 459.650 to .690, .992 and .995, and OAR Chapter 340, Division 12.

Hazardous waste determination.

340-102-025 (1) The provisions of this rule replace the requirements of 40 CFR 262.11.

(2) A person who generates a residue as defined in rule 340-101-015 must determine if that residue is a hazardous waste using the following method:

(a) He should first determine if the waste is excluded from regulation under 40 CFR 261.4 or rule 340-101-020.

(b) He must then determine if the waste is listed as a hazardous waste in Division 101 or in Subpart D of 40 CFR Part 261, excluding application of rules 340-101-040 and -045.

(Comment: Even if the waste is listed, the generator still has an opportunity under rule 340-100-050 to demonstrate to the Department that the waste from his particular facility or operation is not a hazardous waste.)

(c) If the waste is not listed as a hazardous waste by application of subsection (2)(b) of this rule, he must determine whether the waste is identified in Subpart C of 40 CFR Part 261 by either:

(A) Testing the waste according to the methods set forth in Subpart C of 40 CFR 261, or according to an equivalent method approved by the Department under rule 340-100-045; or

(Comment: In most instances, the Department will not consider approving a test method until it has been approved by EPA.)

(B) Applying knowledge of the hazard characteristic of the waste in light of the materials or the processes used.

(d) If the waste is not identified as hazardous by application of subsection (2)(c) of this rule, he must determine if the waste is listed

under rules 340-101-040 or -045, respectively.

Identification number.

340-102-030 In addition to the provisions of 40 CFR 262.13, as a matter of policy, the Department will accept EPA identification numbers already assigned and use a modified EPA registration form and identification numbering system (Dun and Bradstreet) for generators who register in the future.

Accumulation time.

340-102-035 In addition to the requirements of 40 CFR 262.34, a generator may accumulate hazardous waste on-site for 90 days or less without a permit provided that, if storing in excess of 100 containers, the waste is placed in a storage unit that meets the requirements of 40 CFR 264.175.

Recordkeeping.

340-102-040 (1) The provisions of section (2) of this rule replace the requirements of 40 CFR 262.40(b).

(2) A generator must keep a copy of each Quarterly Report and Exception Report for a period of at least three years from the due date of the report.

Quarterly reporting.

340-102-045 (1) The provisions of this rule replace the requirements of 40 CFR 262.41.

(2) A generator who ships his hazardous waste off-site must submit to the Department Quarterly Reports of the waste shipped:

(a)(A) The Quarterly Report consists of copies of the latest quarter's manifest and shipping papers. Alternatively, generators may copy the information from the manifests and shipping papers onto a form of their choice and submit it within the same time schedule.

(Comment: For ease of processing, the Department prefers xerographic or carbon copies of the manifests and shipping papers.)

(B) The Quarterly Report must be accompanied by the following certification signed and dated by the generator or his authorized representative:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this demonstration and all attached documents, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

(b) No later than 45 days after the end of each calendar quarter.

(3) Any generator who treats, stores, or disposes of hazardous waste on-site must submit a report covering those wastes in accordance with the provisions of Divisions 104 and 105.

International shipments.

340-102-050 (1) Any person who is required to comply with 40 CFR 262.50 shall also comply with sections (2) and (3) of this rule.

(2) When shipping hazardous waste outside the United States, the generator must notify the Department in writing four weeks before the initial shipment of hazardous waste to each country in each calendar year;

(a) The waste must be identified by its EPA hazardous waste identification number and its DOT shipping description;

(b) the name and address of the foreign consignee must be included in this notice;

(c) These notices must be sent to:

Hazardous Waste Section

Department of Environmental Quality

PO Box 1760

Portland, OR 97207

(3)(a) The requirements of subsection (3)(b) of this rule replace the provisions of 40 CFR 262.50(d)(2).

(b) In addition to the generator's signature on the certification statement, the U.S. importer or his agent must also sign and date the certification and obtain the signature of the initial transporter.

Farmers.

340-102-055 In addition to the provisions of 40 CFR 262.51, a farmer disposing of waste pesticides from his own use which are hazardous wastes shall comply with the requirements of Division 109.

Instructions for the Uniform Hazardous Waste Manifest.

340-102-055 (1) In addition to the instructions in the Appendix to 40 CFR Part 262, relating to completion of the Uniform Hazardous Waste Manifest, generators shall also comply with sections (2), (3), (4) and (5) of this rule.

(2) Enter a telephone number where an authorized agent of the first transporter may be reached in the event of an emergency, in:

(a) Item D of EPA Form 8700-22; and

(b) Item O of EPA Form 8700-22A, if applicable.

(3) Enter a telephone number where an authorized agent of the second transporter may be reached in the event of an emergency, in:

(a) Item F of EPA Form 8700-22; and

(b) Item Q of EPA Form 8700-22A, if applicable.

(4) Enter a telephone number where an authorized agent of the facility may be reached in the event of an emergency in Item H of EPA Form 8700-22.

(5) Enter the EPA Hazardous Waste Number in:

(a) Item I of EPA Form 8700-22; and

(b) Item R of EPA Form 8700-22A, if applicable.

(6) The authorized disposal request number may be entered in:

(a) Item 15 of EPA Form 8700-22; and

(b) Item 32 of EPA Form 8700-22A, if applicable.

Hazardous waste generator fees.

340-102-065 (1) Beginning July 1, 1984, each person generating hazardous waste shall be subject to an annual fee based on the volume of hazardous waste generated during the previous calendar year. The fee

period shall be the state's fiscal year (July 1 through June 30) and shall be paid annually by July 1, except that for fiscal year 1985 the fee shall be paid by January 1, 1985.

(2) For the purpose of determining appropriate fees, each hazardous waste generator shall be assigned to a category in Table 1 of this Division based upon the amount of hazardous waste generated in the calendar year identified in section (1) of this rule except as otherwise provided in section (5) of this section.

(3) For the purpose of determining appropriate fees, hazardous waste that is used, reused, recycled or reclaimed shall be included in the quantity determinations required by section (1) of this section.

(4) In order to determine annual hazardous waste generation rates, the Department intends to use generator quarterly reports required by rule 340-102-045; treatment, storage and disposal reports required by rule 340-104-050; and information derived from manifests required by 40 CFR 262.20. For wastes reported in the units of measure other than cubic feet, the Department will use the following conversion factors: 1.0 cubic feet = 7.48 gallons = 62.4 pounds = 0.03 tons (English) = 0.14 drums (55 gallon).

(5) Owners and operators of hazardous waste treatment, storage and disposal facilities shall not be subject to the fees required by section (1) of this rule for any wastes generated as a result of storing, treating or disposing of wastes upon which an annual hazardous waste generation fee has already been paid. Any other wastes generated by owners and operators of treatment, storage and disposal facilities are subject to the fee required by section (1) of this rule.

(6) All fees shall be made payable to the Department of Environmental Quality.

Table 1

Hazardous Waste Generation Rate (cu.ft./year)	Fee (dollars)
<35	No fee
35-99	$ 100
100-499	350
500-999	625
1,000-4,999	1500
5,000-9,999	3500
>10,000	5000

DIVISION 103
HAZARDOUS WASTE MANAGEMENT

Standards Applicable to Transporters
of Hazardous Waste by Air or Water

Authority: ORS Chapter 468, including 468.020; 459, including 459.440; and 183.

Purpose and applicability.

340-103-005 (1) The purpose of this Division is to establish standards which apply to persons transporting hazardous waste by air or water if the transportation requires a manifest under Division 102.

(2) Rail and highway transporters must comply with the regulations of the Public Utility Commissioner.

Adoption of United States Environmental Protection Agency Hazardous Waste Regulations.

340-103-010 Except as otherwise modified or specified by OAR Chapter 340, Division 103, the rules and regulations governing persons who transport hazardous waste, prescribed by the United States Environmental Protection Agency in Title 40 Code of Federal Regulations, Part 263, and amendments thereto promulgated prior to May 1, 1985, are adopted and prescribed by the Commission to be observed by all persons subject to ORS 459.410 to 459.450, and 459.460 to 459.695.

Meanings.

340-103-015 When used in 40 CFR Part 263, the following terms shall have the meanings given below:

(1) "Administrator" means the Department.

(2) "Regional Administrator" means the Department.

(3) "EPA Form 8700-12" means EPA Form 8700-12 as modified by the Department.

Identification Number.

340-103-020 In addition to the requirements of 40 CFR 263.11, as a matter of policy, the Department will accept EPA identification numbers already assigned and use a modified EPA registration form and EPA's identification numbering system (Dun and Bradstreet) for transporters who register in the future.

Immediate action.

340-103-025 In addition to the requirements of 40 CFR 263.30, a transporter who has discharged hazardous waste must report the discharge to the Oregon Emergency Management Division (800-452-0311).

Discharge clean up.

340-103-030 A transporter must clean up any hazardous waste discharge that occurs during transportation or take such action as may be required or approved by federal, state, or local officials so that the hazardous waste discharge no longer presents a hazard to human health or the environment. See Division 108 for further requirements.

DIVISION 104
HAZARDOUS WASTE MANAGEMENT

Standards for Owners and Operators of Hazardous
Waste Treatment, Storage and Disposal Facilities

Authority: ORS Chapters 468, including 468.020; 459, including 459.440; and 183.

Purpose.

340-104-005 The purpose of this Division is to establish minimum State standards which define the acceptable management of hazardous waste.

Adoption of United States Environmental Protection Agency Hazardous Waste Regulations.

340-104-010 Except as otherwise modified or specified by OAR Chapter 340, Division 104, the rules and regulations governing the management of hazardous waste, prescribed by the United States Environmental Protection Agency in Title 40 Code of Federal Regulations, Part 264, and amendments thereto promulgated prior to May 1, 1985, are adopted and prescribed by the Commission to be observed by all persons subject to ORS 459.410 to 459.450, and 459.460 to 459.695.

Meanings.

340-104-025 When used in 40 CFR Part 264, the following terms shall have the meanings given below:

(1) "EPA" or "Environmental Protection Agency" means the Department.

(2) "Administrator" means the Department.

(3) "Regional Administrator" means the Department.

Applicability.

340-104-020 (1)(a) The provisions of subsection (1)(b) of this rule replace the requirements of 40 CFR 264.1(d).

(b) The requirements of this Division apply to a person disposing of hazardous waste by means of underground injection subject to a permit issued under an Underground Injection Control (UIC) program approved or promulgated under the Safe Drinking Water Act only to the following extent: 40 CFR 264.11 (identification number), 264.16 (personnel training), 264.71 (manifest system), 264.72 (manifest discrepancies), 264.73(a), (b)(1) and (b)(2) (operating record), 264.75 (periodic report), and 264.76 (unmanifested waste report). When abandonment is completed, the owner or operator must submit to the Department certification by the owner or operator and by an independent registered professional engineer that the facility has been closed in a manner that will ensure that plugging and abandonment of the well will not allow the movement of fluids either into an underground source of drinking water or from one underground source of drinking water to another.

(2) The provisions of 40 CFR 264.1(f) and 264.3 are deleted.

(3) In addition to the requirements of 40 CFR 264.1(g)(8)(iii), any person covered by 40 CFR 264.1(g)(8)(iii) shall comply with the applicable requirements of Divisions 100 to 108.

Imminent hazard action.

340-104-025 (1) The provisions of section (2) of this rule replace the provisions of 40 CFR 264.4.

(2) Notwithstanding any other provisions of these regulations, enforcement actions may be brought pursuant to ORS 459.650 to .690.

Identification number.

340-104-030 In addition to the provisions of 40 CFR 264.11, as a matter of policy, the Department will accept EPA identification numbers already assigned, use an amended EPA registration form, and use EPA's identification numbering system (Dun and Bradstreet) for owners and operators who register in the future.

Required notices.

340-104-035 The provisions of 40 CFR 264.12(c) regarding transfers of ownership are hereby deleted.

Emergency procedures.

340-104-040 (1) In 40 CFR 264.56(d) prior to paragraph (1), the phrase "outside the facility" is deleted.

(2)(a) The requirements of subsection (2)(b) of this rule replace the provisions of 40 CFR 264.56(d)(2).

(b) He must immediately notify either the Department or the Oregon Emergency Management Division (using their 24-hour toll-free number 800-452-0311).

(3) In addition to the requirements of 40 CFR 264.56(j), the owner or operator's report must include:

(a) The steps taken to prevent a recurrence of the incident; and

(b) Any changes required in the contingency plan.

Availability of records.

340-104-045 (1) The provisions of 40 CFR 264.74(a) are replaced with section (2) of this rule.

(2) All records, including plans, required under this Division must be furnished upon request, and made available at all reasonable times for inspection, by any officer, employee, or representative of the Department as authorized by ORS 459.285.

Periodic report.

340-104-050 (1) The provisions of this rule replace the requirements of 40 CFR 264.75.

(2) The owner or operator must prepare and submit an operating report to the Department on an approved form. Disposal facility reports are due monthly within 45 days after the end of each calendar month, and treatment and storage facility reports are due within 45 days after the end of each calendar quarter. The report must cover facility activities during the previous month or quarter, as appropriate, and must include the following information:

(a) The EPA identification number, name, and address of the facility;

(b) The period covered by the report;

(c) For off-site facilities, the EPA identification number of each hazardous waste generator from which the facility received a hazardous waste during the period; for imported shipments, the report must give the name and address of the foreign generator;

(d) A description and the quantity of each hazardous waste the facility received during the period. For off-site facilities, this

information must be listed by EPA identification number of each generator;

(e) The method of treatment, storage, or disposal for each hazardous waste;

(f) (Reserved)

(g) The most recent closure cost estimate under 40 CFR 264.142, and, for disposal facilities, the most recent post-closure cost estimate under 40 CFR 264.144; and

(h) A certification signed by the owner or operator of the facility or his authorized representative as required by 40 CFR 270.11(b).

(Comment: The state program is more stringent than the federal program in that it requires monthly or quarterly operating reports whereas the federal program requires a biennial report.)

Unsaturated zone monitoring program.

340-104-055 An owner or operator may be required to establish an unsaturated zone monitoring program consisting of soil-pore liquid monitoring in the zone immediately below a facility to determine whether hazardous constituents have migrated out of the facility. The Department will approve the components of this program based on a consideration of the construction and operation of the facility and the type and amount of waste being managed therein.

Financial assurance for facility closure.

340-104-065 (1) This rule amends the requirements of 40 CFR 264.143.

(2) An owner or operator of a disposal facility must choose the option specified in 40 CFR 264.143(a).

(3)(a) If an owner or operator uses the trust fund option specified in 40 CFR 264.143(a) to establish financial assurance for closure of the facility, he must also comply with subsection (3)(b) of this rule.

(b) During the period the current closure cost estimate (CE) exceeds the current value of the trust fund (CV), the owner or operator must also establish supplemental financial assurance in the amount CE-CV by choosing one of the options specified in 40 CFR 264.143(b) to 264.143(f).

(4) The phrase ". . . term of the initial permit . . ." in the first sentence of 40 CFR 264.143(a)(3) is deleted and replaced with the phrase ". . . initial 10 years the facility is permitted under Divisions 105 and 106 . . ."

(5) The phrase ". . . in one or more States" in the last sentence of 40 CFR 264.143(e)(1) is deleted and replaced with the phrase ". . . in Oregon."

(6) The phrase "Except as may be required by 40 CFR 264.143(f)(10)," is added to the first sentence of 40 CFR 264.143(f)(1).

(7) The phrase "An owner or operator that has a parent corporation may only meet . . ." replaces the phrase "An owner or operator may meet . . ." in the first sentence of 40 CFR 264.143(f)(10).

Financial assurance for post-closure care.

340-104-070 (1) This rule amends the requirements of 40 CFR 264.145.

(2) An owner or operator of a disposal facility must choose the option specified in 40 CFR 264.145(a).

(3)(a) If an owner or operator uses the trust fund option specified in 40 CFR 264.145(a) to establish financial assurance for post-closure care of a facility, he must also comply with subsection (3)(b) of this rule.

(b) During the period the current post-closure cost estimate (CE) exceeds the current value of the trust fund (CV), the owner or operator must also establish supplemental financial assurance in the amount CE-CV by choosing one of the options specified in 40 CFR 264.145(b) to 264.145(f).

(4) The phrase "An owner or operator that has a parent corporation may only meet . . ." replaces the phrase "An owner or operator may meet . . ." in the first sentence of 40 CFR 264.145(f)(11).

Liability requirements.

340-104-075 (1) This rule amends the requirements of 40 CFR 264.147.

(2) The phrase ". . . in one or more States" at the end of 40 CFR 264.147(a)(1)(ii) is deleted and replaced with the phrase ". . . in Oregon."

(3) The phrase ". . . in one or more States" at the end of 40 CFR 264.147(b)(1)(ii) is deleted and replaced with the phrase ". . . in Oregon."

(4) The provisions of 40 CFR 264.147(b)(4) are deleted.

Use of State-required mechanisms.

340-104-080 The provisions of 40 CFR 264.149 are deleted.

State assumption of responsibility.

340-104-085 The provisions of 40 CFR 264.150 are deleted.

Wording of the instruments.

340-104-090 (1) This rule amends 40 CFR 264.151.

(2) When used in 40 CFR 264.151, the references specified in section (2) of this rule shall be changed as indicated in this section.

(a) "The United States Environmental Protection Agency," "The U.S. Environmental Protection Agency," or "EPA" shall be "the Oregon Department of Environmental Quality" (hereinafter called "Department").

(b) "The United States Government" shall be "the State of Oregon."

(c) "The EPA Regional Administrator" shall be "the Department."

(d) "The appropriate EPA Regional Administrator" shall be "the Department."

(e) "The Resource Conservation and Recovery Act as amended (RCRA)" or "the Resource Conservation and Recovery Act of 1976 (as amended)" shall be "Oregon law."

(f) "Where EPA is not administering the financial requirements of Subpart H of 40 CFR Parts 264 and 265" shall be "other than Oregon."

Design of tanks.

340-104-095 (1) Owners and operators of facilities subject to the requirements of 40 CFR 264.191 shall also comply with the requirements of section (2) of this rule.

(2) For tanks installed after January 1, 1985, tanks and related appurtenances, including but not limited to pipes, valves, backflow prevention devices, gauges, or pumps within 5 feet of the tank, must have secondary containment that:

(a) Is sufficiently impervious to contain leaks, spills and accumulated precipitation until the collected material is detected and

removed;

(b) Has sufficient capacity to hold the entire volume of the largest tank; and

(c) Prevents run-on into the containment system unless there is sufficient excess capacity in addition to that required by subsection (2)(b) of this rule to contain it.

(Comment: It is intended that the appurtenance containment return any leakage to the main tank containment.)

Applicability to surface impoundments.

340-104-100 (1) The provisions of 40 CFR 264.220 are deleted and replaced with the requirements of section (2) of this rule.

(2) The regulations in Subpart K of 40 CFR Part 264 apply to owners and operators of facilities that use surface impoundments to treat or store hazardous waste, except as 40 CFR 264.1 provides otherwise.

Closure and post-closure care of surface impoundments.

340-104-105 (1) The provisions of 40 CFR 264.228(a)(1), (c) and (d) are deleted and replaced with the requirements of sections (2), (3) and (4) of this rule.

(2) At closure, the owner or operator must remove or decontaminate all waste residues, contaminated containment system components (liners, etc.), contaminated subsoils, and structures and equipment contaminated with waste and leachate, and manage them as hazardous waste unless 40 CFR 261.3(d) applies.

(Comment: The state program is more stringent than the federal

program in that it requires the removal of all wastes, etc., at closure whereas the federal program gives the option of closing with wastes left in place.)

(3) If, after removing or decontaminating all residues and making all reasonable efforts to effect removal or decontamination of contaminated components, subsoils, structures, and equipment as required in section (2) of this rule, the owner or operator finds that not all contaminated subsoils can be practicably removed or decontaminated, he must close the facility in accordance with the closure requirements of 40 CFR 264.228(a)(2) and perform post-closure care in accordance with the closure and post-closure care requirements of 40 CFR 264.228(b).

(4)(a) The owner or operator of a surface impoundment that does not comply with the liner requirements of 40 CFR 264.221(a) and is not exempt from them in accordance with 40 CFR 264.221(b) must:

(A) Include in the closure plan for the surface impoundment under 40 CFR 264.112 both a plan for complying with section (2) of this rule and a contingency plan for complying with section (3) of this rule in case not all contaminated subsoils can be practicably removed at closure; and

(B) Prepare a contingent post-closure plan under 40 CFR 264.118 for complying with section (3) of this rule in case not all contaminated subsoils can be practicably removed at closure.

(b) The cost estimates calculated under 40 CFR 264.142 and .144 for closure and post-closure care of a surface impoundment subject to this section must include the cost of complying with the contingent closure plan and the contingent post-closure plan.

Closure and post-closure care for waste piles.

340-104-110 The phrase ". . . but are not required to include the cost of expected closure under paragraph (a) of this section" at the end of 40 CFR 264.258(c)(2) is deleted.

Food-chain crops.

340-104-115 (1) In 40 CFR 264.276, the term "animal feed crops" is substituted for the term "food chain crops."

(2) The provisions of 40 CFR 264.276(b)(1) are deleted.

(Comment: The state program is more stringent than the federal program in that it does not permit crops intended for human consumption to be grown on a land treatment facility.)

Prohibition on land disposal of ignitable wastes.

340-104-120 (1) Except as may be permitted by sections (2) and (3) of this rule or by 40 CFR 264.314(b)(1) to .314(b)(4) an owner or operator shall not place in a land disposal unit any liquid waste or the free-liquid portion of any liquid/solid waste mixture if such mixture contains in excess of 20% free liquid, if the waste was initially generated as a liquid or as a liquid/solid mixture and is identified as a hazardous waste only because it is listed on the basis of or meets the characteristic of ignitability (I).

(Comment: These wastes include but are not limited to those having EPA Hazardous Waste Numbers D001, F003, U001, U002, U008, U031, U055, U056, U057, U092, U110, U112, U113, U117, U124, U125, U154, U161, U171, U186,

U213 and U239.)

(2) The generator and owner or operator may apply for an exemption from section (1) of this rule for a specific waste if he can demonstrate that:

(a) The disposal will not pose a threat to public health or the environment due to the properties or quantity of the waste, characteristics of the landfill, the proposed disposal procedure and other relevant circumstances;

(b) The waste generator has taken all practicable steps to eliminate or minimize the generation of the waste and to recover, concentrate or render the waste non-hazardous; and

(c) There is no reasonably available means of beneficial use, reuse, recycle, reclamation or treatment.

(3) Upon receipt of a request for an exemption, the Department shall make a tentative determination to approve or deny the request within thirty (30) days of receipt. The generator and owner or operator shall have thirty (30) days from the date of tentative denial to appeal the denial to the Department. The Department shall make a final determination within ninety (90) days of the original request if a timely appeal has been filed.

(Comment: The intention of this rule is to disallow the landfilling of solids formed by soil stabilization of liquids. This rule does not pertain to liquids which become mixed with soil or other debris as the result of a spill or to lab packs as defined in 40 CFR 264.316.)

Procedure for prohibiting the land disposal of any hazardous waste.

340-104-125 (1) The Department may prohibit the land disposal of any hazardous waste if in the Department's judgment there are more environmentally sound beneficial use, reuse, recycle, reclamation, treatment or disposal options. In making such a judgment, the Department shall consider but not be limited to storage, transportation and other appropriate risks.

(2) For wastes identified under section (1) of this rule, the Department shall notify any affected generators and land disposal owners or operators, in writing, that land disposal of a specified waste is prohibited. Such notice shall indicate the specific waste affected by name and EPA Hazardous Waste Number, and shall also indicate the alternative means of beneficial use, reuse, recycle, reclamation, treatment or disposal deemed to be more environmentally sound. The Department shall provide that the prohibition is effective for the waste listed in the notice 90 days after receipt of notice. The generator or disposal facility shall have 30 days from receipt of the notice to appeal the prohibition to the Department. The Department shall make a final determination within 60 days of the original notice if a timely appeal has been filed.

Applicability to incinerators.

340-104-130 The provisions of 40 CFR 264.340(d) are deleted.

(Comment: The Department may require the owner or operator to obtain an Air Contaminant Discharge Permit and such permit may establish standards more stringent than required under Subpart O of 40 CFR Part 264.)

Performance standards.

340-104-135 The provisions of 40 CFR 264.343(d) are deleted.

Closure requirements for waste piles and surface impoundments.

340-104-140 Owners or operators of surface impoundment or waste pile facilities which close according to 340-104-105(3) or 40 CFR 264.258(b) shall comply with the requirements of rule 340-105-021 regarding conveyance of deed to the State of Oregon.

DIVISION 105
HAZARDOUS WASTE MANAGEMENT

Management Facility Permits

Authority: ORS Chapter 468, including 468.020; 459, including 459.440; and 183.

Purpose.

340-105-005 The purpose of this Division is to establish basic permitting requirements, such as application requirements, standard permit conditions, and monitoring and reporting requirements. These regulations are part of a regulatory scheme implementing Oregon's hazardous waste management program set forth in ORS Chapter 459 and OAR Chapter 340, Divisions 100 to 108.

Adoption of United States Environmental Protection Agency Hazardous Waste Regulations.

340-105-010 Except as otherwise modified or specified by OAR Chapter 340, Division 105, the rules and regulations governing the management of hazardous waste, prescribed by the United States Environmental Protection Agency in Title 40 Code of Federal Regulations, Parts 270 and 265, and amendments thereto promulgated prior to May 1, 1985, are adopted and prescribed by the Commission to be observed by all persons subject to ORS 459.410 to 459.450, and 459.460 to 459.695.

Meanings.

340-105-015 When used in 40 CFR Parts 265 or 270, the following terms shall have the meanings set forth below:

(1) "RCRA" or "Resource Conservation and Recover Act," when used to refer to a federal law, means Oregon law.

(2) "RCRA permit" means Oregon hazardous waste management permit.

(3) "Director" means the Department, except it shall mean the

Commission when the context relates to a matter solely within the authority of the Commission.

(4) "Administrator" means the Department.

(5) "Regional Administrator" means the Department.

Applicability.

340-105-020 (1) The provisions of this rule replace the contents of 40 CFR 270.1(a), 270.1(b) and 270.1(c) prior to paragraph (c)(1).

(2)(a) Technical regulations. The hazardous waste permit program has separate additional regulations that contain technical requirements. These separate regulations are used by the Department to determine what requirements must be placed in permits if they are issued. These separate regulations are located in Division 104 of this Chapter.

(Comment: Although the permit applicant or permittee will interface primarily with the Department as is indicated by these rules, hazardous waste disposal facility permits are technically issued by the Environmental Quality Commission while hazardous waste storage and treatment facility permits are issued by the Department.)

(b) Applicability. The state hazardous waste program requires a permit for the "treatment," "storage" or "disposal" of any "hazardous waste" as identified or listed in Division 101 of this Chapter. The terms "treatment," "storage," "disposal" and "hazardous waste" are defined in rule 340-100-030. Owners and operators of hazardous waste management units must have permits during the active life (including the closure period) of the unit, and, for any unit which closes after the effective date of these rules, during any post-closure care period required under 40 CFR 264.117 and during any compliance period specified under 40 CFR 264.96, including

any extension of the compliance period under 40 CFR 264.96(c).

Disposal facility permit requirements.

340-105-021 Persons required to obtain a landfill operating or post-closure permit must deed to the State all that portion of the facility in or upon which hazardous wastes are disposed. If the State is required to pay the permittee just compensation for the real property deeded to it, the permittee shall pay the State annually a fee in an amount determined by the Department to be sufficient to make such real property self-supporting and self-liquidating. The Department shall lease-back the property to the permittee to enable the permittee to comply with all requirements of the permit.

Considerations under Federal law.

340-105-025 The provisions of 40 CFR 270.3 are deleted.

Permit transfers.

340-105-030 (1) A permit is personal to the permittee and is non-transferrable.

(2) The provisions of 40 CFR 270.40 are deleted.

State program reporting.

340-105-035 The provisions of 40 CFR 270.5 are deleted.

General application requirements.

340-105-040 (1) The requirements of this rule replace the provisions of 40 CFR 270.10(e) to 270.10(i).

(2) Existing management facilities. (a) Owners and operators of existing hazardous waste management facilities that do not have a permit must submit a Part A permit application to the Department within thirty days after the effective date of statutory or regulatory changes under Oregon law that render the facility subject to the requirement to have a permit.

(b) The Department may at any time require the owner or operator of an existing management facility to submit Part B of their permit application. The owner or operator shall be allowed at least six months from the date of request to submit Part B of the application. Any owner or operator of an existing management facility may voluntarily submit Part B of the application at any time.

(c) An owner or operator that has not submitted an acceptable Part A permit application, or an acceptable Part B permit application when required to do so, or does not operate in compliance with the regulations of 40 CFR Part 265, as required by rule 340-105-045, shall be subject to Department enforcement action including termination of the facility's operation.

(d) If an owner or operator of an existing management facility has filed a Part A permit application but has not yet filed a Part B permit application, the owner or operator shall file an amended Part A application:

(A) No later than 15 days after the effective date of the adoption of rules listing or designating wastes as hazardous if the facility is

treating, storing or disposing of any of those newly listed or designated wastes; or

(B) Prior to any of the following actions at the facility:

(i) Treatment, storage or disposal of a new hazardous waste not previously identified in Part A of the permit application;

(ii) Increases in the design capacity of processes used at a facility. The owner or operator must submit a justification explaining the need for the increase based on the lack of available treatment, storage or disposal capacity at other hazardous waste management facilities, and receive Department approval before making such increase.

(iii) Changes in the processes for the treatment, storage or disposal of hazardous waste. The owner or operator must submit a justification explaining that the change is needed because:

(I) It is necessary to prevent a threat to human health or the environment because of an emergency situation, or

(II) It is necessary to comply with the requirements of Divisions 100 to 108.

The owner or operator must receive Department approval before making such change.

(iv) Changes in the ownership or operational control of a facility. The new owner or operator must submit a revised Part A permit application no later than 90 days prior to the scheduled change. When a transfer of ownership or operational control of a facility occurs, the old owner or operator shall comply with the requirements of Subpart H of 40 CFR Part 265 (financial requirements), until the Department has released him in writing. The Department shall not release the old owner or operator until the new owner or operator has demonstrated to the Department that he is complying with that Subpart. All other duties required by these rules are

transferred effective immediately upon the date of the change of ownership or operational control of the facility.

(3) New management facilities. (a) No person shall begin physical construction of a new management facility without having submitted Part A and Part B of the permit application and having received a finally effective hazardous waste permit.

(b) An application for a permit for a new management facility (including both Part A and Part B) may be filed with the Department any time after promulgation of those standards in Division 104 applicable to such facility. All applications must be submitted at least 180 days before physical construction is expected to commence.

(4) Reapplication. Any management facility with an effective permit shall submit a new application at least 180 days before the expiration date of the effective permit, unless permission for a later date has been granted by the Department. (The Department shall not grant permission for applications to be submitted later than the expiration date of the existing permit.)

(5) Recordkeeping. Applicants shall keep records of all data used to complete permit applications and any supplemental information submitted under 40 CFR 270.10(d), 270.13, 270.14 through 270.21 for a period of at least 3 years from the date the application is signed.

Requirements applicable to existing management facilities.

340-105-045 (1) An owner or operator of an existing management facility that has not been issued a management facility permit shall comply with the regulations of 40 CFR Part 265 until final administrative disposition of a permit is made.

(2) After September 1, 1985, and until final administrative disposition of a permit under these rules is made, an owner or operator of a management facility that has received a State-issued non-RCRA permit shall comply with the regulations of 40 CFR Part 265 in those instances where a regulation exists and with the conditions of the permit in those instances where a regulation does not exist.

(3) After final administrative disposition of a permit is made, a management facility shall not treat, store or dispose of hazardous waste without a permit issued in accordance with Divisions 100 to 106.

Confidentiality of information.

340-105-050 (1) The provisions of this rule replace the contents of 40 CFR 270.12.

(2) In accordance with ORS 192.500 and 459.460, any information submitted to the Department pursuant to these regulations may be claimed as confidential by the submitter. Any such claim must be asserted at the time of submission by stamping the words "confidential business information," or the equivalent, on each page containing such information. If no claim is made at the time of submission, the Department may make the information available to the public without further notice. If a claim is asserted, the information will be treated in accordance with the procedures in ORS 192.500 and 459.460.

(Comment: Any information stamped confidential must be accompanied by an explanation as to why it should be so considered under the criteria of ORS 192.500 and 459.460. The Department believes that very little, if any, information in an application will meet the criteria.)

(3) Claims of confidentiality for the name and address of any permit

applicant or permittee will be denied.

(4) Any information submitted to the Department shall be available to the Environmental Protection Agency upon request. If the information has been submitted under a claim of confidentiality, the Department shall make that claim of confidentiality to the Environmental Protection Agency for the requested information. The federal agency shall treat the information that is subject to the confidentiality claim as confidential in accordance with applicable federal law.

Contents of Part A of the permit application.

340-105-055 In addition to the requirements of 40 CFR 270.13, Part A of the permit application shall include a statement of compatibility with the acknowledged local comprehensive plan and zoning requirements or the Land Conservation and Development Commission's Statewide Planning Goals.

Contents of Part B.

340-105-014 In addition to the information required by 40 CFR 270.14, Part B of the permit application shall include other information pertinent to the facility as may be requested by the Department.

Specific Part B information requirements for land treatment facilities.

340-105-065 The requirements of 40 CFR 270.20(d) and (e) are applicable to animal feed crops.

(Comment: The Department does not allow food-chain crops to be grown in or on the treatment zone of a hazardous waste land treatment unit.)

Specific Part B information requirements for landfills.

340-105-070 In addition to the information required by 40 CFR 270.21, the following additional information shall be submitted in a Part B application:

(1) A detailed report with supporting information justifying the need for the landfill as proposed; and

(2) An explanation of how the requirements of rule 340-104-120 will be complied with after January 1, 1985.

Conditions applicable to all permits.

340-105-075 (1) The phrase ". . . the appropriate Act . . ." in the second sentence of 40 CFR 270.30(a) is deleted and replaced with the phrase ". . . ORS Chapter 459 and OAR Chapter 340 . . ."

(2) The provisions of 40 CFR 270.30(l)(2)(ii)(B) are deleted.

(3)(a) The provisions of 40 CFR 270.30(l)(3) are deleted and replaced with subsection (3)(b) of this rule.

(b) Transfers. The permit is personal to the permittee and is non-transferable.

(4)(a) The provisions of 40 CFR 270.30(l)(6)(i) but not 270.30(l)(6)(i)(A) and (B) are deleted and replaced with subsection (4)(b) of this rule.

(b) Immediate reporting. The permittee shall immediately report any noncompliance which may endanger health or the environment as soon as he becomes aware of the circumstances, including:

(5)(a) The provision of 40 CFR 270.30(l)(9) is deleted and replaced

with subsection (5)(b) of this rule.

(b) Periodic report. A periodic report must be submitted covering facility activities on an appropriate schedule (see rule 340-104-050).

Major modifications or revocation and reissuance of permits.

340-105-080 (1) The sentence "If cause does not exist under this section or 40 CFR 270.42, the Director shall not modify or revoke and reissue the permit" in the first paragraph of 40 CFR 270.41 is deleted.

(2)(a) The provision of 40 CFR 270.41(a) preceding paragraph (a)(1) is deleted and replaced with subsection (2)(b) of this rule.

(b) Causes for modification or revocation and reissuance. The following are causes to modify or, alternatively, revoke and reissue a permit:

(3)(a) The provisions of 40 CFR 270.41(a)(3) are deleted and replaced with subsection (3)(b) of this rule.

(b) New regulations. The standards or regulations on which the permit was based have been changed by promulgation of amended standards or regulations or by judicial decision after the permit was issued.

(4) The provision of 40 CFR 270.41(b)(2) is deleted.

Minor modifications of permits.

340-105-085 The provisions of 40 CFR 270.42(d) are deleted.

Continuation of expiring permits.

340-105-090 (1) The provisions of 40 CFR 270.51 are deleted and replaced with sections (2) and (3) of this rule.

(2) The conditions of an expired permit continue in force until the effective date of a new permit if:

(a) The permittee has submitted a timely application under 40 CFR 270.14 and the applicable sections in 40 CFR 270.15 to 270.29 which is a complete (under 40 CFR 270.10(c)) application for a new permit; and

(b) The Department through no fault of the permittee, does not issue a new permit with an effective date under 40 CFR 124.15 on or before the expiration date of the previous permit (for example, when issuance is impractical due to time or resource constraints).

(3) Effect. Permits continued under this rule remain fully effective and enforceable.

Emergency permits.

340-105-095 (1) The provisions of 40 CFR 270.61(b)(4) are deleted and replaced with section (2) of this rule.

(2) May be suspended or renewal refused by the Department at any time without prior hearing if it finds a serious danger to the public health or safety and sets forth specific reasons for such findings;

Letter of authorization for small-quantity management facilities.

340-105-100 (1) Except as indicated in section (3) of this rule, owners or operators of off-site facilities that treat or store more than

200 pounds of hazardous waste per calendar month must obtain a letter of authorization from the Department if such waste is obtained only from small-quantity generators.

(2) The letter of authorization:

(a) Shall be written;

(b) Shall not exceed 5 years in duration;

(c) Shall clearly specify the hazardous wastes to be received, the treatment process, and the disposal of all hazardous products generated by that process;

(d) May require the operator to obtain Department approval prior to receipt of each specific waste;

(e) May require the operator to demonstrate that, due to the type and quantity of waste, its operation and other relevant factors, the facility is not likely to endanger public health or the environment;

(f) May be suspended or revoked at any time if it is determined that such action is appropriate to protect public health or the environment; and

(g) May include any applicable requirements of Division 104.

(3) The Department may require the owner or operator to obtain a hazardous waste permit if it determines that operation of the facility may endanger public health or the environment.

Permit fees.

340-105-110 (1) Beginning July 1, 1984, each person required to have a hazardous waste storage, treatment or disposal permit (management facility permit) shall be subject to a three-part fee consisting of a filing fee, an application processing fee and an annual compliance determination fee as listed in Table 1 of this Division. The amount equal

to the filing fee, application processing fee and the first year's annual compliance determination fee shall be submitted as a required part of any application for a new permit. The amount equal to the filing fee and application processing fee shall be submitted as a required part of any application for renewal or modification of an existing permit.

(2) As used in this rule, the following definitions shall apply:

(a) The term management facility includes, but is not limited to:

(A) Hazardous waste storage facility;

(B) Hazardous waste treatment facility; and

(C) Hazardous waste disposal facility.

(b) The term hazardous wastes includes any residue or hazardous wastes as defined in Division 101 handled under the authority of a management facility permit.

(c) The term license and permit shall mean the same thing and will be referred to in this rule as permit.

(3) The annual compliance determination fee shall be paid for each year a management facility is in operation and, in the case of a disposal facility, for each year that post-closure care is required. The fee period shall be the state's fiscal year (July 1 through June 30) and shall be paid annually by July 1. Any annual compliance determination fee submitted as part of an application for a new permit shall apply to the fiscal year the permitted management facility is put into operation. For the first year's operation, the full fee shall apply if the management facility is placed into operation on or before April 1. Any new management facility placed into operation after April 1 shall not owe a compliance determination fee until July 1 of the following year. The Director may alter the due date for the annual compliance determination fee upon receipt of a justifiable request from a permittee.

(4) For the purpose of determining appropriate fees, each management facility shall be assigned to a category in Table 1 of this Division based upon the amount of hazardous waste received and upon the complexity of each management facility. Each management facility which falls into more than one category shall pay whichever fee is higher. The Department shall assign a storage and treatment facility to a category on the basis of design capacity of the facility. The Department shall assign a new disposal facility to a category on the basis of estimated annual cubic feet of hazardous waste to be received and an existing disposal facility on the basis of average annual cubic feet of hazardous waste received during the previous three calendar years.

(5) Where more than one management facility exists on a single site, in addition to the compliance determination fee required by rules 340-105-110(3) and (4), a flat fee of $250 shall be assessed for each additional management facility.

(6) Modifications of existing, unexpired permits which are instituted by the Department due to changing conditions or standards, receipt of additional information or any other reason pursuant to applicable statutes and do not require re-filing or review of an application or plans and specifications shall not require submission of the filing fee or the application processing fee.

(7) Upon the Department accepting an application for filing, the filing fee shall be nonrefundable.

(8) The application processing fee, except for disposal permits, may be refunded in whole or in part when submitted with an application if either of the following conditions exist:

(a) The Department determines that no permit will be required.

(b) The applicant withdraws the application before the Department has

approved or denied the application.

(9) The annual compliance determination fee may be refunded in whole or in part when submitted with a new permit application if either of the following conditions exist:

(a) The Department denies the application.

(b) The permittee does not proceed to construct and operate the permitted facility.

(10) All fees shall be made payable to the Department of Environmental Quality.

Table 1: Fee Schedule

(1) Filing Fee. A filing fee of $50 shall accompany each application for issuance, renewal or modification of a hazardous waste management facility permit. This fee is nonrefundable and is in addition to any application processing fee or annual compliance determination fee which might be imposed.

(2) Application Processing Fee. An application processing fee varying between $25 and $5,000 shall be submitted with each application. The amount of the fee shall depend on the type of facility and the required action as follows:

(a) A new facility (including substantial expansion of an existing facility:

(A)	Storage facility	$ 150
(B)	Treatment facility - Recycling	150
(C)	Treatment facility - other than incineration	250
(D)	Treatment facility - incineration . . .	500

(E) Disposal facility 5,000

(F) Disposal facility - post closure 2,500

(b) Permit Renewal:

(A) Storage facility 50

(B) Treatment facility - recycling 50

(C) Treatment facility - other than incineration 75

(D) Treatment facility - incineration . . . 175

(E) Disposal facility 5,000

(F) Disposal facility - post closure 800

(c) Permit Modification - Changes to Performance/Technical Standards:

(A) Storage facility 50

(B) Treatment facility - recycling 50

(C) Treatment facility - other than incineration 75

(D) Treatment facility - incineration . . . 175

(E) Disposal facility 1,750

(F) Disposal facility - post closure 800

(d) Permit Modification - All Other Changes not Covered by (2)(c):

All categories 25

(e) Permit Modifications - Department Initiated . no fee

(3) Annual Compliance Determination Fee. (In any case where a facility fits into more than one category, the permittee shall pay only the

highest fee):

(a) Storage facility:

(A) 5-55 gallon drums or 250 gallons total or 2,000 pounds 250

(B) 5 to 250 - 55 gallon drums or 250 to 10,000 gallons total or 2,000 to 80,000 pounds 1,000

(C) >250 - 55 gallon drums or >10,000 gallons total or >80,000 pounds 2,500

(b) Treatment Facility:

(A) <25 gallons/hour or 50,000 gallon/day or 6,000 pounds/day 250

(B) 25-200 gallons/hour or 50,000 to 500,000 gallons/day or 6,000 to 60,000 pounds/day 1,000

(C) >200 gallons/hour or >500,000 gallons/day or >60,000 pounds/day . . . 2,500

(c) Disposal Facility:

(A) <750,000 cubic feet/year or <37,500 tons/year . . . . . .$ 50,000

(B) 750,000 to 2,500,000 cubic feet/year or 37,500 to 125,000 tons/year 100,000

(C) >2,500,000 cubic feet/year or >125,000 tons/year 150,000

(d) Disposal Facility - Post Closure:

All categories 5,000

Interim status.

340-105-115 The provisions of 40 CFR 270.70 to 270.73, pertaining to interim status, are not included in the State's hazardous waste managment program.

(Comment: State requirements applicable to existing hazardous waste management facilities are identified in rules 340-105-040 and -045.)

DIVISION 106
HAZARDOUS WASTE MANAGEMENT

Permitting Procedures

Authority: ORS Chapter 468, including 468.020; 459, including 459.440; and 183.

Purpose.

340-106-005 The purpose of this Division is to establish the procedures for issuing, modifying, revoking and reissuing, or terminating all hazardous waste permits other than hazardous waste emergency permits and hazardous waste permits by rule.

(Comment: Although the permit applicant or permittee will interface primarily with the Department as is indicated by these rules, hazardous waste disposal facility permits are issued by the Environmental Quality Commission while hazardous waste storage and treatment facility permits are issued by the Department.)

Adoption of United States Environmental Protection Agency Hazardous Waste Regulations.

340-106-010 Except as otherwise modified or specified by OAR Chapter 340, Division 106, the rules and regulations governing permitting procedures for hazardous waste management facilities, prescribed by the United States Environmental Protection Agency in Title 40 Code of Federal Regulations, Part 124, Subpart A, and amendments thereto promulgated prior to May 1, 1985, are adopted and prescribed by the Commission to be observed by all persons subject to ORS 459.410 to 459.450, and 459.460 to 459.695.

(Comment: 40 CFR Part 124 includes requirements applicable to several programs, including UIC, NPDES, 404, etc. Only the provisions of 40 CFR Part 124 Subpart A which are applicable to hazardous waste or "RCRA" permits are being adopted by the Commission, as modified by Division 106.)

Meanings.

340-106-015 (1) When used in 40 CFR Part 124, Subpart A, the following terms shall have the meanings set forth below:

(a) "Director" or "Regional Administrator" means:

(A) The Department when used in 40 CFR 124.3; or

(B) The "permitting body," as defined in section (2) of this rule, when used in 40 CFR 124.5, 124.6, 124.8, 124.10, 124.12, 124.14, 124.15 and 124.17.

(b) "RCRA permit" means hazardous waste management facility permit.

(2) The term "permitting body" when used as specified in paragraph (1)(a)(B) of this rule, means:

(a) The Department of Environmental Quality, when the activity or action pertains to hazardous waste storage or treatment facility permits; or

(b) The Environmental Quality Commission, when the activity or action pertains to hazardous waste disposal facility permits.

Requirements not applicable.

340-106-020 The provisions of 40 CFR 124.1, 124.4, 124.9, 124.11(e), 124.13, 124.14(c), 124.15(b), 124.16, 124.17(b), 124.18, 124.19, 124.20 and 124.21 are deleted and not part of Division 106.

Recommendations by State agencies on waste disposal facility applications.

340-106-025 (1) In addition to the requirements of 40 CFR 124.3, the provisions of section (2) of this rule shall be followed.

(2) The Commission shall cause copies of disposal site applications to

be sent to affected state agencies, including the Health Division, the Public Utility Commissioner, the State Fish and Wildlife Commission and the Water Resources Director. Each agency shall respond by making a recommendation as to whether the permit should be granted. If the Health Division recommends against granting the permit, the permit must be denied. Recommendation from other agencies shall be considered as evidence in determining whether to issue the permit.

Application review.

340-106-030 The requirements of 40 CFR 124.3 are amended as specified by sections (1), (2) and (3) of this rule.

(1) Each application from either an existing or new hazardous waste management facility for a permit will be reviewed for completeness by the Department within 60 days of its receipt.

(2) If an applicant fails or refuses to correct deficiencies in the application, the permit may be denied and appropriate enforcement actions may be taken.

(3) The provisions of 40 CFR 124.3(g) are deleted.

Modification, revocation and reissuance, or termination of permits.

340-106-035 (1) The provisions of 40 CFR 124.5(b) are deleted and replaced with subsections (1)(a), (b) and (c) of this rule.

(a) If the permitting body decides the request is not justified, it shall send the requester a brief written response giving a reason for the decision. Denials of requests for modification, revocation and reissuance, or termination are not subject to public notice, comment or hearings.

(b) Denials by the Department may be appealed to the Commission by a letter briefly setting forth the relevant facts. The Commission may direct the Department to begin modification, revocation and reissuance, or termination proceedings under 40 CFR 124.5(c). The appeal shall be considered denied if the Commission takes no action on the letter within 60 days after receiving it. This appeal is a prerequisite to seeking judicial review of Department action in denying a request for modification, revocation and reissuance, or termination.

(c) Denials by the Commission are subject to judicial review under ORS 183.480.

(2) The provisions of 40 CFR 124.5(e), (f) and (g) are deleted.

Draft permits.

340-106-040 The requirements of 40 CFR 124.6(e) are modified by deleting the sentence "For RCRA, UIC or PSD permits, . . . under 124.74."

Public hearings on disposal facility draft permits.

340-106-045 In addition to the provisions of 40 CFR 124.12, the requirements of sections (1) and (2) of this rule are applicable to hazardous waste disposal facilities.

(1) The Commission shall conduct a public hearing in the county or counties where a proposed hazardous waste disposal site is located and may conduct hearings at such other places as the Department considers suitable. At the hearing, the applicant may present the application and the public may appear or be represented in support of or in opposition to the application.

(2)(a) Prior to holding hearings on a hazardous waste disposal site license application, the Commission shall cause notice to be given in the county or counties where the proposed site is located in a manner reasonably calculated to notify interested and affected persons of the license application.

(b) The notice shall contain information regarding the approximate location of the site and the type and amount of materials intended for disposal at such site, and shall fix a time and place for a public hearing. In addition, the notice shall contain a statement that any person interested in or affected by the proposed site shall have opportunity to testify at the hearing.

DIVISION 107
HAZARDOUS WASTE MANAGEMENT

Standards for the Management of
Specific Hazardous Wastes and Specific Types
of Hazardous Waste Management Facilities

Authority: ORS Chapter 468, including 468.020; 459, including 459.440; and 183.

Purpose.

340-107-005 The purpose of this Division is to establish requirements for persons managing specific hazardous wastes which are recycled (known as "recyclable materials") in specific manners.

Adoption of United States Environmental Protection Agency Hazardous Waste Regulations.

340-107-010 Except as otherwise modified or specified by OAR Chapter 340, Division 107, the rules and regulations governing the management of hazardous waste, prescribed by the United States Environmental Protection Agency in Title 40 Code of Federal Regulations, Part 266, and amendments thereto promulgated prior to May 1, 1985, are adopted and prescribed by the Commission to be observed by all persons subject to ORS 459.410 to 459.450, and 459.460 to 459.695.

DIVISION 108
HAZARDOUS WASTE MANAGEMENT

Spills and Other Incidents

Authority: ORS Chapter 468, including 468.020; 459, including 459.440; and 183.

Subdivision A: General

Purpose and applicability.

340-108-001 (1) The purpose of this Division is to specify the emergency procedures required to respond to a spill or other incident involving a hazardous waste or hazardous substance.

(2) The regulations of this Division apply to all persons whose actions cause or allow to be caused a hazardous waste or hazardous substance spill or other incident; except that

(3) Spills and other incidents occurring on the site of a generator who accumulates hazardous waste or in a hazardous waste treatment, storage or disposal facility shall be managed in accordance with the contingency plan prepared in accordance with [Subdivision D of] Division 102 or Division 104.

(4) Oil spilled in an area that may allow it to reach any waters of the state shall also be managed in accordance with ORS Chapter 468 and OAR Chapter 340, Division 47.

Definitions.

340-108-002 As used in this Division unless otherwise specified:

"Disposal" means the discharge, deposit, injection, dumping, spilling, leaking or placing of any hazardous waste or hazardous substance into or on any land or water so that the hazardous waste or hazardous substance or any constituent thereof may enter the environment or be emitted into the air or discharged into any waters of the State.

"Hazardous substance" means any substance intended for use which

may also be identified as hazardous pursuant to Division 101.

"Hazardous waste" means a hazardous waste as defined in rule 340-101[-003]-015.

"Oil" means oil, including gasoline, crude oil, fuel oil, diesel oil, lubricating oil, sludge, oil refuse and any other petroleum related product.

"Other incident" includes but is not limited to the actual or imminent possibility of a dangerous uncontrolled reaction, the release of leachate, noxious gases or odors, fires, explosion or other disposal which may endanger public health or the environment.

"Modified Spill Prevention Control and Countermeasure (SPCC) Plan" means the plan to prevent the spill of oil from a non-transportation-related facility that has been modified to include those hazardous substances and hazardous wastes handled at the facility.

"Spill" means unauthorized disposal.

"Waters of the state" means lakes, bays, ponds, impounding reservoirs, springs, wells, rivers, streams, creeks, estuaries, marshes, inlets, canals, the Pacific Ocean within the territorial limits of the State of Oregon and all other bodies of surface or underground waters, natural or artificial, inland or coastal, fresh or salt, public or private (except those private waters which do not combine or effect a junction with natural surface or underground waters), which are wholly or partially within or bordering the state or within its jurisdiction.

Subdivision B: Liability

Liability.

340-108-010 (1) Any person having the care, custody or control of a hazardous waste or a hazardous substance, who causes or permits the disposal of that waste or substance in violation of law or otherwise than as reasonably intended for normal use or handling of such waste or substance, including but not limited to spills or other incidents, shall be liable for the damages to person or property, public or private, caused by the disposal.

(2) It shall be the obligation of such person to collect, remove or treat the waste or substance immediately, subject to the requirements of Divisions 100 to 108 and such direction as the Department may give.

(Comment: [Rule 340-105-001(2)(c)] 40 CFR 264.1(g) states that a permit is not required for treatment or containment activities taken during immediate response to a spill or other incident.)

(3) If such person fails to collect, remove or treat the waste or substance when under an obligation to do so, the Department will take action as is necessary to collect, remove or treat the waste or substance.

(4) The Department will keep a record of all necessary expenses incurred in carrying out any cleanup projects or activities, including reasonable charges for services performed and equipment and materials utilized.

(5) Any person who fails to collect, remove or treat the waste or substance immediately, when under an obligation to do so, shall be responsible for the necessary expenses incurred by the State in carrying out a cleanup project or activity authorized by the Department.

(6) If the amount of state-incurred expenses are not paid to the Department within 15 days after receipt of notice that expenses are due and owing, the Attorney General, at the request of the Department, shall bring an action in the name of the State of Oregon in any court of competent jurisdiction to recover the amount specified in the final order of the Department.

Subdivision C: Required Action

Emergency action, reporting.

340-108-020 In the event of a spill or other incident, the person having the care, custody, or control of the hazardous waste or hazardous substance shall take the following actions, as appropriate:

(1) Immediately implement the site modified SPCC plan or other applicable contingency plan.

(Comment: Generators [storing] accumulating hazardous waste for less than 90 days are required to have a contingency plan prepared in accordance with [rule 340-102-034] 40 CFR 262.34.)

(2) If a contingency plan is not required or available, immediately take the following actions in the order listed:

(a) Activate alarms or otherwise warn persons in the immediate area;

(b) Undertake every reasonable method to contain the hazardous substance or hazardous waste;

(c)(A) Report the spill or other incident to the Oregon Emergency Management Division (telephone 800-452-0311) if the amount of hazardous waste or hazardous substance exceeds the following reportable quantity (in the event a substance or waste falls into more than one category, the lower quantity shall be reported):

Substance or Waste Type	Reportable Quantity (pounds)
Ignitable, [rule 340-101-021] 40 CFR 261.21	200
Corrosive, [rule 340-101-022] 40 CFR 261.22	200
Reactive, [rule 340-101-023] 40 CFR 261.23	200
EP Toxic, [rule 340-101-024] 40 CFR 261.24	10
Listed, [rule 340-101-031 and -032] 40 CFR 261.31 and .32	10
Listed, [rule 340-101-033(1)(a) and (2)(a)]	2

40 CFR 261.33(e)	
Listed, [rule 340-101-033(1)(b), (2)(b) and (3)(a)]	10
40 CFR 261.33(f)	
Listed, rule 340-101-040	10
Pesticide, rule 340-101-[034] 045	10
PCB, rule 340-110-001(2)	10

(Comment: "Ignitable" includes the DOT classifications "Flammable," "Oxidizer," and some "Combustible.")

(B) Transporters must report spills of any quantity that occur during transportation. Transporters must also report spills or other incidents to the National Response Center (800-424-8802) as required by 49 CFR 171.15, and, if a water transporter, as required by 33 CFR 153.203;

(C) The spill or other incident need not be reported if:

(i) It occurs on private property and is known to the owner of the property (or his representative);

(ii) It occurs on an impervious surface where it is fully contained; and

(iii) It is completely cleaned up without further incident.

(Comment: For reporting purposes, quantity calculation involving hazardous waste shall be made independent of the concentrations of the hazardous components. For example, the table in this rule requires reporting a 10 pound spill of acrolein (a rule 340-101-[033(3)(a)] 040 waste). This shall be interpreted as requiring reporting a 10 pound spill of a waste containing acrolein whether the concentration of acrolein is 3, 30 or 100%.)

(d) Undertake, in the most practicable manner, the collection, removal or treatment of the hazardous substance or hazardous waste in accordance with the requirements of Divisions 100 to 110 and in a manner that will minimize damage to the environment. The Department may, in any case, evaluate the action taken and may require additional action to complete the

cleanup and disposal.

Cleanup Report

340-108-021 The Department may require the person responsible for a spill or other incident to submit a written report within 15 days of the spill or other incident describing all aspects of the spill and steps taken to prevent a recurrence.

(Comment: Transporters are also required by the Public Utility Commissioner to file a Hazardous Materials Incident Report (DOT Form F5800.0) within 15 days after a spill. A copy of this report may be sent to the Department in lieu of the report required by this rule.)

portion as to be capable of attracting or providing food for birds.

57.4 **Effective date.**

These criteria become effective October 15, 1979.

APPENDIX I

The maximum contaminant levels promulgated herein are for use in determining whether solid waste disposal activities comply with the ground-water criteria (§ 257.3-4). Analytical methods for these contaminants may be found in 40 CFR Part 141 which should be consulted in its entirety.

1. *Maximum contaminant levels for inorganic chemicals.* The following are the maximum levels of inorganic chemicals other than fluoride:

Contaminant	Level (milligrams per liter)
Arsenic	0.05
Barium	1
Cadmium	0.010
Chromium	0.05
Lead	0.05
Mercury	0.002
Nitrate (as N)	10
Selenium	0.01
Silver	0.05

The maximum contaminant levels for fluoride are:

Temperature[1] degrees Fahrenheit	Degrees Celsius	Level (milligrams per liter)
53.7 and below	12 and below	2.4
53.8 to 58.3	12.1 to 14.6	2.2
58.4 to 63.8	14.7 to 17.6	2.0
63.9 to 70.6	17.7 to 21.4	1.8
70.7 to 79.2	21.5 to 26.2	1.6
79.3 to 90.5	26.3 to 32.5	1.4

[1] Annual average of the maximum daily air temperature.

2. *Maximum contaminant levels for organic chemicals.* The following are the maximum contaminant levels for organic chemicals:

	Level (milligrams per liter)
(a) Chlorinated hydrocarbons:	
Endrin (1,2,3,4,10,10-Hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-1,4-endo, endo-5,8-dimethano naphthalene)	0.0002
Lindane (1,2,3,4,5,6-Hexachlorocyclohexane, gamma isomer)	0.004
Methoxychlor (1,1,1-Trichloro-2,2 bis (p-methoxyphenyl) ethane)	0.1
Toxaphone ($C_{10}H_{10}Cl_8$-Technical chlorinated camphene, 67 to 69 percent chlorine)	0.005
(b) Chlorophenoxys:	
2,4-D (2,4-Dichlorophenoxy-acetic acid)	0.1
2,4,5-TP Silvex (2,4,5-Trichlorophen- oxy-propionic acid)	0.01

3. *Maximum microbiological contaminant levels.* The maximum contaminant level for coliform bacteria from any one well is as follows:

(a) using the membrane filter technique:

(1) Four coliform bacteria per 100 milliliters if one sample is taken, or

(2) Four coliform bacteria per 100 milliliters in more than one sample of all the samples analyzed in one month.

(b) Using the five tube most probable number procedure, (the fermentation tube method) in accordance with the analytical recommendations set forth in "Standard Methods for Examination of Water and Waste Water", American Public Health Association, 13th Ed. pp. 662-668, and using a Standard sample, each portion being one fifth of the sample:

(1) If the standard portion is 10 milliliters, coliform in any five consecutive samples from a well shall not be present in three or more of the 25 portions, or

(2) If the standard portion is 100 milliliters, coliform in any five consecutive samples from a well shall not be present in five portions in any of five samples or in more than fifteen of the 25 portions.

4. *Maximum contaminant levels for radium-226, radium-228, and gross alpha particle radioactivity.* The following are the maximum contaminant levels for radium-226, radium-228, and gross alpha particle radioactivity:

(a) Combined radium-226 and radium-228—5 pCi/l;

(b) Gross alpha particle activity (including radium-226 but excluding radon and uranium)—15 pCi/l.

APPENDIX II

A. Processes to Significantly Reduce Pathogens

Aerobic digestion: The process is conducted by agitating sludge with air or oxygen to maintain aerobic conditions at residence times ranging from 60 days at 15° C to 40 days at 20° C, with a volatile solids reduction of at least 38 percent.

Air Drying: Liquid sludge is allowed to drain and/or dry on under-drained sand beds, or paved or unpaved basins in which the sludge is at a depth of nine inches. A minimum of three months is needed, two months of which temperatures average on a daily basis above 0° C.

Anaerobic digestion: The process is conducted in the absence of air at residence times ranging from 60 days at 20° C to 15 days at 35° to 55° C, with a volatile solids reduction of at least 38 percent.

Composting: Using the within-vessel, static aerated pile or windrow composting methods, the solid waste is maintained at minimum operating conditions of 40° C for 5 days. For four hours during this period the temperature exceeds 55° C.

Lime Stabilization: Sufficient lime is added to produce a pH of 12 after 2 hours of contact.

Other methods: Other methods or operating conditions may be acceptable if pathogens and vector attraction of the waste (volatile solids) are reduced to an extent equivalent to the reduction achieved by any of the above methods.

B. Processes to Further Reduce Pathogens

Composting: Using the within-vessel composting method, the solid waste is maintained at operating conditions of 55° C or greater for three days. Using the static aerated pile composting method, the solid waste is maintained at operating conditions of 55° C or greater for three days. Using the windrow composting method, the solid waste attains a temperature of 55° C or greater for at least 15 days during the composting period. Also, during the high temperature period, there will be a minimum of five turnings of the windrow.

Heat drying: Dewatered sludge cake is dried by direct or indirect contact with hot gases, and moisture content is reduced to 10 percent or lower. Sludge particles reach temperatures well in excess of 80° C, or the wet bulb temperature of the gas stream in contact with the sludge at the point where it leaves the dryer is in excess of 80° C.

Heat treatment: Liquid sludge is heated to temperatures of 180° C for 30 minutes.

Thermophilic Aerobic Digestion: Liquid sludge is agitated with air or oxygen to maintain aerobic conditions at residence times of 10 days at 55-60° C, with a volatile solids reduction of at least 38 percent.

Other methods: Other methods or operating conditions may be acceptable if pathogens and vector attraction of the waste (volatile solids) are reduced to an extent equivalent to the reduction achieved by any of the above methods.

Any of the processes listed below, if added to the processes described in Section A above, further reduce pathogens. Because the processes listed below, on their own, do not reduce the attraction of disease vectors, they are only add-on in nature.

Beta ray irradiation: Sludge is irradiated with beta rays from an accelerator at dosages of at least 1.0 megarad at room temperature (ca. 20° C).

Gamma ray irradiation: Sludge is irradiated with gamma rays from certain isotopes, such as ^{60}Cobalt and ^{137}Cesium, at dosages of at least 1.0 megarad at room temperature (ca. 20° C).

Pasteurization: Sludge is maintained for at least 30 minutes at a minimum temperature of 70° C.

Other methods: Other methods or operating conditions may be acceptable if pathogens are reduced to an extent equivalent to the reduction achieved by any of the above add-on methods.

PART 260—HAZARDOUS WASTE MANAGEMENT SYSTEM: GENERAL

Subpart A—General

Subpart B—Definitions

Subpart C—Rulemaking Petitions

AUTHORITY: Secs. 1006, 2002, 3001 through 3007, 3010, and 7004, Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended, 42 U.S.C. 6905, 6912, 6921 through 6927, 6930, and 6974.

SOURCE: 45 FR 33073, May 19, 1980, unless otherwise noted.

EDITORIAL NOTE: The reporting or recordkeeping provisions included in the final rule published at 47 FR 32274, July 26, 1982, will be submitted for approval to the Office of Management and Budget (OMB). They are not effective until OMB approval has been obtained. EPA will publish a notice of the effective date of the reporting and recordkeeping provisions of this rule after it obtains OMB approval.

Subpart A—General

§ 260.1 Purpose, scope, and applicability.

(a) This part provides definitions of terms, general standards, and overview information applicable to Parts 260 through 265 of this chapter.

(b) In this part: (1) Section 260.2 sets forth the rules that EPA will use in making information it receives available to the public and sets forth the requirements that generators, transporters, or owners or operators of treatment, storage, or disposal facilities must follow to assert claims of business confidentiality with respect to information that is submitted to EPA under Parts 260 through 265 of this chapter.

(2) Section 260.3 establishes rules of grammatical construction for Parts 260 through 265 of this chapter.

(3) Section 260.10 defines terms which are used in Parts 260 through 265 of this chapter.

(4) Section 260.20 establishes procedures for petitioning EPA to amend, modify, or revoke any provision of Parts 260 through 265 of this chapter and establishes procedures governing EPA's action on such petitions.

(5) Section 260.21 establishes procedures for petitioning EPA to approve testing methods as equivalent to those prescribed in Parts 261, 264, or 265 of this chapter.

(6) Section 260.22 establishes procedures for petitioning EPA to amend Subpart D of Part 261 to exclude a waste from a particular facility.

§ 260.2 Availability of information; confidentiality of information.

(a) Any information provided to EPA under Parts 260 through 265 of this chapter will be made available to the public to the extent and in the manner authorized by the Freedom of Information Act, 5 U.S.C. section 552, section 3007(b) of RCRA and EPA regulations implementing the Freedom of Information Act and section 3007(b), Part 2 of this chapter, as applicable.

(b) Any person who submits information to EPA in accordance with Parts 260 through 265 of this chapter may assert a claim of business confidentiality covering part or all of that information by following the procedures set forth in § 2.203(b) of this chapter. Information covered by such a claim will be disclosed by EPA only to the extent, and by means of the procedures, set forth in Part 2, Subpart B of this chapter. However, if no such claim accompanies the information when it is received by EPA, it may be made available to the public without further notice to the person submitting it.

§ 260.3 Use of number and gender.

As used in Parts 260 through 265 of this chapter:

(a) Words in the masculine gender also include the feminine and neuter genders; and

(b) Words in the singular include the plural; and

(c) Words in the plural include the singular.

Subpart B—Definitions

§ 260.10 Definitions.

When used in Parts 260 through 265 of this chapter, the following terms have the meanings given below:

"Act" or "RCRA" means the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended, 42 U.S.C. section 6901 et seq.

"Active portion" means that portion of a facility where treatment, storage, or disposal operations are being or have been conducted after the effective date of Part 261 of this chapter and which is not a closed portion. (See also "closed portion" and "inactive portion".)

"Administrator" means the Administrator of the Environmental Protection Agency, or his designee.

"Aquifer" means a geologic formation, group of formations, or part of a formation capable of yielding a significant amount of ground water to wells or springs.

"Authorized representative" means the person responsible for the overall operation of a facility or an operational unit (i.e., part of a facility), e.g., the plant manager, superintendent or person of equivalent responsibility.

"Certification" means a statement of professional opinion based upon knowledge and belief.

"Closed portion" means that portion of a facility which an owner or operator has closed in accordance with the approved facility closure plan and all applicable closure requirements. (See also "active portion" and "inactive portion".)

"Confined aquifer" means an aquifer bounded above and below by impermeable beds or by beds of distinctly lower permeability than that of the aquifer itself; an aquifer containing confined ground water.

"Container" means any portable device in which a material is stored, transported, treated, disposed of, or otherwise handled.

"Contingency plan" means a document setting out an organized, planned, and coordinated course of action to be followed in case of a fire, explosion, or release of hazardous waste or hazardous waste constituents which could threaten human health or the environment.

"Designated facility" means a hazardous waste treatment, storage, or disposal facility which has received an EPA permit (or a facility with interim status) in accordance with the requirements of 40 CFR Parts 270 and 124 of this chapter, or a permit from a State authorized in accordance with Part 271 of this chapter, that has been designated on the manifest by the generator pursuant to § 262.20.

"Dike" means an embankment or ridge of either natural or man-made materials used to prevent the movement of liquids, sludges, solids, or other materials.

"Discharge" or "hazardous waste discharge" means the accidental or intentional spilling, leaking, pumping, pouring, emitting, emptying, or dumping of hazardous waste into or on any land or water.

"Disposal" means the discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid waste or hazardous waste into or on any land or water so that such solid waste or hazardous waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any waters, including ground waters.

"Disposal facility" means a facility or part of a facility at which hazardous waste is intentionally placed into or on any land or water, and at which waste will remain after closure.

"Elementary neutralization unit" means a device which:

(1) Is used for neutralizing wastes which are hazardous wastes only because they exhibit the corrosivity characteristic defined in § 261.22 of this chapter, or are listed in Subpart D of Part 261 of this chapter only for this reason; and,

(2) Meets the definition of tank, container, transport vehicle, or vessel in § 260.10 of this chapter.

"EPA hazardous waste number" means the number assigned by EPA to each hazardous waste listed in Part 261, Subpart D, of this chapter and to each characteristic identified in Part 261, Subpart C, of this chapter.

"EPA identification number" means the number assigned by EPA to each generator, transporter, and treatment, storage, or disposal facility.

"EPA region" means the states and territories found in any one of the following ten regions:

Region I—Maine, Vermont, New Hampshire, Massachusetts, Connecticut, and Rhode Island.
Region II—New York, New Jersey, Commonwealth of Puerto Rico, and the U.S. Virgin Islands.
Region III—Pennsylvania, Delaware, Maryland, West Virginia, Virginia, and the District of Columbia.
Region IV—Kentucky, Tennessee, North Carolina, Mississippi, Alabama, Georgia, South Carolina, and Florida.
Region V—Minnesota, Wisconsin, Illinois, Michigan, Indiana and Ohio.
Region VI—New Mexico, Oklahoma, Arkansas, Louisiana, and Texas.
Region VII—Nebraska, Kansas, Missouri, and Iowa.
Region VIII—Montana, Wyoming, North Dakota, South Dakota, Utah, and Colorado.
Region IX—California, Nevada, Arizona, Hawaii, Guam, American Samoa, Commonwealth of the Northern Mariana Islands.
Region X—Washington, Oregon, Idaho, and Alaska.

"Equivalent method" means any testing or analytical method approved

by the Administrator under §§ 260.20 and 260.21.

"Existing hazardous waste management (HWM) facility" or "existing facility" means a facility which was in operation or for which construction commenced on or before November 19, 1980. A facility has commenced construction if:

(1) The owner or operator has obtained the Federal, State and local approvals or permits necessary to begin physical construction; and either

(2)(i) A continuous on-site, physical construction program has begun; or

(ii) The owner or operator has entered into contractual obligations—which cannot be cancelled or modified without substantial loss—for physical construction of the facility to be completed within a reasonable time.

"Existing portion" means that land surface area of an existing waste management unit, included in the original Part A permit application, on which wastes have been placed prior to the issuance of a permit.

"Facility" means all contiguous land, and structures, other appurtenances, and improvements on the land, used for treating, storing, or disposing of hazardous waste. A facility may consist of several treatment, storage, or disposal operational units (e.g., one or more landfills, surface impoundments, or combinations of them).

"Federal agency" means any department, agency, or other instrumentality of the Federal Government, any independent agency or establishment of the Federal Government including any Government corporation, and the Government Printing Office.

"Federal, State and local approvals or permits necessary to begin physical construction" means permits and approvals required under Federal, State or local hazardous waste control statutes, regulations or ordinances.

"Food-chain crops" means tobacco, crops grown for human consumption, and crops grown for feed for animals whose products are consumed by humans.

"Free liquids" means liquids which readily separate from the solid portion of a waste under ambient temperature and pressure.

"Freeboard" means the vertical distance between the top of a tank or surface impoundment dike, and the surface of the waste contained therein.

"Generator " means any person, by site, whose act or process produces hazardous waste identified or listed in Part 261 of this chapter or whose act first causes a hazardous waste to become subject to regulation.

"Ground water" means water below the land surface in a zone of saturation.

"Hazardous waste" means a hazardous waste as defined in § 261.3 of this chapter.

"Hazardous waste constituent" means a constituent that caused the Administrator to list the hazardous waste in Part 261, Subpart D, of this chapter, or a constituent listed in Table 1 of § 261.24 of this chapter.

"Inactive portion" means that portion of a facility which is not operated after the effective date of Part 261 of this chapter. (See also "active portion" and "closed portion".)

"Incinerator" means an enclosed device using controlled flame combustion, the primary purpose of which is to thermally break down hazardous waste. Examples of incinerators are rotary kiln, fluidized bed, and liquid injection incinerators.

"Incompatible waste" means a hazardous waste which is unsuitable for:

(1) Placement in a particular device or facility because it may cause corrosion or decay of containment materials (e.g., container inner liners or tank walls); or

(2) Commingling with another waste or material under uncontrolled conditions because the commingling might produce heat or pressure, fire or explosion, violent reaction, toxic dusts, mists, fumes, or gases, or flammable fumes or gases.

(See Part 265, Appendix V, of this chapter for examples.)

"Individual generation site" means the contiguous site at or on which one or more hazardous wastes are generated. An individual generation site, such as a large manufacturing plant, may have one or more sources of hazardous waste but is considered a single or individual generation site if the site or property is contiguous.

"In operation" refers to a facility which is treating, storing, or disposing of hazardous waste.

"Injection well" means a well into which fluids are injected. (See also "underground injection".)

"Inner liner" means a continuous layer of material placed inside a tank or container which protects the construction materials of the tank or container from the contained waste or reagents used to treat the waste.

"International shipment" means the transportation of hazardous waste into or out of the jurisdiction of the United States.

"Landfill" means a disposal facility or part of a facility where hazardous waste is placed in or on land and which is not a land treatment facility, a surface impoundment, or an injection well.

"Landfill cell" means a discrete volume of a hazardous waste landfill which uses a liner to provide isolation of wastes from adjacent cells or wastes. Examples of landfill cells are trenches and pits.

"Land treatment facility" means a facility or part of a facility at which hazardous waste is applied onto or incorporated into the soil surface; such facilities are disposal facilities if the waste will remain after closure.

"Leachate" means any liquid, including any suspended components in the liquid, that has percolated through or drained from hazardous waste.

"Liner" means a continuous layer of natural or man-made materials, beneath or on the sides of a surface impoundment, landfill, or landfill cell, which restricts the downward or lateral escape of hazardous waste, hazardous waste constituents, or leachate.

"Management" or "hazardous waste management" means the systematic control of the collection, source separation, storage, transportation, processing, treatment, recovery, and disposal of hazardous waste.

"Manifest" means the shipping document EPA form 8700-22 and, if necessary, EPA form 8700-22A, originated and signed by the generator in accordance with the instructions included in the Appendix to Part 262.

"Manifest document number" means the U.S. EPA twelve digit identification number assigned to the generator plus a unique five digit document number assigned to the Manifest by the generator for recording and reporting purposes.

"Mining overburden returned to the mine site" means any material overlying an economic mineral deposit which is removed to gain access to that deposit and is then used for reclamation of a surface mine.

"Movement" means that hazardous waste transported to a facility in an individual vehicle.

"New hazardous waste management facility" or "new facility" means a facility which began operation, or for which construction commenced after October 21, 1976. (See also "Existing hazardous waste management facility".)

"On-site" means the same or geographically contiguous property which may be divided by public or private right-of-way, provided the entrance and exit between the properties is at a cross-roads intersection, and access is by crossing as opposed to going along, the right-of-way. Non-contiguous properties owned by the same person but connected by a right-of-way which he controls and to which the public does not have access, is also considered on-site property.

"Open burning" means the combustion of any material without the following characteristics:

(1) Control of combustion air to maintain adequate temperature for efficient combustion,

(2) Containment of the combustion-reaction in an enclosed device to provide sufficient residence time and mixing for complete combustion, and

(3) Control of emission of the gaseous combustion products.

(See also "incineration" and "thermal treatment".)

"Operator" means the person responsible for the overall operation of a facility.

"Owner" means the person who owns a facility or part of a facility.

"Partial closure" means the closure of a discrete part of a facility in accordance with the applicable closure requirements of Parts 264 or 265 of

this chapter. For example, partial closure may include the closure of a trench, a unit operation, a landfill cell, or a pit, while other parts of the same facility continue in operation or will be placed in operation in the future.

"Person" means an individual, trust, firm, joint stock company, Federal Agency, corporation (including a government corporation), partnership, association, State, municipality, commission, political subdivision of a State, or any interstate body.

"Personnel" or "facility personnel" means all persons who work, at, or oversee the operations of, a hazardous waste facility, and whose actions or failure to act may result in noncompliance with the requirements of Parts 264 or 265 of this chapter.

"Pile" means any non-containerized accumulation of solid, nonflowing hazardous waste that is used for treatment or storage.

"Point source" means any discernible, confined, and discrete conveyance, including, but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture.

"Publicly owned treatment works" or "POTW" means any device or system used in the treatment (including recycling and reclamation) of municipal sewage or industrial wastes of a liquid nature which is owned by a "State" or "municipality" (as defined by Section 502(4) of the CWA). This definition includes sewers, pipes, or other conveyances only if they convey wastewater to a POTW providing treatment.

"Regional Administrator" means the Regional Administrator for the EPA Region in which the facility is located, or his designee.

"Representative sample" means a sample of a universe or whole (e.g., waste pile, lagoon, ground water) which can be expected to exhibit the average properties of the universe or whole.

"Run-off" means any rainwater, leachate, or other liquid that drains over land from any part of a facility.

"Run-on" means any rainwater, leachate, or other liquid that drains over land onto any part of a facility.

"Saturated zone" or "zone of saturation" means that part of the earth's crust in which all voids are filled with water.

"Sludge" means any solid, semi-solid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility exclusive of the treated effluent from a wastewater treatment plant.

"Solid waste" means a solid waste as defined in § 261.2 of this chapter.

"State" means any of the several States, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands.

"Storage" means the holding of hazardous waste for a temporary period, at the end of which the hazardous waste is treated, disposed of, or stored elsewhere.

"Surface impoundment" or "impoundment" means a facility or part of a facility which is a natural topographic depression, man-made excavation, or diked area formed primarily of earthen materials (although it may be lined with man-made materials), which is designed to hold an accumulation of liquid wastes or wastes containing free liquids, and which is not an injection well. Examples of surface impoundments are holding, storage, settling, and aeration pits, ponds, and lagoons.

"Tank" means a stationary device, designed to contain an accumulation of hazardous waste which is constructed primarily of non-earthen materials (e.g., wood, concrete, steel, plastic) which provide structural support.

"Thermal treatment" means the treatment of hazardous waste in a device which uses elevated temperatures as the primary means to change the chemical, physical, or biological character or composition of the hazardous waste. Examples of thermal treatment processes are incineration,

molten salt, pyrolysis, calcination, wet air oxidation, and microwave discharge. (See also "incinerator" and "open burning".)

"Totally enclosed treatment facility" means a facility for the treatment of hazardous waste which is directly connected to an industrial production process and which is constructed and operated in a manner which prevents the release of any hazardous waste or any constituent thereof into the environment during treatment. An example is a pipe in which waste acid is neutralized.

"Transfer facility" means any transportation related facility including loading docks, parking areas, storage areas and other similar areas where shipments of hazardous waste are held during the normal course of transportation.

"Transport vehicle" means a motor vehicle or rail car used for the transportation of cargo by any mode. Each cargo-carrying body (trailer, railroad freight car, etc.) is a separate transport vehicle.

"Transportation" means the movement of hazardous waste by air, rail, highway, or water.

"Transporter" means a person engaged in the offsite transportation of hazardous waste by air, rail, highway, or water.

"Treatment" means any method, technique, or process, including neutralization, designed to change the physical, chemical, or biological character or composition of any hazardous waste so as to neutralize such waste, or so as to recover energy or material resources from the waste, or so as to render such waste non-hazardous, or less hazardous; safer to transport, store, or dispose of; or amenable for recovery, amenable for storage, or reduced in volume.

"Treatment zone" means a soil area of the unsaturated zone of a land treatment unit within which hazardous constituents are degraded, transformed, or immobilized.

"Underground injection" means the subsurface emplacement of fluids through a bored, drilled or driven well; or through a dug well, where the depth of the dug well is greater than the largest surface dimension. (See also "injection well".)

"Unsaturated zone" or "zone of aeration" means the zone between the land surface and the water table.

"United States" means the 50 States, the District of Columbia, the Commonwealth of Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands.

"Uppermost aquifer" means the geologic formation nearest the natural ground surface that is an aquifer, as well as lower aquifers that are hydraulically interconnected with this aquifer within the facility's property boundary.

"Vessel" includes every description of watercraft, used or capable of being used as a means of transportation on the water.

"Wastewater treatment unit" means a device which:

(1) Is part of a wastewater treatment facility which is subject to regulation under either Section 402 or Section 307(b) of the Clean Water Act; and

(2) Receives and treats or stores an influent wastewater which is a hazardous waste as defined in § 261.3 of this chapter, or generates and accumulates a wastewater treatment sludge which is a hazardous waste as defined in § 261.3 of this chapter, or treats or stores a wastewater treatment sludge which is a hazardous waste as defined in § 261.3 of this chapter; and

(3) Meets the definition of tank in § 260.10 of this chapter.

"Water (bulk shipment)" means the bulk transportation of hazardous waste which is loaded or carried on board a vessel without containers or labels.

"Well" means any shaft or pit dug or bored into the earth, generally of a cylindrical form, and often walled with bricks or tubing to prevent the earth from caving in.

"Well injection": (See "underground injection".)

[45 FR 33073, May 19, 1980, as amended at 45 FR 72028, Oct. 30, 1980; 45 FR 76075, Nov.17, 1980; 45 FR 76630, Nov. 19, 1980; 45 FR 86968, Dec. 31, 1980; 46 FR 2348, Jan. 9, 1981; 46 FR 27476, May 20, 1981; 47 FR 32349, July 26, 1982; 48 FR 2511, Jan. 16,

1983; 48 FR 14293, Apr. 1, 1983; 49 FR 10500, Mar. 20, 1984]

EFFECTIVE DATE NOTE: At 49 FR 10500, Mar. 20, 1984, § 260.10 was amended by revising the definitions of "Manifest" and "Manifest document number", effective September 20, 1984. For the convenience of the user, the superseded text is set out below.

§ 260.10 Definitions.

* * * * *

"Manifest" means the shipping document originated and signed by the generator which contains the information required by Part 262, Subpart B, of this chapter.

"Manifest document number" means the serially increasing number assigned to the manifest by the generator for recording and reporting purposes.

* * * * *

§ 260.11 References.

(a) When used in Parts 260 through 265 of this chapter, the following publications are incorporated by reference:

"ASTM Standard Test Methods for Flash Point of Liquids by Setaflash Closed Tester," ASTM Standard D-3278-78, available from American Society for Testing and Materials, 1916 Race Street, Philadelphia, Pa. 19103.

"ASTM Standard Test Methods for Flash Point by Pensky-Martens Closed Tester," ASTM Standard D-93-79 or D-93-80. D-93-80 is available from American Society for Testing and Materials, 1916 Race Street, Philadelphia, Pa. 19103.

"Flammable and Combustible Liquids Code" (1977 or 1981), available from the National Fire Protection Association, 470 Atlantic Avenue, Boston, Massachusetts 02210.

"Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846 (First Edition, 1980, as updated by Revisions A (August, 1980), B (July, 1981), and C (February, 1982)) *or* (Second Edition, 1982). The first edition of SW-846 is no longer in print. Revisions A and B are available from EPA, Office of Solid Waste, (WH-565B), 401 M Street, S.W., Washington, D.C. 20460. Revision C is available from NTIS, 5285 Port Royal Road, Springfield, Virginia 22161. The second edition of SW-846 includes material from the first edition and Revisions A, B, and C in a reorganized format. It is available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, (202) 783-3238, on a subscription basis, and future updates will automatically be mailed to the subscriber.

(b) The references listed in paragraph (a) of this section are also available for inspection at the Office of the Federal Register, 1100 L Street, NW, Washington, D.C. 20408. These incorporations by reference were approved by the Director of the Federal Register. These materials are incorporated as they exist on the date of approval and a notice of any change in these materials will be published in the FEDERAL REGISTER.

[46 FR 35247, July 7, 1981, as amended at 47 FR 41563, Sept. 21, 1982]

Subpart C—Rulemaking Petitions

§ 260.20 General.

(a) Any person may petition the Administrator to modify or revoke any provision in Parts 260 through 265 of this chapter. This section sets forth general requirements which apply to all such petitions. Section 260.21 sets forth additional requirements for petitions to add a testing or analytical method to Part 261, 264 or 265. Section 260.22 sets forth additional requirements for petitions to exclude a waste at a particular facility from § 261.3 of this chapter or the lists of hazardous wastes in Subpart D of Part 261.

(b) Each petition must be submitted to the Administrator by certified mail and must include:

(1) The petitioner's name and address;

(2) A statement of the petitioner's interest in the proposed action;

(3) A description of the proposed action, including (where appropriate) suggested regulatory language; and

(4) A statement of the need and justification for the proposed action, including any supporting tests, studies, or other information.

(c) The Administrator will make a tentative decision to grant or deny a petition and will publish notice of such tentative decision, either in the form of an advanced notice of proposed rulemaking, a proposed rule, or a tentative determination to deny the petition, in the FEDERAL REGISTER for written public comment.

(d) Upon the written request of any interested person, the Administrator may, at his discretion, hold an informal public hearing to consider oral comments on the tentative decision. A person requesting a hearing must state the issues to be raised and explain why written comments would not suffice to communicate the person's views. The Administrator may in any case decide on his own motion to hold an informal public hearing.

(e) After evaluating all public comments the Administrator will make a final decision by publishing in the FEDERAL REGISTER a regulatory amendment or a denial of the petition.

§ 260.21 Petitions for equivalent testing or analytical methods.

(a) Any person seeking to add a testing or analytical method to Part 261, 264, or 265 of this chapter may petition for a regulatory amendment under this section and § 260.20. To be successful, the person must demonstrate to the satisfaction of the Administrator that the proposed method is equal to or superior to the corresponding method prescribed in Part 261, 264, or 265 of this chapter, in terms of its sensitivity, accuracy, and precision (i.e., reproducibility).

(b) Each petition must include, in addition to the information required by § 260.20(b):

(1) A full description of the proposed method, including all procedural steps and equipment used in the method;

(2) A description of the types of wastes or waste matrices for which the proposed method may be used;

(3) Comparative results obtained from using the proposed method with those obtained from using the relevant or corresponding methods prescribed in Part 261, 264, or 265 of this chapter;

(4) An assessment of any factors which may interfere with, or limit the use of, the proposed method; and

(5) A description of the quality control procedures necessary to ensure the sensitivity, accuracy and precision of the proposed method.

(c) After receiving a petition for an equivalent method, the Administrator may request any additional information on the proposed method which he may reasonably require to evaluate the method.

(d) If the Administrator amends the regulations to permit use of a new testing method, the method will be incorporated in "Test Methods for the Evaluation of Solid Waste: Physical/Chemical Methods," SW-846, U.S. Environmental Protection Agency, Office of Solid Waste, Washington, D.C. 20460.

[*Comment:* This manual will be provided to any person on request, and will be available for inspection or copying at EPA headquarters or any EPA Regional Office.]

§ 260.22 Petitions to amend Part 261 to exclude a waste produced at a particular facility.

(a) Any person seeking to exclude a waste at a particular generating facility from the lists in Subpart D of Part 261 may petition for a regulatory amendment under this section and § 260.20. To be successful, the petitioner must demonstrate to the satisfaction of the Administrator that the waste produced by a particular generating facility does not meet any of the criteria under which the waste was listed as a hazardous waste and, in the case of an acutely hazardous waste listed under § 261.11(a)(2), that it also does not meet the criterion of § 261.11(a)(3). A waste which is so excluded may still, however, be a hazardous waste by operation of Subpart C of Part 261.

(b) The procedures in this section and § 260.20 may also be used to petition the Administrator for a regulatory amendment to exclude from § 261.3(a)(2)(ii) or (c), a waste which is described in those sections and is either a waste listed in Subpart D, contains a waste listed in Subpart D, or is derived from a waste listed in

Subpart D. This exclusion may only be issued for a particular generating, storage, treatment, or disposal facility. The petitioner must make the same demonstration as required by paragraph (a) of this section, except that where the waste is a mixture of solid waste and one or more listed hazardous wastes or is derived from one or more hazardous wastes, his demonstration may be made with respect to each constituent listed waste or the waste mixture as a whole. A waste which is so excluded may still be a hazardous waste by operation of Subpart C of Part 261.

(c) If the waste is listed with codes "I", "C", "R", or "E" in Subpart D, the petitioner must show that demonstration samples of the waste do not exhibit the relevant characteristic defined in §261.21, § 261.22, § 261.23, or § 261.24 using any applicable test methods prescribed therein.

(d) If the waste is listed with code "T" in Subpart D, the petitioner must demonstrate that:

(1) Demonstration samples of the waste do not contain the constituent (as defined in Appendix VII) that caused the Administrator to list the waste, using the appropriate test methods prescribed in Appendix III; or

(2) The waste does not meet the criterion of § 261.11(a)(3) when considering the factors in § 261.11(a)(3) (i) through (xi).

(e) If the waste is listed with the code "H" in Subpart D, the petitioner must demonstrate that the waste does not meet both of the following criteria:

(1) The criterion of § 261.11(a)(2).

(2) The criterion of § 261.11(a)(3) when considering the factors listed in § 261.11(a)(3) (i) through (xi).

(f) [Reserved for listing radioactive wastes.]

(g) [Reserved for listed infectious wastes.]

(h) Demonstration samples must consist of enough representative samples, but in no case less than four samples, taken over a period of time sufficient to represent the variability or the uniformity of the waste.

(i) Each petition must include, in addition to the information required by § 260.20(b):

(1) The name and address of the laboratory facility performing the sampling or tests of the waste;

(2) The names and qualifications of the persons sampling and testing the waste;

(3) The dates of sampling and testing;

(4) The location of the generating facility;

(5) A description of the manufacturing processes or other operations and feed materials producing the waste and an assessment of whether such processes, operations, or feed materials can or might produce a waste that is not covered by the demonstration;

(6) A description of the waste and an estimate of the average and maximum monthly and annual quantities of waste covered by the demonstration;

(7) Pertinent data on and discussion of the factors delineated in the respective criterion for listing a hazardous waste, where the demonstration is based on the factors in § 261.11(a)(3);

(8) A description of the methodologies and equipment used to obtain the representative samples;

(9) A description of the sample handling and preparation techniques, including techniques used for extraction, containerization and preservation of the samples;

(10) A description of the tests performed (including results);

(11) The names and model numbers of the instruments used in performing the tests; and

(12) The following statement signed by the generator of the waste or his authorized representative:

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this demonstration and all attached documents, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

(j) After receiving a petition for an exclusion, the Administrator may request any additional information which he may reasonably require to evaluate the petition.

(k) An exclusion will only apply to the waste generated at the individual facility covered by the demonstration and will not apply to waste from any other facility.

(l) The Administrator may exclude only part of the waste for which the demonstration is submitted where he has reason to believe that variability of the waste justifies a partial exclusion.

(m) The Administrator may (but shall not be required to) grant a temporary exclusion before making a final decision under § 260.20(d) whenever he finds that there is a substantial likelihood that an exclusion will be finally granted. The Administrator will publish notice of any such temporary exclusion in the FEDERAL REGISTER.

APPENDIX I—OVERVIEW OF SUBTITLE C REGULATIONS

The Agency believes that there are many people who suspect, but are not sure, that their activities are subject to control under the RCRA Subtitle C rules. This appendix is written for these people. It is designed to help those who are unfamiliar with the hazardous waste control program to determine with which, if any, of the regulations they should comply.

Definition of Solid Waste

The first question which such a person should ask himself is: "Is the material I handle a solid waste?" If the answer to this question is "No", then the material is not subject to control under RCRA and, therefore, the person need not worry about whether he should comply with the Subtitle C rules.

Section 261.2 of this chapter provides a definition of "solid waste" which expands the statutory definition of that term given in section 1004(27) of RCRA. This definition is diagrammed in Figure 1 below.

Figure 1 explains that all materials are either: (1) Garbage refuse, or sludge; (2) solid, liquid, semi-solid or contained gaseous material; or (3) something else. No materials in the third category are solid waste. All materials in the first category are solid waste. Materials in the second category are solid waste unless they are one of the five exclusions specified in § 261.4(a).

Definition of Hazardous Waste

If a person has determined that his material is a "solid waste", the next question he should ask is: "Is the solid waste I handle a hazardous waste?"

Hazardous waste is defined in § 261.3 of this chapter. Section 261.3 provides that, in general, a solid waste is a hazardous waste if: (1) It is, or contains, a hazardous waste listed in Subpart D of Part 261 of this chapter, or (2) the waste exhibits any of the characteristics defined in Subpart C of Part 261. However, Parts 260 and 261 also contain provisions which exclude (§§ 261.4(b), 260.20, and 260.22) certain solid wastes from the definition of "hazardous waste", even though they are listed in Subpart D or exhibit one or more of the characteristics defined in Subpart C. Figure 2 depicts the interplay of these special provisions with the definition of "hazardous waste". It presents a series of questions which a person should ask himself concerning his waste. After doing so, the person should be able to determine if the solid waste he handles is a hazardous waste.

Hazardous Waste Regulations

If this is the case, the person should look at Figure 3. Figure 3 depicts the special provisions specified in the final Part 261 rules for hazardous waste which:

1. Is generated by a small quantity generator
2. Is or is intended to be legitimately and beneficially used, re-used, recycled, or reclaimed
3. Is a sludge; is listed in Part 261, Subpart D; or is a mixture containing a waste listed in Part 261, Subpart D.

For each of these Groups, Figure 3 indicates with which Subtitle C regulations (if any) the person handling these wastes must comply. Figure 3 also explains that, if a person handles hazardous waste which is not included in any one of the above three categories, his waste is subject to the Subtitle C regulations diagrammed in Figure 4.

Figure 4 is a flowchart which identifies the three categories of activities regulated under the Subtitle C rules, and the corresponding set of rules with which people in each of these categories must comply. It points out that all people who handle hazardous waste are either: (1) Generators of hazardous waste, (2) transporters of hazardous waste, (3) owners or operators of hazardous waste treatment, storage, or disposal facilities, or (4) a combination of the above. Figure 4 indicates that all of these people must notify EPA of their hazardous waste activities in accordance with the Section 3010 Notification Procedures (see 45 FR 12746 *et seq.*), and obtain an EPA identification number.

It should be noted that people handling wastes listed in Subpart D of Part 261 who have filed, or who intend to file an application to exempt their waste from regulation under the Subtitle C rules, must also comply with the notification requirements of section 3010.

If a person generates hazardous waste, Figure 4 indicates that he must comply with the Part 262 rules. If he transports it, he must comply with the Part 263 rules. The standards in both these Parts are designed to ensure, among other things, proper recordkeeping and reporting, the use of a manifest system to track shipments of hazardous waste, the use of proper labels and containers, and the delivery of the waste to a permitted treatment, storage, or disposal facility.

If a person owns or operates a facility which treats, stores, or disposes of hazardous waste, the standards with which he must comply depend on a number of factors. First of all, if the owner or operator of a *storage* facility is also the person who generates the waste, and the waste is stored at the facility for less than 90 days for subsequent shipment off-site, then the person must comply with § 262.34 of the Part 262 rules.

All other owners or operators of treatment, storage, or disposal facilities must comply with either the Part 264 or the Part 265 rules. To determine with which of these sets of rules an owner or operator must comply, he must find out whether his facility qualifies for interim status. To qualify, the owner or operator must: (1) Have been treating, storing, or disposing of the hazardous waste, or commenced facility construction on or before October 21, 1976, (2) comply with the Section 3010 notification requirements, and (3) apply for a permit under Part 270 of this chapter.

If the owner or operator has done all of the above, he qualifies for interim status, and he must comply with the Part 265 rules. These rules contain administrative requirements, monitoring and closure standards, and an abbreviated set of technical and closure and post-closure cost estimate requirements. The owner or operator must comply with these standards until final administrative disposition of his permit application is made. If a permit is issued to the owner or operator, he must then comply with the permit which will be based on the Part 264 rules.

If the owner or operator has not carried out the above three requirements, he does not qualify for interim status. Until he is issued a permit for his facility, the owner or operator must stop waste management operations (if any) at the facility, and send his hazardous waste (if any) to a facility whose owner or operator has interim status or to a storage facility following the Part 262 rules.

In order to apply for a permit, the owner or operator must comply with the procedures specified in Part 270 of this chapter.

It should be noted that the Agency will be periodically revising the rules depicted in Figures 3 and 4. All persons are encouraged to write to EPA to verify that the regulations which they are reading are up-to-date. To obtain this verification, contact: Solid Waste Information, U.S. Environmental Protection Agency, 26 West St. Clair Street, Cincinnati, Ohio 45268 (513) 684-5362.

FIGURE 1

DEFINITION OF A SOLID WASTE

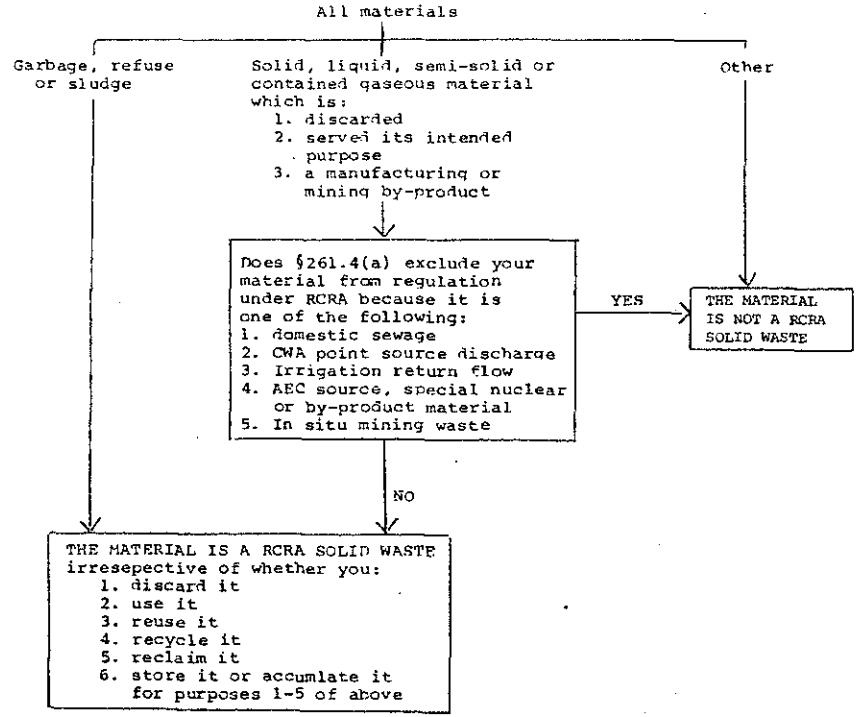


FIGURE 2

DEFINITION OF A HAZARDOUS WASTE

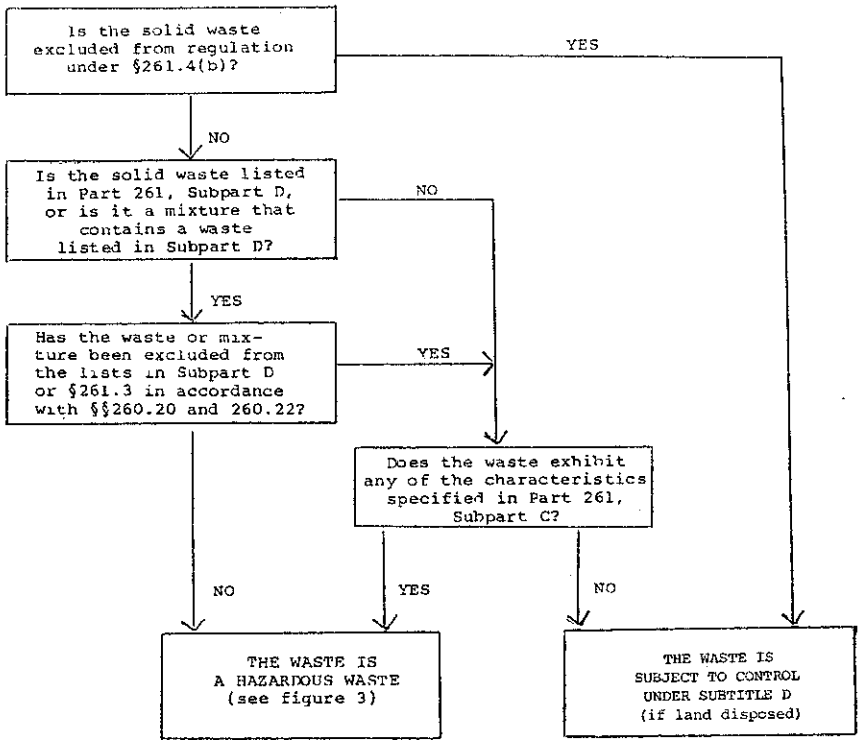
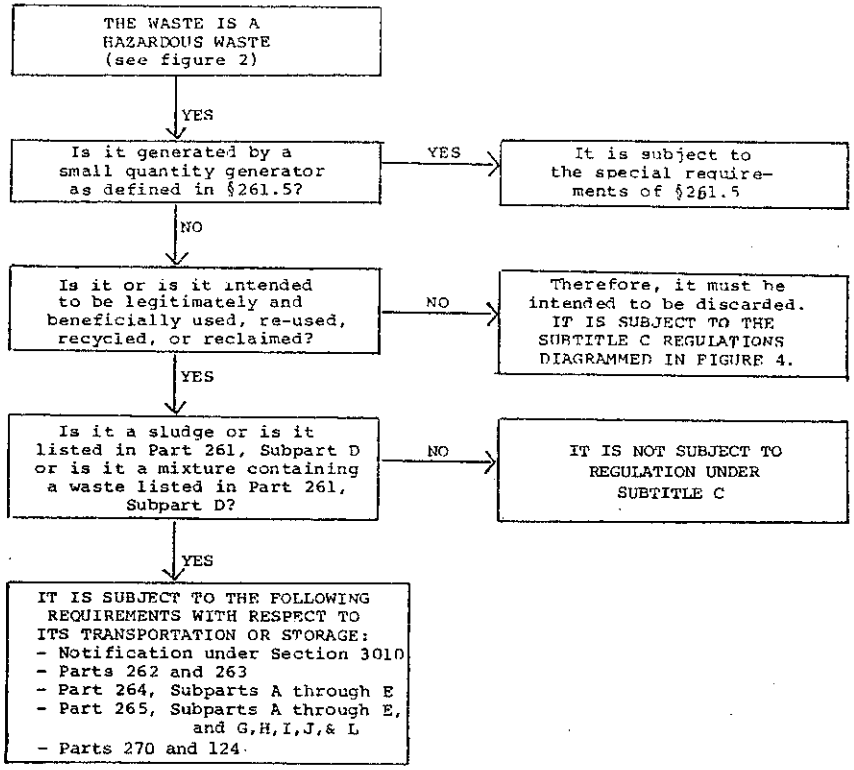


FIGURE 3

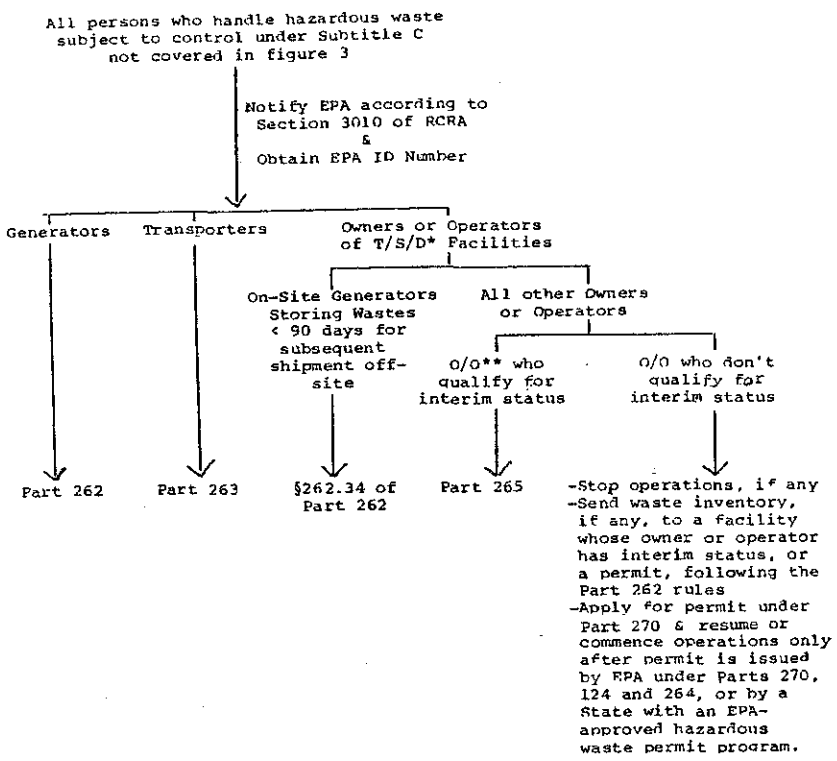
SPECIAL PROVISIONS FOR CERTAIN HAZARDOUS WASTE



33-130 O—84——23

FIGURE 4

REGULATIONS FOR HAZARDOUS WASTE
NOT COVERED IN DIAGRAM 3



* T/S/D stands for Treatment, Storage, or Disposal
** O/O stands for Owners or Operators

[45 FR 33073, May 19, 1980, as amended at 48 FR 14293, Apr. 1, 1983]

PART 261—IDENTIFICATION AND LISTING OF HAZARDOUS WASTE

Subpart A—General

Sec.
261.1 Purpose and scope.
261.2 Definition of solid waste.
261.3 Definition of hazardous waste.
261.4 Exclusions.
261.5 Special requirements for hazardous waste generated by small quantity generators.
261.6 Special requirements for hazardous waste which is used, re-used, recycled or reclaimed.
261.7 Residues of hazardous waste in empty containers.

Subpart B—Criteria for Identifying the Characteristics of Hazardous Waste and for Listing Hazardous Wastes

261.10 Criteria for identifying the characteristics of hazardous waste.
261.11 Criteria for listing hazardous waste.

Subpart C—Characteristics of Hazardous Waste

261.20 General.
261.21 Characteristic of ignitability.
261.22 Characteristic of corrosivity.
261.23 Characteristic of reactivity.
261.24 Characteristic of EP toxicity.

Subpart D—Lists of Hazardous Wastes

261.30 General.
261.31 Hazardous wastes from non-specific sources.
261.32 Hazardous wastes from specific sources.
261.33 Discarded commercial chemical products, off-specification species, container residues, and spill residues thereof.

Appendices

Appendix I—Representative Sampling Methods
Appendix II—EP Toxicity Test Procedures
Appendix III—Chemical Analysis Test Methods
Appendix IV—[Reserved for Radioactive Waste Test Methods]
Appendix V—[Reserved for Infectious Waste Treatment Specifications]
Appendix VI—[Reserved for Etiologic Agents]
Appendix VII—Basis for Listing Hazardous Waste
Appendix VIII—Hazardous Constituents

Authority: Secs. 1006, 2002(a), 3001 and 3002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C. 6905, 6912(a), 6921, and 6922).

Source: 45 FR 33119, May 19, 1980, unless otherwise noted.

Subpart A—General

§ 261.1 Purpose and scope.

(a) This part identifies those solid wastes which are subject to regulation as hazardous wastes under Parts 262 through 265 and Parts 270, 271, and 124 of this chapter and which are subject to the notification requirements of section 3010 of RCRA. In this part:

(1) Subpart A defines the terms "solid waste" and "hazardous waste," identifies those wastes which are excluded from regulation under Parts 262 through 265, 270, 271 and 124 and establishes special management requirements for hazardous waste produced by small quantity generators and hazardous waste which is used, reused, recycled or reclaimed.

(2) Subpart B sets forth the criteria used by EPA to identify characteristics of hazardous waste and to list particular hazardous wastes.

(3) Subpart C identifies characteristics of hazardous waste.

(4) Subpart D lists particular hazardous wastes.

(b) This part identifies only some of the materials which are hazardous wastes under sections 3007 and 7003 of RCRA. A material which is not a hazardous waste identified in this part is still a hazardous waste for purposes of those sections if:

(1) In the case of section 3007, EPA has reason to believe that the material may be a hazardous waste within the meaning of section 1004(5) of RCRA.

(2) In the case of section 7003, the statutory elements are established.

[45 FR 33119, May 19, 1980, as amended at 48 FR 14293, Apr. 1, 1983]

§ 261.2 Definition of solid waste.

(a) A solid waste is any garbage, refuse, sludge or any other waste material which is not excluded under § 261.4(a).

(b) An "other waste material" is any solid, liquid, semi-solid or contained

gaseous material, resulting from industrial, commercial, mining or agricultural operations, or from community activities which:

(1) Is discarded or is being accumulated, stored or physically, chemically or biologically treated prior to being discarded; or

(2) Has served its original intended use and sometimes is discarded; or

(3) Is a manufacuring or mining by-product and sometimes is discarded.

(c) A material is "discarded" if it is abandoned (and not used, re-used, reclaimed or recycled) by being:

(1) Disposed of; or

(2) Burned or incinerated, except where the material is being burned as a fuel for the purpose of recovering usable energy; or

(3) Physically, chemically, or biologically treated (other than burned or incinerated) in lieu of or prior to being disposed of.

(d) A material is "disposed of" if it is discharged, deposited, injected, dumped, spilled, leaked or placed into or on any land or water so that such material or any constituent thereof may enter the environment or be emitted into the air or discharged into ground or surface waters.

(e) A "manufacturing or mining by-product" is a material that is not one of the primary products of a particular manufacturing or mining operation, is a secondary and incidental product of the particular operation and would not be solely and separately manufactured or mined by the particular manufacturing or mining operation. The term does not include an intermediate manufacturing or mining product which results from one of the steps in a manufacturing or mining process and is typically processed through the next step of the process within a short time.

§ 261.3 Definition of hazardous waste.

(a) A solid waste, as defined in § 261.2, is a hazardous waste if:

(1) It is not excluded from regulation as a hazardous waste under § 261.4(b); and

(2) It meets any of the following criteria:

(i) It exhibits any of the characteristics of hazardous waste identified in Subpart C.

(ii) It is listed in Subpart D and has not been excluded from the lists in Subpart D under §§ 260.20 and 260.22 of this chapter.

(iii) It is a mixture of a solid waste and a hazardous waste that is listed in Subpart D solely because it exhibits one or more of the characteristics of hazardous waste identified in Subpart C, unless the resultant mixture no longer exhibits any characteristic of hazardous waste identified in Subpart C.

(iv) It is a mixture of solid waste and one or more hazardous wastes listed in Subpart D and has not been excluded from this paragraph under §§ 260.20 and 260.22 of this chapter; however, the following mixtures of solid wastes and hazardous wastes listed in Subpart D are not hazardous wastes (except by application of paragraph (a)(2) (i) or (ii) of this section) if the generator can demonstrate that the mixture consists of wastewater the discharge of which is subject to regulation under either Section 402 or Section 307(b) of the Clean Water Act (including wastewater at facilities which have eliminated the discharge of wastewater) and:

(A) One or more of the following spent solvents listed in § 261.31—carbon tetrachloride, tetrachloroethylene, trichoroethylene—provided that the maximum total weekly usage of these solvents (other than the amounts that can be demonstrated not to be discharged to wastewater) divided by the average weekly flow of wastewater into the headworks of the facility's wastewater treatment or pre-treatment system does not exceed 1 part per million; or

(B) One or more of the following spent solvents listed in § 261.31—methylene chloride, 1,1,1-trichloroethane, chlorobenzene, o-dichlorobenzene, cresols, cresylic acid, nitrobenzene, toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, spent chlorofluorocarbon solvents—provided that the maximum total weekly usage of these solvents (other than the amounts that can be demonstrated not to be discharged to wastewater) divided by the average weekly flow of wastewater into the headworks of the facility's wastewater treatment or pre-treatment system does not exceed 25 parts per million; or

(C) One of the following wastes listed in § 261.32—heat exchanger bundle cleaning sludge from the petroleum refining industry (EPA Hazardous Waste No. K050); or

(D) A discarded commercial chemical product, or chemical intermediate listed in § 261.33, arising from *de minimis* losses of these materials from manufacturing operations in which these materials are used as raw materials or are produced in the manufacturing process. For purposes of this subparagraph, *"de minimis"* losses include those from normal material handling operations (e.g. spills from the unloading or transfer of materials from bins or other containers, leaks from pipes, valves or other devices used to transfer materials); minor leaks of process equipment, storage tanks or containers; leaks from well-maintained pump packings and seals; sample purgings; relief device discharges; discharges from safety showers and rinsing and cleaning of personal safety equipment; and rinsate from empty containers or from containers that are rendered empty by that rinsing; or

(E) Wastewater resulting from laboratory operations containing toxic (T) wastes listed in Subpart D, provided that the annualized average flow of laboratory wastewater does not exceed one percent of total wastewater flow into the headworks of the facility's wastewater treatment or pre-treatment system, or provided the wastes, combined annualized average concentration does not exceed one part per million in the headworks of the facility's wastewater treatment or pre-treatment facility. Toxic (T) wastes used in laboratories that are demonstrated not to be discharged to wastewater are not to be included in this calculation.

(b) A solid waste which is not excluded from regulation under paragraph (a)(1) of this section becomes a hazardous waste when any of the following events occur:

(1) In the case of a waste listed in Subpart D, when the waste first meets the listing description set forth in Subpart D.

(2) In the case of a mixture of solid waste and one or more listed hazardous wastes, when a hazardous waste listed in Subpart D is first added to the solid waste.

(3) In the case of any other waste (including a waste mixture), when the waste exhibits any of the characteristics identified in Subpart C.

(c) Unless and until it meets the criteria of paragraph (d):

(1) A hazardous waste will remain a hazardous waste.

(2)(i) Except as otherwise provided in paragraph (c)(2)(ii) of this section, any solid waste generated from the treatment, storage, or disposal of a hazardous waste, including any sludge, spill residue, ash, emission control dust or leachate (but not including precipitation run-off) is a hazardous waste.

(ii) The following solid wastes are not hazardous even though they are generated from the treatment, storage, or disposal of a hazardous waste, unless they exhibit one or more of the characteristics of hazardous waste: (A) Waste pickle liquor sludge generated by lime stabilization of spent pickle liquor from the iron and steel industry (SIC codes 331 and 332).

(d) Any solid waste described in paragraph (c) of this section is not a hazardous waste if it meets the following criteria:

(1) In the case of any solid waste, it does not exhibit any of the characteristics of hazardous waste identified in Subpart C.

(2) In the case of a waste which is a listed waste under Subpart D, contains a waste listed under Subpart D or is derived from a waste listed in Subpart D, it also has been excluded from paragraph (c) under §§ 260.20 and 260.22 of this chapter.

[45 FR 33119, May 19, 1980, as amended at 46 FR 56588, Nov. 11, 1981; 49 FR 23287, June 5, 1984]

EFFECTIVE DATE NOTE: At 49 FR 23287, June 5, 1984, § 261.3(c)(2) was revised, effective December 5, 1984. For the convenience of the user, the superseded text is set out below:

§ 261.3 Definition of hazardous waste.

* * * * *

(c) * * *

(2) Any solid waste generated from the treatment, storage or disposal of a hazardous waste, including any sludge, spill residue, ash, emission control dust or leachate (but not including precipitation run-off), is a hazardous waste.

* * * * *

§ 261.4 Exclusions.

(a) *Materials which are not solid wastes.* The following materials are not solid wastes for the purpose of this part:

(1)(i) Domestic sewage; and

(ii) Any mixture of domestic sewage and other wastes that passes through a sewer system to a publicly-owned treatment works for treatment. "Domestic sewage" means untreated sanitary wastes that pass through a sewer system.

(2) Industrial wastewater discharges that are point source discharges subject to regulation under Section 402 of the Clean Water Act, as amended.

[*Comment:* This exclusion applies only to the actual point source discharge. It does not exclude industrial wastewaters while they are being collected, stored or treated before discharge, nor does it exclude sludges that are generated by industrial wastewater treatment.]

(3) Irrigation return flows.

(4) Source, special nuclear or by-product material as defined by the Atomic Energy Act of 1954, as amended, 42 U.S.C. 2011 *et seq.*

(5) Materials subjected to in-situ mining techniques which are not removed from the ground as part of the extraction process.

(b) *Solid wastes which are not hazardous wastes.* The following solid wastes are not hazardous wastes:

(1) Household waste, including household waste that has been collected, transported, stored, treated, disposed, recovered (e.g., refuse-derived fuel) or reused. "Household waste" means any waste material (including garbage, trash and sanitary wastes in septic tanks) derived from households (including single and multiple residences, hotels and motels.)

(2) Solid wastes generated by any of the following and which are returned to the soils as fertilizers:

(i) The growing and harvesting of agricultural crops.

(ii) The raising of animals, including animal manures.

(3) Mining overburden returned to the mine site.

(4) Fly ash waste, bottom ash waste, slag waste, and flue gas emission control waste generated primarily from the combustion of coal or other fossil fuels.

(5) Drilling fluids, produced waters, and other wastes associated with the exploration, development, or production of crude oil, natural gas or geothermal energy.

(6)(i) Wastes which fail the test for the characteristic of EP toxicity because chromium is present or are listed in Subpart D due to the presence of chromium, which do not fail the test for the characteristic of EP toxicity for any other constituent or are not listed due to the presence of any other constituent, and which do not fail the text for any other characteristic, if it is shown by a waste generator or by waste generators that:

(A) The chromium in the waste is exclusively (or nearly exclusively) trivalent chromium; and

(B) The waste is generated from an industrial process which uses trivalent chromium exlcusively (or nearly exclusively) and the process does not generate hexavalent chromium; and

(C) The waste is typically and frequently managed in non-oxidizing environments.

(ii) Specific wastes which meet the standard in paragraphs (b)(6)(i)(A), (B) and (C) (so long as they do not fail the test for the charactristic of EP toxicity, and do not fail the test for any other characteristic) are:

(A) Chrome (blue) trimmings generated by the following subcategories of the leather tanning and finishing industry; hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue; and shearling.

(B) Chrome (blue) shavings generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue; and shearling.

(C) Buffing dust generated by the following subcategories of the leather tanning and finishing industry; hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue.

(D) Sewer screenings generated by the following subcategories of the leather tanning and finishing industry: hair pulp/crome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue; and shearling.

(E) Wastewater treatment sludges generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue; and shearling.

(F) Wastewater treatment sludes generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish; hair save/chrome-tan/retan/wet finish; and through-the-blue.

(G) Waste scrap leather from the leather tanning industry, the shoe manufacturing industry, and other leather product manufacturing industries.

(H) Wastewater treatment ,sludges from the production of TiO_2 pigment using chromium-bearing ores by the chloride process.

(7) Solid waste from the extraction, beneficiation and processing of ores and minerals (including coal), including phosphate rock and overburden from the mining of uranium ore.

(8) Cement kiln dust waste.

(9) Solid waste which consists of discarded wood or wood products which fails the test for the characteristic of EP toxicity and which is not a hazardous waste for any other reason if the waste is generated by persons who utilize the arsenical-treated wood and wood products for these materials' intended end use.

(c) Hazardous wastes which are exempted from certain regulations. A hazardous waste which is generated in a product or raw material storage tank, a product or raw material transport vehicle or vessel, a product or raw material pipeline, or in a manufacturing process unit or an associated non-waste-treatment-manufacturing unit, is not subject to regulation under Parts 262 through 265, 270, 271 and 124 of this chapter or to the notification requirements of Section 3010 of RCRA until it exits the unit in which it was generated, unless the unit is a surface impoundment, or unless the hazardous waste remains in the unit more than 90 days after the unit ceases to be operated for manufacturing, or for storage or transportation of product or raw materials.

(d) *Samples.* (1) Except as provided in paragraph (d)(2) of this section, a sample of solid waste or a sample of water, soil, or air, which is collected for the sole purpose of testing to determine its characteristics or composition, is not subject to any requirements of this part or Parts 262 through 267 or Part 270 or Part 124 of this chapter or to the notification requirements of Section 3010 of RCRA, when:

(i) The sample is being transported to a laboratory for the purpose of testing; or

(ii) The sample is being transported back to the sample collector after testing; or

(iii) The sample is being stored by the sample collector before transport to a laboratory for testing; or

(iv) The sample is being stored in a laboratory before testing; or

(v) The sample is being stored in a laboratory after testing but before it is returned to the sample collector; or

(vi) The sample is being stored temporarily in the laboratory after testing for a specific purpose (for example, until conclusion of a court case or enforcement action where further testing of the sample may be necessary).

(2) In order to qualify for the exemption in paragraphs (d)(1) (i) and (ii) of this section, a sample collector shipping samples to a laboratory and a laboratory returning samples to a sample collector must:

(i) Comply with U.S. Department of Transportation (DOT), U.S. Postal Service (USPS), or any other applicable shipping requirements; or

(ii) Comply with the following requirements if the sample collector determines that DOT, USPS, or other shipping requirements do not apply to the shipment of the sample:

(A) Assure that the following information accompanies the sample:

(*1*) The sample collector's name, mailing address, and telephone number;

(*2*) The laboratory's name, mailing address, and telephone number;

(*3*) The quantity of the sample;

(*4*) The date of shipment; and

(*5*) A description of the sample.

(B) Package the sample so that it does not leak, spill, or vaporize from its packaging.

(3) This exemption does not apply if the laboratory determines that the waste is hazardous but the laboratory is no longer meeting any of the conditions stated in paragraph (d)(1) of this section.

[45 FR 33119, May 19, 1980, as amended at 45 FR 72037, Oct. 30, 1980; 45 FR 76620, Nov. 19, 1980; 45 FR 78531, Nov. 25, 1980; 45 FR 80287, Dec. 4, 1980; 46 FR 27476, May 20, 1981; 46 FR 47429, Sept. 25, 1981; 48 FR 14293, Apr. 1, 1983; 48 FR 30115, June 30, 1983]

§ 261.5 Special requirements for hazardous waste generated by small quantity generators.

(a) A generator is a small quantity generator in a calendar month if he generates less than 1000 kilograms of hazardous waste in that month.

(b) Except for those wastes identified in paragraphs (e) and (f) of this section, a small quantity generator's hazardous wastes are not subject to regulation under Parts 262 through 265 and Parts 270 and 124 of this chapter, and the notification requirements of Section 3010 of RCRA, provided the generator complies with the requirements of paragraph (g) of this section.

(c) Hazardous waste that is beneficially used or re-used or legitimately recycled or reclaimed and that is excluded from regulation by § 261.6(a) is not included in the quantity determinations of this section, and is not subject to any requirements of this section. Hazardous waste that is subject to the special requirements of § 261.6(b) is included in the quantity determinations of this section and is subject to the requirements of this section.

(d) In determining the quantity of hazardous waste he generates, a generator need not include:

(1) His hazardous waste when it is removed from on-site storage; or

(2) Hazardous waste produced by on-site treatment of his hazardous waste.

(e) If a small quantity generator generates acutely hazardous waste in a calendar month in quantities greater than set forth below, all quantities of that acutely hazardous waste are subject to regulation under Parts 262 through 265 and Parts 270 and 124 of this chapter, and the notification requirements of Section 3010 of RCRA:

(1) A total of one kilogram of commercial chemical products and manufacturing chemical intermediates having the generic names listed in § 261.33(e), and off-specification commercial chemical products and manufacturing chemical intermediates which, if they met specifications, would have the generic names listed in § 261.33(e).

(2) A total of 100 kilograms of any residue or contaminated soil, water or other debris resulting from the clean-up of a spill, into or on any land or water, of any commercial chemical products or manufacturing chemical intermediates having the generic names listed in § 261.33(e), or any residue or contaminated soil, water or other debris resulting from the clean-up of a spill, into or on any land or water, of any off-spectification commercial chemical products or manufacturing chemical intermediates which, if they met specifications, would have the generic names listed in § 261.33(e).

(f) A small quantity generator may accumulate hazardous waste on-site. If he accumulates at any time more than a total of 1000 kilograms of his hazardous waste, or his acutely hazardous wastes in quantities greater than set forth in paragraph (e)(1) or (e)(2) of this section, all of those accumulated wastes for which the accumulation limit was exceeded are subject to regulation under Parts 262 through 265 and Parts 270 and 124 of this chapter, and the notification requirements of Section 3010 of RCRA. The time period of § 262.34 for accumulation of wastes on-site begins for a small quantity generator when the accumulated wastes exceed the applicable exclusion level.

(g) In order for hazardous waste generated by a small quantity generator to be excluded from full regulation under this section, the generator must:

(1) Comply with § 262.11 of this chapter;

(2) If he stores his hazardous waste on-site, store it in compliance with the requirements of paragraph (f) of this section; and

(3) Either treat or dispose of his hazardous waste in an on-site facility, or ensure delivery to an off-site storage, treatment or disposal facility, either of which is:

(i) Permitted under Part 270 of this chapter;

(ii) In interim status under Parts 270 and 265 of this chapter;

(iii) Authorized to manage hazardous waste by a State with a hazardous waste management program approved under Part 271 of this chapter;

(iv) Permitted, licensed or registered by a State to manage municipal or industrial solid waste; or

(v) A facility which:

(A) Beneficially uses or re-uses, or legitimately recycles or reclaims his waste; or

(B) Treats his waste prior to beneficial use or re-use, or legitimate recycling or reclamation.

(h) Hazardous waste subject to the reduced requirements of this section may be mixed with non-hazardous waste and remain subject to these reduced requirements even though the resultant mixture exceeds the quantity limitations identified in this section, unless the mixture meets any of the characteristics of hazardous wastes identified in Subpart C.

(i) If a small quantity generator mixes a solid waste with a hazardous waste that exceeds a quantity exclusion level of this section, the mixture is subject to full regulation.

[45 FR 76623, Nov. 19, 1980, as amended at 46 FR 27476, May 20, 1981; 46 FR 34587, July 2, 1981; 48 FR 14294, Apr. 1, 1983]

§ 261.6 Special requirements for hazardous waste which is used, re-used, recycled or reclaimed.

(a) Except as otherwise provided in paragraph (b) of this section, a hazardous waste which meets any of the following criteria is not subject to regulation under Parts 262 through 265 or Parts 270, 271, and 124 of this Chapter and is not subject to the notification requirements of Section 3010 of RCRA until such time as the Administrator promulgates regulations to the contrary:

(1) It is being beneficially used or reused or legitimately recycled or reclaimed.

(2) It is being accumulated, stored or physically, chemically or biologically treated prior to beneficial use or reuse or legitimate recycling or reclamation.

(3) It is one of the following materials being used, reused, recycled or reclaimed in the specified manner:

(i) Spent pickle liquor which is reused in wastewater treatment at a facility holding a National Pollutant Discharge Elimination System (NPDES) permit, or which is being accumulated, stored, or physically, chemically or biologically treated before such reuse.

(b) Except for those wastes listed in paragraph (a)(3) of this section, a hazardous waste that is a sludge, or that is listed in § 261.31 or § 261.32, or that contains one or more hazardous wastes listed in § 261.31 or § 261.32; and that is transported or stored prior to being used, re-used, recycled, or reclaimed is subject to the following requirements with respect to such transporation or storage:

(1) Notification requirements under Section 3010 RCRA.

(2) Part 262 of this chapter.

(3) Part 263 of this chapter.

(4) Applicable provisions of Subparts A through L of Part 264 of this chapter;

(5) Applicable provisions of Subparts A through L of Part 265 of this chapter

(6) Parts 270 and 124 of this chapter, with respect to storage facilities.

[45 FR 33119, May 19, 1980, as amended at 46 FR 44973, Sept. 8, 1981; 48 FR 2532, Jan. 20, 1983; 48 FR 14294, Apr. 1, 1983]

§ 261.7 Residues of hazardous waste in empty containers.

(a)(1) Any hazardous waste remaining in either (i) an empty container or (ii) an inner liner removed from an empty container, as defined in paragraph (b) of this section, is not subject to regulation under Parts 261 through 265, or Part 270 or 124 of this chapter or to the notification requirements of Section 3010 of RCRA.

(2) Any hazardous waste in either (i) a container that is not empty or (ii) an inner liner removed from a container that is not empty, as defined in paragraph (b) of this section, is subject to regulation under Parts 261 through 265, and Parts 270 and 124 of this chapter and to the notification requirements of Section 3010 of RCRA.

(b)(1) A container or an inner liner removed from a container that has held any hazardous waste, except a waste that is a compressed gas or that is identified in § 261.33(c) of this chapter, is empty if:

(i) All wastes have been removed that can be removed using the practices commonly employed to remove materials from that type of container, *e.g.*, pouring, pumping, and aspirating, *and*

(ii) No more than 2.5 centimeters (one inch) of residue remain on the bottom of the container or inner liner, *or*

(iii)(A) No more than 3 percent by weight of the total capacity of the container remains in the container or inner liner if the container is less than or equal to 110 gallons in size, or

(B) No more than 0.3 percent by weight of the total capacity of the container remains in the container or inner liner if the container is greater than 110 gallons in size.

(2) A container that has held a hazardous waste that is a compressed gas is empty when the pressure in the container approaches atmospheric.

(3) A container or an inner liner removed from a container that has held a hazardous waste identified in § 261.33(c) of this chapter is empty if:

(i) the container or inner liner has been triple rinsed using a solvent capable of removing the commercial chemical product or manufacturing chemical intermediate;

(ii) the container or inner liner has been cleaned by another method that has been shown in the scientific literature, or by tests conducted by the generator, to achieve equivalent removal; or

(iii) in the case of a container, the inner liner that prevented contact of the commercial chemical product or manufacturing chemical intermediate with the container, has been removed.

[45 FR 78529, Nov. 25, 1980, as amended at 47 FR 36097, Aug. 18, 1982; 48 FR 14294, Apr. 1, 1983]

Subpart B—Criteria for Identifying the Characteristics of Hazardous Waste and for Listing Hazardous Waste

§ 261.10 Criteria for identifying the characteristics of hazardous waste.

(a) The Administrator shall identify and define a characteristic of hazardous waste in Subpart C only upon determining that:

(1) A solid waste that exhibits the characteristic may:

(i) Cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or

(ii) Pose a substantial present or potential hazard to human health or the environment when it is improperly treated, stored, transported, disposed of or otherwise managed; and

(2) The characteristic can be:

(i) Measured by an available standardized test method which is reasonably within the capability of generators of solid waste or private sector laboratories that are available to serve generators of solid waste; or

(ii) Reasonably detected by generators of solid waste through their knowledge of their waste.

§ 261.11 Criteria for listing hazardous waste.

(a) The Administrator shall list a solid waste as a hazardous waste only upon determining that the solid waste meets one of the following criteria:

(1) It exhibits any of the characteristics of hazardous waste identified in Subpart C.

(2) It has been found to be fatal to humans in low doses or, in the absence of data on human toxicity, it has been shown in studies to have an oral LD 50 toxicity (rat) of less than 50 milligrams per kilogram, an inhalation LC 50 toxicity (rat) of less than 2 milligrams per liter, or a dermal LD 50 toxicity (rabbit) of less than 200 milligrams per kilogram or is otherwise capable of causing or significantly contributing to an increase in serious irreversible, or incapacitating reversible, illness. (Waste listed in accordance with these criteria will be designated Acute Hazardous Waste.)

(3) It contains any of the toxic constituents listed in Appendix VIII unless, after considering any of the following factors, the Administrator concludes that the waste is not capable of posing a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported or disposed of, or otherwise managed:

(i) The nature of the toxicity presented by the constituent.

(ii) The concentration of the constituent in the waste.

(iii) The potential of the constituent or any toxic degradation product of the constituent to migrate from the waste into the environment under the types of improper management considered in paragraph (a)(3)(vii) of this section.

(iv) The persistence of the constituent or any toxic degradation product of the constituent.

(v) The potential for the constituent or any toxic degradation product of the constituent to degrade into nonharmful constituents and the rate of degradation.

(vi) The degree to which the constituent or any degradation product of the constituent bioaccumulates in ecosystems.

(vii) The plausible types of improper management to which the waste could be subjected.

(viii) The quantities of the waste generated at individual generation sites or on a regional or national basis.

(ix) The nature and severity of the human health and environmental damage that has occurred as a result of the improper management of wastes containing the constituent.

(x) Action taken by other governmental agencies or regulatory programs based on the health or environmental hazard posed by the waste or waste constituent.

(xi) Such other factors as may be appropriate.

Substances will be listed on Appendix VIII only if they have been shown in scientific studies to have toxic, carcinogenic, mutagenic or teratogenic effects on humans or other life forms.

(Wastes listed in accordance with these criteria will be designated Toxic wastes.)

(b) The Administrator may list classes or types of solid waste as hazardous waste if he has reason to believe that individual wastes, within the class or type of waste, typically or frequently are hazardous under the definition of hazardous waste found in Section 1004(5) of the Act.

(c) The Administrator will use the criteria for listing specified in this section to establish the exclusion limits referred to in § 261.5(c).

Subpart C—Characteristics of Hazardous Waste

§ 261.20 General.

(a) A solid waste, as defined in § 261.2, which is not excluded from regulation as a hazardous waste under § 261.4(b), is a hazardous waste if it exhibits any of the characteristics identified in this Subpart.

[*Comment*: § 262.11 of this chapter sets forth the generator's responsibility to determine whether his waste exhibits one or more of the characteristics identified in this Subpart.]

(b) A hazardous waste which is identified by a characteristic in this subpart, but is not listed as a hazardous

waste in Subpart D, is assigned the EPA Hazardous Waste Number set forth in the respective characteristic in this Subpart. This number must be used in complying with the notification requirements of Section 3010 of the Act and certain recordkeeping and reporting requirements under Parts 262 through 265 and Part 270 of this chapter.

(c) For purposes of this Subpart, the Administrator will consider a sample obtained using any of the applicable sampling methods specified in Appendix I to be a representative sample within the meaning of Part 260 of this chapter.

[*Comment*: Since the Appendix I sampling methods are not being formally adopted by the Administrator, a person who desires to employ an alternative sampling method is not required to demonstrate the equivalency of his method under the procedures set forth in §§ 260.20 and 260.21.]

[45 FR 33119, May 19, 1980, as amended at 48 FR 14294, Apr. 1, 1983]

§ 261.21 Characteristic of ignitability.

(a) A solid waste exhibits the characteristic of ignitability if a representative sample of the waste has any of the following properties:

(1) It is a liquid, other than an aqueous solution containing less than 24 percent alcohol by volume and has flash point less than 60°C (140°F), as determined by a Pensky-Martens Closed Cup Tester, using the test method specified in ASTM Standard D-93-79 or D-93-80 (incorporated by reference, see § 260.11), or a Setaflash Closed Cup Tester, using the test method specified in ASTM Standard D-3278-78 (incorporated by reference, see § 260.11), or as determined by an equivalent test method approved by the Administrator under procedures set forth in §§ 260.20 and 260.21.

(2) It is not a liquid and is capable, under standard temperature and pressure, of causing fire through friction, absorption of moisture or spontaneous chemical changes and, when ignited, burns so vigorously and persistently that is creates a hazard.

(3) It is an ignitable compressed gas as defined in 49 CFR 173.300 and as determined by the test methods described in that regulation or equivalent test methods approved by the Administrator under §§ 260.20 and 260.21.

(4) It is an oxidizer as defined in 49 CFR 173.151.

(b) A solid waste that exhibits the characteristic of ignitability, but is not listed as a hazardous waste in Subpart D, has the EPA Hazardous Waste Number of D001.

[45 FR 33119, May 19, 1980, as amended at 46 FR 35247, July 7, 1981]

§ 261.22 Characteristic of corrosivity.

(a) A solid waste exhibits the characteristic of corrosivity if a representative sample of the waste has either of the following properties:

(1) It is aqueous and has a pH less than or equal to 2 or greater than or equal to 12.5, as determined by a pH meter using either an EPA test method or an equivalent test method approved by the Administrator under the procedures set forth in §§ 260.20 and 260.21. The EPA test method for pH is specified as Method 5.2 in "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods" (incorporated by reference, see § 260.11).

(2) It is a liquid and corrodes steel (SAE 1020) at a rate greater than 6.35 mm (0.250 inch) per year at a test temperature of 55°C (130°F) as determined by the test method specified in NACE (National Association of Corrosion Engineers) Standard TM-01-69 as standardized in "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods" (incorporated by reference, see § 260.11) or an equivalent test method approved by the Administrator under the procedures set forth in §§ 260.20 and 260.21.

(b) A solid waste that exhibits the characteristic of corrosivity, but is not listed as a hazardous waste in Subpart D, has the EPA Hazardous Waste Number of D002.

[45 FR 33119, May 19, 1980, as amended at 46 FR 35247, July 7, 1981]

§ 261.23 Characteristic of reactivity.

(a) A solid waste exhibits the characteristic of reactivity if a representative sample of the waste has *any* of the following properties:

(1) It is normally unstable and readily undergoes violent change without detonating.

(2) It reacts violently with water.

(3) It forms potentially explosive mixtures with water.

(4) When mixed with water, it generates toxic gases, vapors or fumes in a quantity sufficient to present a danger to human health or the environment.

(5) It is a cyanide or sulfide bearing waste which, when exposed to pH conditions between 2 and 12.5, can generate toxic gases, vapors or fumes in a quantity sufficient to present a danger to human health or the environment.

(6) It is capable of detonation or explosive reaction if it is subjected to a strong initiating source or if heated under confinement.

(7) It is readily capable of detonation or explosive decomposition or reaction at standard temperature and pressure.

(8) It is a forbidden explosive as defined in 49 CFR 173.51, or a Class A explosive as defined in 49 CFR 173.53 or a Class B explosive as defined in 49 CFR 173.88.

(b) A solid waste that exhibits the characteristic of reactivity, but is not listed as a hazardous waste in Subpart D, has the EPA Hazardous Waste Number of D003.

§ 261.24 Characteristic of EP toxicity.

(a) A solid waste exhibits the characteristic of EP toxicity if, using the test methods described in Appendix II or equivalent methods approved by the Administrator under the procedures set forth in §§ 260.20 and 260.21, the extract from a representative sample of the waste contains any of the contaminants listed in Table I at a concentration equal to or greater than the respective value given in that Table. Where the waste contains less than 0.5 percent filterable solids, the waste itself, after filtering, is considered to be the extract for the purposes of this section.

(b) A solid waste that exhibits the characteristic of EP toxicity, but is not listed as a hazardous waste in Subpart D, has the EPA Hazardous Waste Number specified in Table I which corresponds to the toxic contaminant causing it to be hazardous.

TABLE I—MAXIMUM CONCENTRATION OF CONTAMINANTS FOR CHARACTERISTIC OF EP TOXICITY

EPA hazardous waste number	Contaminant	Maximum concentration (milligrams per liter)
D004	Arsenic	5.0
D005	Barium	100.0
D006	Cadmium	1.0
D007	Chromium	5.0
D008	Lead	5.0
D009	Mercury	0.2
D010	Selenium	1.0
D011	Silver	5.0
D012	Endrin (1,2,3,4,10,10-hexachloro-1,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-1,4-endo, endo-5,8-dimethano-naphthalene.	0.02
D013	Lindane (1,2,3,4,5,6-hexa- chlorocyclohexane, gamma isomer.	0.4
D014	Methoxychlor (1,1,1-Trichloro-2,2-bis (p-methoxyphenyl)ethane).	10.0
D015	Toxaphone ($C_{10}H_{10}Cl_8$, Technical chlorinated camphene, 67-69 percent chlorine).	0.5
D016	2,4-D, (2,4-Dichlorophenoxyacetic acid).	10.0
D017	2,4,5-TP Silvex (2,4,5-Trichlorophenoxypropionic acid).	1.0

Subpart D—Lists of Hazardous Wastes

§ 261.30 General.

(a) A solid waste is a hazardous waste if it is listed in this subpart, unless it has been excluded from this list under §§ 260.20 and 260.22.

(b) The Administrator will indicate his basis for listing the classes or types of wastes listed in this Subpart by employing one or more of the following Hazard Codes:

Ignitable Waste	(I)
Corrosive Waste	(C)
Reactive Waste	(R)
EP Toxic Waste	(E)
Acute Hazardous Waste	(H)
Toxic Waste	(T)

Appendix VII identifies the constituent which caused the Administrator to list the waste as an EP Toxic Waste (E) or Toxic Waste (T) in §§ 261.31 and 261.32.

(c) Each hazardous waste listed in this subpart is assigned an EPA Haz-

ardous Waste Number which precedes the name of the waste. This number must be used in complying with the notification requirements of Section 3010 of the Act and certain record-keeping and reporting requirements under Parts 262 through 265 and Part 270 of this chapter.

(d) The following hazardous wastes listed in § 261.31 or § 261.32 are subject to the exclusion limits for acutely hazardous wastes established in § 261.5: [Reserved]

[45 FR 33119, May 19, 1980, as amended at 45 FR 74892, Nov. 12, 1980; 48 FR 14294, Apr. 1, 1983]

§ 261.31 Hazardous wastes from non-specific sources.

Industry and EPA hazardous waste No.	Hazardous waste	Hazard code
Generic:		
F001	The following spent halogenated solvents used in degreasing: tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1-trichloroethane, carbon tetrachloride, and chlorinated fluorocarbons; and sludges from the recovery of these solvents in degreasing operations.	(T)
F002	The following spent halogenated solvents: tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, chlorobenzene, 1,1,2-trichloro-1,2,2-trifluoroethane, ortho-dichlorobenzene, and trichlorofluoromethane; and the still bottoms from the recovery of these solvents.	(T)
F003	The following spent non-halogenated solvents: xylene, acetone, ethyl acetate, ethyl benzene, ethyl ether, methyl isobutyl ketone, n-butyl alcohol, cyclohexanone, and methanol; and the still bottoms from the recovery of these solvents.	(I)
F004	The following spent non-halogenated solvents: cresols and cresylic acid, and nitrobenzene; and the still bottoms from the recovery of these solvents.	(T)
F005	The following spent non-halogenated solvents: toluene, methyl ethyl ketone, carbon disulfide, isobutanol, and pyridine; and the still bottoms from the recovery of these solvents.	(I, T)
F006	Wastewater treatment sludges from electroplating operations except from the following processes: (1) sulfuric acid anodizing of aluminum; (2) tin plating on carbon steel; (3) zinc plating (segregated basis) on carbon steel; (4) aluminum or zinc-aluminum plating on carbon steel; (5) cleaning/stripping associated with tin, zinc and aluminum plating on carbon steel; and (6) chemical etching and milling of aluminum.	(T)
F019	Wastewater treatment sludges from the chemical conversion coating of aluminum	(T)
F007	Spent cyanide plating bath solutions from electroplating operations (except for precious metals electroplating spent cyanide plating bath solutions).	(R, T)
F008	Plating bath sludges from the bottom of plating baths from electroplating operations where cyanides are used in the process (except for precious metals electroplating plating bath sludges).	(R, T)
F009	Spent stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process (except for precious metals electroplating spent stripping and cleaning bath solutions).	(R, T)
F010	Quenching bath sludge from oil baths from metal heat treating operations where cyanides are used in the process (except for precious metals heat-treating quenching bath sludges).	(R, T)
F011	Spent cyanide solutions from salt bath pot cleaning from metal heat treating operations (except for precious metals heat treating spent cyanide solutions from salt bath pot cleaning).	(R, T)
F012	Quenching wastewater treatment sludges from metal heat treating operations where cyanides are used in the process (except for precious metals heat treating quenching wastewater treatment sludges).	(T)
F024	Wastes, including but not limited to, distillation residues, heavy ends, tars, and reactor clean-out wastes from the production of chlorinated aliphatic hydrocarbons, having carbon content from one to five, utilizing free radical catalyzed processes. [This listing does not include light ends, spent filters and filter aids, spent dessicants, wastewater, wastewater treatment sludges, spent catalysts, and wastes listed in § 261.32.]	(T)

[46 FR 4617, Jan. 16, 1981, as amended at 46 FR 27477, May 20, 1981; 49 FR 5312, Feb. 10, 1984]

EFFECTIVE DATE NOTE: At 49 FR 5312, Feb. 10, 1984, the waste stream identified by EPA hazardous waste no. F024 was added to the table in § 261.31, effective August 10, 1984.

§ 261.32 Hazardous wastes from specific sources.

Industry and EPA hazardous waste No	Hazardous waste	Hazard code
Wood preservation: K001	Bottom sediment sludge from the treatment of wastewaters from wood preserving processes that use creosote and/or pentachlorophenol.	(T)
Inorganic pigments:		
K002	Wastewater treatment sludge from the production of chrome yellow and orange pigments.	(T)
K003	Wastewater treatment sludge from the production of molybdate orange pigments	(T)
K004	Wastewater treatment sludge from the production of zinc yellow pigments	(T)
K005	Wastewater treatment sludge from the production of chrome green pigments	(T)
K006	Wastewater treatment sludge from the production of chrome oxide green pigments (anhydrous and hydrated).	(T)
K007	Wastewater treatment sludge from the production of iron blue pigments	(T)
K008	Oven residue from the production of chrome oxide green pigments	(T)
Organic chemicals:		
K009	Distillation bottoms from the production of acetaldehyde from ethylene	(T)
K010	Distillation side cuts from the production of acetaldehyde from ethylene	(T)
K011	Bottom stream from the wastewater stripper in the production of acrylonitrile	(R, T)
K013	Bottom stream from the acetonitrile column in the production of acrylonitrile	(R, T)
K014	Bottoms from the acetonitrile purification column in the production of acrylonitrile	(T)
K015	Still bottoms from the distillation of benzyl chloride	(T)
K016	Heavy ends or distillation residues from the production of carbon tetrachloride	(T)
K017	Heavy ends (still bottoms) from the purification column in the production of epichlorohydrin.	(T)
K018	Heavy ends from the fractionation column in ethyl chloride production	(T)
K019	Heavy ends from the distillation of ethylene dichloride in ethylene dichloride production.	(T)
K020	Heavy ends from the distillation of vinyl chloride in vinyl chloride monomer production.	(T)
K021	Aqueous spent antimony catalyst waste from fluoromethanes production	(T)
K022	Distillation bottom tars from the production of phenol/acetone from cumene	(T)
K023	Distillation light ends from the production of phthalic anhydride from naphthalene	(T)
K024	Distillation bottoms from the production of phthalic anhydride from naphthalene	(T)
K093	Distillation light ends from the production of phthalic anhydride from ortho-xylene	(T)
K094	Distillation bottoms from the production of phthalic anhydride from ortho-xylene	(T)
K025	Distillation bottoms from the production of nitrobenzene by the nitration of benzene	(T)
K026	Stripping still tails from the production of methy ethyl pyridines	(T)
K027	Centrifuge and distillation residues from toluene diisocyanate production	(R, T)
K028	Spent catalyst from the hydrochlorinator reactor in the production of 1,1,1-trichloroethane.	(T)
K029	Waste from the product steam stripper in the production of 1,1,1-trichloroethane	(T)
K095	Distillation bottoms from the production of 1,1,1-trichloroethane	(T)
K096	Heavy ends from the heavy ends column from the production of 1,1,1-trichloroethane.	(T)
K030	Column bottoms or heavy ends from the combined production of trichloroethylene and perchloroethylene.	(T)
K083	Distillation bottoms from aniline production	(T)
K103	Process residues from aniline extraction from the production of aniline	(T)
K104	Combined wastewater streams generated from nitrobenzene/aniline production	(T)
K085	Distillation or fractionation column bottoms from the production of chlorobenzenes	(T)
K105	Separated aqueous stream from the reactor product washing step in the production of chlorobenzenes.	(T)
Inorganic chemicals:		
K071	Brine purification muds from the mercury cell process in chlorine production, where separately prepurified brine is not used.	(T)
K073	Chlorinated hydrocarbon waste from the purification step of the diaphragm cell process using graphite anodes in chlorine production	(T)
K106	Wastewater treatment sludge from the mercury cell process in chlorine production	(T)
Pesticides:		
K031	By-product salts generated in the production of MSMA and cacodylic acid	(T)
K032	Wastewater treatment sludge from the production of chlordane	(T)
K033	Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane.	(T)
K034	Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane.	(T)
K097	Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane.	(T)
K035	Wastewater treatment sludges generated in the production of creosote	(T)
K036	Still bottoms from toluene reclamation distillation in the production of disulfoton	(T)
K037	Wastewater treatment sludges from the production of disulfoton	(T)
K038	Wastewater from the washing and stripping of phorate production	(T)

Industry and EPA hazardous waste No.	Hazardous waste	Hazard code
K039	Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate.	(T)
K040	Wastewater treatment sludge from the production of phorate	(T)
K041	Wastewater treatment sludge from the production of toxaphene	(T)
K098	Untreated process wastewater from the production of toxaphene	(T)
K042	Heavy ends or distillation residues from the distillation of tetrachlorobenzene in the production of 2,4,5-T.	(T)
K043	2,6-Dichlorophenol waste from the production of 2,4-D	(T)
K099	Untreated wastewater from the production of 2,4-D	(T)
Explosives:		
K044	Wastewater treatment sludges from the manufacturing and processing of explosives	(R)
K045	Spent carbon from the treatment of wastewater containing explosives	(R)
K046	Wastewater treatment sludges from the manufacturing, formulation and loading of lead-based initiating compounds.	(T)
K047	Pink/red water from TNT operations	(R)
Petroleum refining:		
K048	Dissolved air flotation (DAF) float from the petroleum refining industry	(T)
K049	Slop oil emulsion solids from the petroleum refining industry	(T)
K050	Heat exchanger bundle cleaning sludge from the petroleum refining industry	(T)
K051	API separator sludge from the petroleum refining industry	(T)
K052	Tank bottoms (leaded) from the petroleum refining industry	(T)
Iron and steel:		
K061	Emission control dust/sludge from the primary production of steel in electric furnaces.	(T)
K062	Spent pickle liquor from steel finishing operations	(C, T)
Secondary lead:		
K069	Emission control dust/sludge from secondary lead smelting	(T)
K100	Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting.	(T)
Veterinary pharmaceuticals:		
K084	Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.	(T)
K101	Distillation tar residues from the distillation of aniline-based compounds in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.	(T)
K102	Residue from the use of activated carbon for decolorization in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.	(T)
Ink formulation: K086	Solvent washes and sludges, caustic washes and sludges, or water washes and sludges from cleaning tubs and equipment used in the formulation of ink from pigments, driers, soaps, and stabilizers containing chromium and lead.	(T)
Coking:		
K060	Ammonia still lime sludge from coking operations	(T)
K087	Decanter tank tar sludge from coking operations	(T)

[46 FR 4618, Jan. 16, 1981, as amended at 46 FR 27476-27477, May 20, 1981]

§ 261.33 Discarded commercial chemical products, off-specification species, container residues, and spill residues thereof.

The following materials or items are hazardous wastes if and when they are discarded or intended to be discarded:

(a) Any commercial chemical product, or manufacturing chemical intermediate having the generic name listed in paragraph (e) or (f) of this section.

(b) Any off-specification commercial chemical product or manufacturing chemical intermediate which, if it met specifications, would have the generic name listed in paragraph (e) or (f) of this section.

(c) Any container or inner liner removed from a container that has been used to hold any commercial chemical product or manufacturing chemical intermediate having the generic names listed in paragraph (e) of this section, or any container or inner liner removed from a container that has been used to hold any off-specification chemical product and manufacturing chemical intermediate which, if it met specifications, would have the generic name listed in paragraph (e) of this section, unless the container is empty as defined in § 261.7(b)(3) of this chapter.

[*Comment:* Unless the residue is being beneficially used or reused, or legitimately recycled or reclaimed; or being accumulated, stored, transported or treated prior to such use, re-use, recycling or reclamation, EPA considers the residue to be intended for discard, and thus a hazardous waste. An example of a legitimate re-use of the residue would be where the residue remains in the container and the container is used to hold the same commerical chemical product or manufacturing chemical product or manufacturing chemical intermediate it previously held. An example of the discard of the residue would be where the drum is sent to a drum reconditioner who reconditions the drum but discards the residue.]

(d) Any residue or contaminated soil, water or other debris resulting from the cleanup of a spill into or on any land or water of any commercial chemical product or manufacturing chemical intermediate having the generic name listed in paragraph (e) or (f) of this section, or any residue or contaminated soil, water or other debris resulting from the cleanup of a spill, into or on any land or water, of any off-specification chemical product and manufacturing chemical intermediate which, if it met specifications, would have the generic name listed in paragraph (e) or (f) of this section.

[*Comment:* The phrase "commercial chemical product or manufacturing chemical intermediate having the generic name listed in . . ." refers to a chemical substance which is manufactured or formulated for commercial or manufacturing use which consists of the commercially pure grade of the chemical, any technical grades of the chemical that are produced or marketed, and all formulations in which the chemical is the sole active ingredient. It does not refer to a material, such as a manufacturing process waste, that contains any of the substances listed in paragraphs (e) or (f). Where a manufacturing process waste is deemed to be a hazardous waste because it contains a substance listed in paragraphs (e) or (f), such waste will be listed in either §§ 261.31 or 261.32 or will be identified as a hazardous waste by the characteristics set forth in Subpart C of this part.]

(e) The commercial chemical products, manufacturing chemical intermediates or off-specification commercial chemical products or manufacturing chemical intermediates referred to in paragraphs (a) through (d) of this section, are identified as acute hazardous wastes (H) and are subject to be the small quantity exclusion defined in § 261.5(e).

[*Comment:* For the convenience of the regulated community the primary hazardous properties of these materials have been indicated by the letters T (Toxicity), and R (Reactivity). Absence of a letter indicates that the compound only is listed for acute toxicity.]

These wastes and their corresponding EPA Hazardous Waste Numbers are:

Hazardous waste No.	Substance
P023	Acetaldehyde, chloro-
P002	Acetamide, N-(aminothioxomethyl)-
P057	Acetamide, 2-fluoro-
P058	Acetic acid, fluoro-, sodium salt
P066	Acetimidic acid, N-[(methylcarbamoyl)oxy]thio-, methyl ester
P001	3-(alpha-Acetonylbenzyl)-4-hydroxycoumarin and salts, when present at concentrations greater than 0.3%
P002	1-Acetyl-2-thiourea
P003	Acrolein
P070	Aldicarb
P004	Aldrin
P005	Allyl alcohol
P006	Aluminum phosphide
P007	5-(Aminomethyl)-3-isoxazolol
P008	4-aAminopyridine
P009	Ammonium picrate (R)
P119	Ammonium vanadate
P010	Arsenic acid
P012	Arsenic (III) oxide
P011	Arsenic (V) oxide
P011	Arsenic pentoxide
P012	Arsenic trioxide
P038	Arsine, diethyl-
P054	Aziridine
P013	Barium cyanide
P024	Benzenamine, 4-chloro-
P077	Benzenamine, 4-nitro-
P028	Benzene, (chloromethyl)-
P042	1,2-Benzenediol, 4-[1-hydroxy-2-(methylamino)ethyl]-
P014	Benzenethiol
P028	Benzyl chloride
P015	Beryllium dust
P016	Bis(chloromethyl) ether
P017	Bromoacetone
P018	Brucine
P021	Calcium cyanide
P123	Camphene, octachloro-
P103	Carbamimidoselenoic acid
P022	Carbon bisulfide
P022	Carbon disulfide
P095	Carbonyl chloride
P033	Chlorine cyanide
P023	Chloroacetaldehyde
P024	p-Chloroaniline
P026	1-(o-Chlorophenyl)thiourea
P027	3-Chloropropionitrile
P029	Copper cyanides
P030	Cyanides (soluble cyanide salts), not elsewhere specified
P031	Cyanogen
P033	Cyanogen chloride
P036	Dichlorophenylarsine
P037	Dieldrin
P038	Diethylarsine

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Hazardous waste No.	Substance
P039	O,O Diethyl S-[2-(ethylthio)ethyl] phosphorodithioate
P041	Diethyl-p-nitrophenyl phosphate
P040	O,O-Diethyl O-pyrazinyl phosphorothioate
P043	Diisopropyl fluorophosphate
P044	Dimethoate
P045	3,3-Dimethyl-1-(methylthio)-2-butanone, O-[(methylamino)carbonyl] oxime
P071	O,O-Dimethyl O-p-nitrophenyl phosphorothioate
P082	Dimethylnitrosamine
P046	alpha, alpha-Dimethylphenethylamine
P047	4,6-Dinitro-o-cresol and salts
P034	4,6-Dinitro-o-cyclohexylphenol
P048	2,4-Dinitrophenol
P020	Dinoseb
P085	Diphosphoramide, octamethyl-
P039	Disulfoton
P049	2,4-Dithiobiuret
P109	Dithiopyrophosphoric acid, tetraethyl ester
P050	Endosulfan
P088	Endothall
P051	Endrin
P042	Epinephrine
P046	Ethanamine, 1,1-dimethyl-2-phenyl-
P084	Ethenamine, N-methyl-N-nitroso-
P101	Ethyl cyanide
P054	Ethyleneimine
P097	Famphur
P056	Fluorine
P057	Fluoroacetamide
P058	Fluoroacetic acid, sodium salt
P065	Fulminic acid, mercury(II) salt (R,T)
P059	Heptachlor
P051	1,2,3,4,10,10-Hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-endo,endo-1,4:5,8-dimethanonaphthalene
P037	1,2,3,4,10,10-Hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-endo,exo-1,4:5,8-dimethanonaphthalene
P060	1,2,3,4,10,10-Hexachloro-1,4,4a,5,8,8a-hexahydro-1,4:5,8-endo, endo-dimethanonaphthalene
P004	1,2,3,4,10,10-Hexachloro-1,4,4a,5,8,8a-hexahydro-1,4:5,8-endo,exo-dimethanonaphthalene
P060	Hexachlorohexahydro-exo,exo-dimethanonaphthalene
P062	Hexaethyl tetraphosphate
P116	Hydrazinecarbothic_mide
P068	Hydrazine, methyl-
P063	Hydrocyanic acid
P063	Hydrogen cyanide
P096	Hydrogen phosphide
P064	Isocyanic acid, methyl ester
P007	3(2H)-Isoxazolone, 5-(aminomethyl)-
P092	Mercury, (acetato-O)phenyl-
P065	Mercury fulminate (R,T)
P016	Methane, oxybis[chloro-
P112	Methane, tetranitro- (R)
P118	Methanethiol, trichloro-
P059	4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-
P066	Methomyl
P067	2-Methylaziridine
P068	Methyl hydrazine
P064	Methyl isocyanate
P069	2-Methyllactonitrile
P071	Methyl parathion
P072	alpha-Naphthylthiourea
P073	Nickel carbonyl
P074	Nickel cyanide
P074	Nickel(II) cyanide
P073	Nickel tetracarbonyl
P075	Nicotine and salts
P076	Nitric oxide
P077	p-Nitroaniline
P078	Nitrogen dioxide
P076	Nitrogen(II) oxide
P078	Nitrogen(IV) oxide
P081	Nitroglycerine (R)
P082	N-Nitrosodimethylamine
P084	N-Nitrosomethylvinylamine
P050	5-Norbornene-2,3-dimethanol, 1,4,5,6,7,7-hexachloro, cyclic sulfite
P085	Octamethylpyrophosphoramide
P087	Osmium oxide
P087	Osmium tetroxide
P088	7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid
P089	Parathion
P034	Phenol, 2-cyclohexyl-4,6-dinitro-
P048	Phenol, 2,4-dinitro-
P047	Phenol, 2,4-dinitro-6-methyl-
P020	Phenol, 2,4-dinitro-6-(1-methylpropyl)-
P009	Phenol, 2,4,6-trinitro-, ammonium salt (R)
P036	Phenyl dichloroarsine
P092	Phenylmercuric acetate
P093	N-Phenylthiourea
P094	Phorate
P095	Phosgene
P096	Phosphine
P041	Phosphoric acid, diethyl p-nitrophenyl ester
P044	Phosphorodithioic acid, O,O-dimethyl S-[2-(methylamino)-2-oxoethyl]ester
P043	Phosphorofluoric acid, bis(1-methylethyl)-ester
P094	Phosphorothioic acid, O,O-diethyl S-(ethylthio)methyl ester
P089	Phosphorothioci acid, O,O-diethyl O-(p-nitrophenyl) ester
P040	Phosphorothioic acid, O,O-diethyl O- pyrazinyl ester
P097	Phosphorothioic acid, O,O-dimethyl O-[p-((dimethylamino)-sulfonyl)phenyl]ester
P110	Plumbane, tetraethyl-
P098	Potassium cyanide
P099	Potassium silver cyanide
P070	Propanal, 2-methyl-2-(methylthio)-, O-[(methylamino)carbonyl]oxime
P101	Propanenitrile
P027	Propanenitrile, 3-chloro-
P069	Propanenitrile, 2-hydroxy-2-methyl-
P081	1,2,3-Propanetriol, trinitrate- (R)
P017	2-Propanone, 1-bromo-
P102	Propargyl alcohol
P003	2-Propenal
P005	2-Propen-1-ol
P067	1,2-Propylenimine
P102	2-Propyn-1-ol
P008	4-Pyridinamine
P075	Pyridine, (S)-3-(1-methyl-2-pyrrolidinyl)-, and salts
P111	Pyrophosphoric acid, tetraethyl ester
P103	Selenourea
P104	Silver cyanide
P105	Sodium azide
P106	Sodium cyanide
P107	Strontium sulfide
P108	Strychnidin-10-one, and salts
P018	Strychnidin-10-one, 2,3-dimethoxy-
P108	Strychnine and salts
P115	Sulfuric acid, thallium(I) salt
P109	Tetraethyldithiopyrophosphate

Hazardous waste No	Substance
P110	Tetraethyl lead
P111	Tetraethylpyrophosphate
P112	Tetranitromethane (R)
P062	Tetraphosphoric acid, hexaethyl ester
P113	Thallic oxide
P113	Thallium(III) oxide
P114	Thallium(I) selenite
P115	Thallium(I) sulfate
P045	Thiofanox
P049	Thioimidodicarbonic diamide
P014	Thiophenol
P116	Thiosemicarbazide
P026	Thiourea, (2-chlorophenyl)-
P072	Thiourea, 1-naphthalenyl-
P093	Thiourea, phenyl-
P123	Toxaphene
P118	Trichloromethanethiol
P119	Vanadic acid, ammonium salt
P120	Vanadium pentoxide
P120	Vanadium(V) oxide
P001	Warfarin, when present at concentrations greater than 0.3%
P121	Zinc cyanide
P122	Zinc phosphide, when present at concentrations greater than 10%

(f) The commercial chemical products, manufacturing chemical intermediates, or off-specification commercial chemical products referred to in paragraphs (a) through (d) of this section, are identified as toxic wastes (T) unless otherwise designated and are subject to the small quantity exclusion defined in § 261.5 (a) and (f).

[*Comment:* For the convenience of the regulated community, the primary hazardous properties of these materials have been indicated by the letters T (Toxicity), R (Reactivity), I (Ignitability) and C (Corrosivity). Absence of a letter indicates that the compound is only listed for toxicity.]

These wastes and their corresponding EPA Hazardous Waste Numbers are:

Hazardous Waste No.	Substance
U001	Acetaldehyde (I)
U034	Acetaldehyde, trichloro-
U167	Acetamide, N-(4-ethoxyphenyl)-
U005	Acetamide, N-9H-fluoren-2-yl-
U112	Acetic acid, ethyl ester (I)
U144	Acetic acid, lead salt
U214	Acetic acid, thallium(I) salt
U002	Acetone (I)
U003	Acetonitrile (I,T)
U248	3-(alpha-Acetonylbenzyl)-4-hydroxycoumarin and salts, when present at concentrations of 0.3% or less
U004	Acetophenone
U005	2-Acetylaminofluorene
U006	Acetyl chloride (C,R,T)
U007	Acrylamide
U008	Acrylic acid (I)
U009	Acrylonitrile
U150	Alanine, 3-[p-bis(2-chloroethyl)amino] phenyl-, L-
U011	Amitrole
U012	Aniline (I,T)
U014	Auramine
U015	Azaserine
U010	Azirino(2',3':3,4)pyrrolo(1,2-a)indole-4,7-dione, 6-amino-8-[((aminocarbonyl) oxy)methyl]-1,1a,2,8,8a,8b-hexahydro-8a-methoxy-5-methyl-,
U157	Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-
U016	Benz[c]acridine
U016	3,4-Benzacridine
U017	Benzal chloride
U018	Benz[a]anthracene
U018	1,2-Benzanthracene
U094	1,2-Benzanthracene, 7,12-dimethyl-
U012	Benzenamine (I,T)
U014	Benzenamine, 4,4'-carbonimidoylbis(N,N-dimethyl-
U049	Benzenamine, 4-chloro-2-methyl-
U093	Benzenamine, N,N'-dimethyl-4-phenylazo-
U158	Benzenamine, 4,4'-methylenebis(2-chloro-
U222	Benzenamine, 2-methyl-, hydrochloride
U181	Benzenamine, 2-methyl-5-nitro
U019	Benzene (I,T)
U038	Benzeneacetic acid, 4-chloro-alpha-(4-chlorophenyl)-alpha-hydroxy, ethyl ester
U030	Benzene, 1-bromo-4-phenoxy-
U037	Benzene, chloro-
U190	1,2-Benzenedicarboxylic acid anhydride
U028	1,2-Benzenedicarboxylic acid, [bis(2-ethylhexyl)] ester
U069	1,2-Benzenedicarboxylic acid, dibutyl ester
U088	1,2-Benzenedicarboxylic acid, diethyl ester
U102	1,2-Benzenedicarboxylic acid, dimethyl ester
U107	1,2-Benzenedicarboxylic acid, di-n-octyl ester
U070	Benzene, 1,2-dichloro-
U071	Benzene, 1,3-dichloro-
U072	Benzene, 1,4-dichloro-
U017	Benzene, (dichloromethyl)-
U223	Benzene, 1,3-diisocyanatomethyl- (R,T)
U239	Benzene, dimethyl-(I,T)
U201	1,3-Benzenediol
U127	Benzene, hexachloro-
U056	Benzene, hexahydro- (I)
U188	Benzene, hydroxy-
U220	Benzene, methyl-
U105	Benzene, 1-methyl-1-2,4-dinitro-
U106	Benzene, 1-methyl-2,6-dinitro-
U203	Benzene, 1,2-methylenedioxy-4-allyl-
U141	Benzene, 1,2-methylenedioxy-4-propenyl-
U090	Benzene, 1,2-methylenedioxy-4-propyl-
U055	Benzene, (1-methylethyl)- (I)
U169	Benzene, nitro- (I,T)
U183	Benzene, pentachloro-
U185	Benzene, pentachloro-nitro-
U020	Benzenesulfonic acid chloride (C,R)
U020	Benzenesulfonyl chloride (C,R)
U207	Benzene, 1,2,4,5-tetrachloro-
U023	Benzene, (trichloromethyl)-(C,R,T)
0234	Benzene, 1,3,5-trinitro- (R,T)
U021	Benzidine
U202	1,2-Benzisothiazolin-3-one, 1,1-dioxide
U120	Benzo[j,k]fluorene
U022	Benzo[a]pyrene
U022	3,4-Benzopyrene
U197	p-Benzoquinone

Hazardous Waste No.	Substance
U023	Benzotrichloride (C,R,T)
U050	1,2-Benzphenanthrene
U085	2,2'-Bioxirane (I,T)
U021	(1,1'-Biphenyl)-4,4'-diamine
U073	(1,1'-Biphenyl)-4,4'-diamine, 3,3'-dichloro-
U091	(1,1'-Biphenyl)-4,4'-diamine, 3,3'-dimethoxy-
U095	(1,1'-Biphenyl)-4,4'-diamine, 3,3'-dimethyl-
U024	Bis(2-chloroethoxy) methane
U027	Bis(2-chloroisopropyl) ether
U244	Bis(dimethylthiocarbamoyl) disulfide
U028	Bis(2-ethylhexyl) phthalate
U246	Bromine cyanide
U225	Bromoform
U030	4-Bromophenyl phenyl ether
U128	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-
U172	1-Butanamine, N-butyl-N-nitroso-
U035	Butanoic acid, 4-[Bis(2-chloroethyl)amino] benzene-
U031	1-Butanol (I)
U159	2-Butanone (I,T)
U160	2-Butanone peroxide (R,T)
U053	2-Butenal
U074	2-Butene, 1,4-dichloro- (I,T)
U031	n-Butyl alchohol (I)
U136	Cacodylic acid
U032	Calcium chromate
U238	Carbamic acid, ethyl ester
U178	Carbamic acid, methylnitroso-, ethyl ester
U176	Carbamide, N-ethyl-N-nitroso-
U177	Carbamide, N-methyl-N-nitroso-
U219	Carbamide, thio-
U097	Carbamoyl chloride, dimethyl-
U215	Carbonic acid, dithallium(I) salt
U156	Carbonochloridic acid, methyl ester (I,T)
U033	Carbon oxyfluoride (R,T)
U211	Carbon tetrachloride
U033	Carbonyl fluoride (R,T)
U034	Chloral
U035	Chlorambucil
U036	Chlordane, technical
U026	Chlornaphazine
U037	Chlorobenzene
U039	4-Chloro-m-cresol
U041	1-Chloro-2,3-epoxypropane
U042	2-Chloroethyl vinyl ether
U044	Chloroform
U046	Chloromethyl methyl ether
U047	beta-Chloronaphthalene
U048	o-Chlorophenol
U049	4-Chloro-o-toluidine, hydrochloride
U032	Chromic acid, calcium salt
U050	Chrysene
U051	Creosote
U052	Cresols
U052	Cresylic acid
U053	Crotonaldehyde
U055	Cumene (I)
U246	Cyanogen bromide
U197	1,4-Cyclohexadienedione
U056	Cyclohexane (I)
U057	Cyclohexanone (I)
U130	1,3-Cyclopentadiene, 1,2,3,4,5,5-hexa- chloro-
U058	Cyclophosphamide
U240	2,44-D, salts and esters
U059	Daunomycin
U060	DDD
U061	DDT
U142	Decachlorooctahydro-1,3,4-metheno-2H-cyclobuta[c,d]-pentalen-2-one
U062	Diallate
U133	Diamine (R,T)
U221	Diaminotoluene
U063	Dibenz[a,h]anthracene
U063	1,2:5,6-Dibenzanthracene
U064	1,2:7,8-Dibenzopyrene
U064	Dibenz[a,i]pyrene
U066	1,2-Dibromo-3-chloropropane
U069	Dibutyl phthalate
U062	S-(2,3-Dichloroallyl) diisopropylthiocarbamate
U070	o-Dichlorobenzene
U071	m-Dichlorobenzene
U072	p-Dichlorobenzene
U073	3,3'-Dichlorobenzidine
U074	1,4-Dichloro-2-butene (I,T)
U075	Dichlorodifluoromethane
U192	3,5-Dichloro-N-(1,1-dimethyl-2-propynyl) benzamide
U060	Dichloro diphenyl dichloroethane
U061	Dichloro diphenyl trichloroethane
U078	1,1-Dichloroethylene
U079	1,2-Dichloroethylene
U025	Dichloroethyl ether
U081	2,4-Dichlorophenol
U082	2,6-Dichlorophenol
U240	2,4-Dichlorophenoxyacetic acid, salts and esters
U083	1,2-Dichloropropane
U084	1,3-Dichloropropene
U085	1,2:3,4-Diepoxybutane (I,T)
U108	1,4-Diethylene dioxide
U086	N,N-Diethylhydrazine
U087	O,O-Diethyl-S-methyl-dithiophosphate
U088	Diethyl phthalate
U089	Diethylstilbestrol
U148	1,2-Dihydro-3,6-pyradizinedione
U090	Dihydrosafrole
U091	3,3'-Dimethoxybenzidine
U092	Dimethylamine (I)
U093	Dimethylaminoazobenzene
U094	7,12-Dimethylbenz[a]anthracene
U095	3,3'-Dimethylbenzidine
U096	alpha,alpha-Dimethylbenzylhydroperoxide (R)
U097	Dimethylcarbamoyl chloride
U098	1,1-Dimethylhydrazine
U099	1,2-Dimethylhydrazine
U101	2,4-Dimethylphenol
U102	Dimethyl phthalate
U103	Dimethyl sulfate
U105	2,4-Dinitrotoluene
U106	2,6-Dinitrotoluene
U107	Di-n-octyl phthalate
U108	1,4-Dioxane
U109	1,2- Diphenylhydrazine
U110	Dipropylamine (I)
U111	Di-N-propylnitrosamine
U001	Ethanal (I)
U174	Ethanamine, N-ethyl-N-nitroso-
U067	Ethane, 1,2-dibromo-
U076	Ethane, 1,1-dichloro-
U077	Ethane, 1,2-dichloro-
U114	1,2-Ethanediylbiscarbamodithioic acid
U131	Ethane, 1,1,1,2,2,2-hexachloro-
U024	Ethane, 1,1'-[methylenebis(oxy)]bis[2-chloro-
U003	Ethanenitrile (I, T)
U117	Ethane,1,1'-oxybis- (I)
U025	Ethane, 1,1'-oxybis[2-chloro-
U184	Ethane, pentachloro-
U208	Ethane, 1,1,1,2-tetrachloro-
U209	Ethane, 1,1,2,2-tetrachloro-
U218	Ethanethioamide
U247	Ethane, 1,1,1,-trichloro-2,2-bis(p-methoxyphenyl).
U227	Ethane, 1,1,2-trichloro-
U043	Ethene, chloro-

Hazardous Waste No.	Substance
U042	Ethene, 2 chloroethoxy-
U078	Ethene, 1,1-dichloro-
U079	Ethene, trans-1,2-dichloro-
U210	Ethene, 1,1,2,2-tetrachloro-
U173	Ethanol, 2,2'-(nitrosoimino)bis-
U004	Ethanone, 1-phenyl-
U006	Ethanoyl chloride (C,R,T)
U112	Ethyl acetate (I)
U113	Ethyl acrylate (I)
U238	Ethyl carbamate (urethan)
U038	Ethyl 4,4'-dichlorobenzilate
U114	Ethylenebis(dithiocarbamic acid)
U067	Etylene dibromide
U077	Ethylene dichloride
U115	Ethlene oxide (I,T)
U116	Ethylene thiourea
U117	Ethyl ether (I)
U076	Ethylidene dichloride
U118	Ethylmethacrylate
U119	Ethyl methanesulfonate
U139	Ferric dextran
U120	Fluoranthene
U122	Formaldehyde
U123	Formic acid (C,T)
U124	Furan (I)
U125	2-Furancarboxaldehyde (I)
U147	2,5-Furandione
U213	Furan, tetrahydro- (I)
U125	Furfural (I)
U124	Furfuran (I)
U206	D-Glucopyranosa, 2-deoxy-2(3-methyl-3-nitro-soureido)-
U126	Glycidylaldehyde
U163	Guanidine, N-nitroso-N-methyl-N'nitro-
U127	Hexachlorobenzene
U128	Hexachlorobutadiene
U129	Hexachlorocyclohexane (gamma isomer)
U130	Hexachlorocyclopentadiene
U131	Hexachloroethane
U132	Hexachlorophene
U243	Hexachloropropene
U133	Hydrazine (R,T)
U086	Hydrazine, 1,2-diethyl-
U098	Hydrazine, 1,1-dimethyl-
U099	Hydrazine, 1,2-dimethyl-
U109	Hydrazine, 1,2-diphenyl-
U134	Hydrofluoric acid (C,T)
U134	Hydrogen fluoride (C,T)
U135	Hydrogen sulfide
U096	Hydroperoxide, 1-methyl-1-phenylethyl- (R)
U136	Hydroxydimethylarsine oxide
U116	2-Imidazolidinethione
U137	Indeno[1,2,3-cd]pyrene
U139	Iron dextran
U140	Isobutyl alcohol (I,T)
U141	Isosafrole
U142	Kepone
U143	Lasiocarpine
U144	Lead acetate
U145	Lead phosphate
U146	Lead subacetate
U129	Lindane
U147	Maleic anhydride
U148	Maleic hydrazide
U149	Malononitrile
U150	Melphalan
U151	Mercury
U152	Methacrylonitrile (I,T)
U092	Methanamine, N-methyl- (I)
U029	Methane, bromo-
U045	Methane, chloro- (I,T)
U046	Methane, chloromethoxy-
U068	Methane, dibromo-
U080	Methane, dichloro-
U075	Methane, dichlorodifluoro-
U138	Methane, iodo-
U119	Methanesulfonic acid, ethyl ester
U211	Methane, tetrachloro-
U121	Methane, trichlorofluoro-
U153	Methanethiol (I,T)
U225	Methane, tribromo-
U044	Methane, trichloro-
U121	Methane, trichlorofluoro-
U123	Methanoic acid (C,T)
U036	4,7-Methanoindan, 1,2,4,5,6,7,8,8-octa-chloro-3a,4,7,7a-tetrahydro-
U154	Methanol (I)
U155	Methapyrilene
U247	Methoxychlor.
U154	Methyl alcohol (I)
U029	Methyl bromide
U186	1-Methylbutadiene (I)
U045	Methyl chloride (I,T)
U156	Methyl chlorocarbonate (I,T)
U226	Methylchloroform
U157	3-Methylcholanthrene
U158	4,4'-Methylenebis(2-chloroaniline)
U132	2,2'-Methylenebis(3,4,6-trichlorophenol)
U068	Methylene bromide
U080	Methylene chloride
U122	Methylene oxide
U159	Methyl ethyl ketone (I,T)
U160	Methyl ethyl ketone peroxide (R,T)
U138	Methyl iodide
U161	Methyl isobutyl ketone (I)
U162	Methyl methacrylate (I,T)
U163	N-Methyl-N'-nitro-N-nitrosoguanidine
U161	4-Methyl-2-pentanone (I)
U164	Methylthiouracil
U010	Mitomycin C
U059	5,12-Naphthacenedione, (8S-cis)-8-acetyl-10-[(3-amino-2,3,6-trideoxy-alpha-L-lyxo-hexopyranosyl)oxy]-7,8,9,10-tetrahydro-6,8,11-trihydroxy-1-methoxy-
U165	Naphthalene
U047	Naphthalene, 2-chloro-
U166	1,4-Naphthalenedione
U236	2,7-Naphthalenedisulfonic acid, 3,3'-[(3,3'-dimethyl-(1,1'-biphenyl)-4,4'diyl)]-bis (azo)bis(5-amino-4-hydroxy)-,tetrasodium salt
U166	1,4,Naphthaquinone
U167	1-Naphthylamine
U168	2-Naphthylamine
U167	alpha-Naphthylamine
U168	beta-Naphthylamine
U026	2-Naphthylamine, N,N'-bis(2-chloromethyl)-
U169	Nitrobenzene (I,T)
U170	p-Nitrophenol
U171	2-Nitropropane (I)
U172	N-Nitrosodi-n-butylamine
U173	N-Nitrosodiethanolamine
U174	N-Nitrosodiethylamine
U111	N-Nitroso-N-propylamine
U176	N-Nitroso-N-ethylurea
U177	N-Nitroso-N-methylurea
U178	N-Nitroso-N-methylurethane
U179	N-Nitrosopiperidine
U180	N-Nitrosopyrrolidine
U181	5-Nitro-o-toluidine
U193	1,2-Oxathiolane, 2,2-dioxide
U058	2H-1,3,2-Oxazaphosphorine, 2-[bis(2-chloro-ethyl)amino]tetrahydro-, oxide 2-
U115	Oxirane (I,T)

Hazardous Waste No.	Substance
U041	Oxirane, 2-(chloromethyl)-
U162	Paraldehyde
U183	Pentachlorobenzene
U184	Pentachloroethane
U185	Pentachloronitrobenzene
U242	Pentachlorophenol
U186	1,3-Pentadiene (I)
U187	Phenacetin
U188	Phenol
U048	Phenol, 2-chloro-
U039	Phenol, 4-chloro-3-methyl-
U081	Phenol, 2,4-dichloro-
U082	Phenol, 2,6-dichloro-
U101	Phenol, 2,4-dimethyl-
U170	Phenol, 4-nitro-
U242	Phenol, pentachloro-
U212	Phenol, 2,3,4,6-tetrachloro-
U230	Phenol, 2,4,5-trichloro-
U231	Phenol, 2,4,6-trichloro-
U137	1,10-(1,2-phenylene)pyrene
U145	Phosphoric acid, Lead salt
U087	Phosphorodithioic acid, 0,0-diethyl-, S-methyl-ester
U189	Phosphorous sulfide (R)
U190	Phthalic anhydride
U191	2-Picoline
U192	Pronamide
U194	1-Propanamine (I,T)
U110	1-Propanamine, N-propyl- (I)
U066	Propane, 1,2-dibromo-3-chloro-
U149	Propanedinitrile
U171	Propane, 2-nitro- (I)
U027	Propane, 2,2'oxybis[2-chloro-
U193	1,3-Propane sultone
U235	1-Propanol, 2,3-dibromo-, phosphate (3:1)
U126	1-Propanol, 2,3-epoxy-
U140	1-Propanol, 2-methyl- (I,T)
U002	2-Propanone (I)
U007	2-Propenamide
U084	Propene, 1,3-dichloro-
U243	1-Propene, 1,1,2,3,3,3-hexachloro-
U009	2-Propenenitrile
U152	2-Propenenitrile, 2-methyl- (I,T)
U008	2-Propenoic acid (I)
U113	2-Propenoic acid, ethyl ester (I)
U118	2-Propenoic acid, 2-methyl-, ethyl ester
U162	2-Propenoic acid, 2-methyl-, methyl ester (I,T)
U233	Propionic acid, 2-(2,4,5-trichlorophenoxy)-
U194	n-Propylamine (I,T)
U083	Propylene dichloride
U196	Pyridine
U155	Pyridine, 2-[(2-(dimethylamino)-2-thenylamino]-
U179	Pyridine, hexahydro-N-nitroso-
U191	Pyridine, 2-methyl-
U164	4(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-
U180	Pyrrole, tetrahydro-N-nitroso-
U200	Reserpine
U201	Resorcinol
U202	Saccharin and salts
U203	Safrole
U204	Selenious acid
U204	Selenium dioxide
U205	Selenium disulfide (R,T)
U015	L-Serine, diazoacetate (ester)
U233	Silvex
U089	4,4'-Stilbenediol, alpha,alpha'-diethyl-
U206	Streptozotocin
U135	Sulfur hydride
U103	Sulfuric acid, dimethyl ester
U189	Sulfur phosphide (R)
U205	Sulfur selenide (R,T)
U232	2,4,5-T
U207	1,2,4,5-Tetrachlorobenzene
U208	1,1,1,2-Tetrachloroethane
U209	1,1,2,2-Tetrachloroethane
U210	Tetrachloroethylene
U212	2,3,4,6-Tetrachlorophenol
U213	Tetrahydrofuran (I)
U214	Thallium(I) acetate
U215	Thallium(I) carbonate
U216	Thallium(I) chloride
U217	Thallium(I) nitrate
U218	Thioacetamide
U153	Thiomethanol (I,T)
U219	Thiourea
U244	Thiram
U220	Toluene
U221	Toluenediamine
U223	Toluene diisocyanate (R,T)
U222	O-Toluidine hydrochloride
U011	1H-1,2,4-Triazol-3-amine
U226	1,1,1-Trichloroethane
U227	1,1,2-Trichloroethane
U228	Trichloroethene
U228	Trichloroethylene
U121	Trichloromonofluoromethane
U230	2,4,5-Trichlorophenol
U231	2,4,6-Trichlorophenol
U232	2,4,5-Trichlorophenoxyacetic acid
U234	sym-Trinitrobenzene (R,T)
U182	1,3,5-Trioxane, 2,4,5-trimethyl-
U235	Tris(2,3-dibromopropyl) phosphate
U236	Trypan blue
U237	Uracil, 5[bis(2-chloromethyl)amino]-
U237	Uracil mustard
U043	Vinyl chloride
U248	Warfarin, when present at concentrations of 0.3% or less
U239	Xylene (I)
U200	Yohimban-16-carboxylic acid, 11,17-dimethoxy-18-[(3,4,5-trimethoxy-benzoyl)oxy]-, methyl ester
U249	Zinc phosphide, when present at concentrations of 10% or less

[45 FR 78529, 78541, Nov. 25, 1980, as amended at 46 FR 27477, May 20, 1981; 49 FR 19923, May 10, 1984]

EFFECTIVE DATE NOTE: At 49 FR 19923, May 10, 1984, § 261.33 was amended by revising three entries in the table in paragraph (e), and adding three entries to the table in paragraph (f) identified by hazardous waste numbers U248, (3-(alpha-Acetonylbenzyl)-4-hydroxycoumarin and salts, when present at concentrations of 0.3% or less, and Warfarin, when present at concentrations of 0.3% or less), and U249, (Zinc phosphide, when present at concentrations of 10% or less), effective November 12, 1984. For the convenience of the user, the superseded entries from the table in paragraph (e) are set out below.

§ 261.33 Discarded commercial chemical products, off-specification species, container residues, and spill residues thereof.

* * * * * * *

(e) * * *

Hazardous waste No.	Substance
*	*
P001	3-(alpha-acetonylbenzyl)-4-hydroxycoumarin and salts
*	*
P001	Warfarin
*	*
P122	Zinc phosphide (R,T)

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APPENDIX I—REPRESENTATIVE SAMPLING METHODS

The methods and equipment used for sampling waste materials will vary with the form and consistency of the waste materials to be sampled. Samples collected using the sampling protocols listed below, for sampling waste with properties similar to the indicated materials, will be considered by the Agency to be representative of the waste.

Extremely viscous liquid—ASTM Standard D140-70 Crushed or powdered material—ASTM Standard D346-75 Soil or rock-like material—ASTM Standard D420-69 Soil-like material—ASTM Standard D1452-65

Fly Ash-like material—ASTM Standard D2234-76 [ASTM Standards are available from ASTM, 1916 Race St., Philadelphia, PA 19103]

Containerized liquid wastes—"COLIWASA" described in "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods," [a] U.S. Environmental Protection Agency, Office of Solid Waste, Washington, D.C. 20460. [Copies may be obtained from Solid Waste Information, U.S. Environmental Protection Agency, 26 W. St. Clair St., Cincinnati, Ohio 45268]

Liquid waste in pits, ponds, lagoons, and similar reservoirs.—"Pond Sampler" described in "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods." [a]

This manual also contains additional information on application of these protocols.

[a] These methods are also described in "Samplers and Sampling Procedures for Hazardous Waste Streams," EPA 600/2-80-018, January 1980.

APPENDIX II—EP TOXICITY TEST PROCEDURES

A. Extraction Procedure (EP)

1. A representative sample of the waste to be tested (minimum size 100 grams) shall be obtained using the methods specified in Appendix I or any other method capable of yielding a representative sample within the meaning of Part 260. [For detailed guidance on conducting the various aspects of the EP see "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods" (incorporated by reference, see § 260.11).]

2. The sample shall be separated into its component liquid and solid phases using the method described in "Separation Procedure" below. If the solid residue [b] obtained using this method totals less than 0.5% of the original weight of the waste, the residue can be discarded and the operator shall treat the liquid phase as the extract and proceed immediately to Step 8.

3. The solid material obtained from the Separation Procedure shall be evaluated for its particle size. If the solid material has a surface area per gram of material equal to, or greater than, 3.1 cm^2 or passes through a 9.5 mm (0.375 inch) standard sieve, the operator shall proceed to Step 4. If the surface area is smaller or the particle size larger than specified above, the solid material shall be prepared for extraction by crushing, cutting or grinding the material so that it passes through a 9.5 mm (0.375 inch) sieve or, if the material is in a single piece, by subjecting the material to the "Structural Integrity Procedure" described below.

4. The solid material obtained in Step 3 shall be weighed and placed in an extractor with 16 times its weight of deionized water. Do not allow the material to dry prior to weighing. For purposes of this test, an acceptable extractor is one which will impart sufficient agitation to the mixture to not only prevent stratification of the sample and extraction fluid but also insure that all sample surfaces are continuously brought into contact with well mixed extraction fluid.

5. After the solid material and deionized water are placed in the extractor, the opera-

[b] The percent solids is determined by drying the filter pad at 80°C until it reaches constant weight and then calculating the percent solids using the following equation:

Percent solids =

$$\frac{\text{(weight of pad + solid)} - \text{(tare weight of pad)}}{\text{initial weight of sample}} \times 100$$

tor shall begin agitation and measure the pH of the solution in the extractor. If the pH is greater than 5.0, the pH of the solution shall be decreased to 5.0 ± 0.2 by adding 0.5 N acetic acid. If the pH is equal to or less than 5.0, no acetic acid should be added. The pH of the solution shall be monitored, as described below, during the course of the extraction and if the pH rises above 5.2, 0.5N acetic acid shall be added to bring the pH down to 5.0 ± 0.2. However, in no event shall the aggregrate amount of acid added to the solution exceed 4 ml of acid per gram of solid. The mixture shall be agitated for 24 hours and maintained at 20°–40°C (68°–104°F) during this time. It is recommended that the operator monitor and adjust the pH during the course of the extraction with a device such as the Type 45-A pH Controller manufactured by Chemtrix, Inc., Hillsboro, Oregon 97123 or its equivalent, in conjunction with a metering pump and reservoir of 0.5N acetic acid. If such a system is not available, the following manual procedure shall be employed:

(a) A pH meter shall be calibrated in accordance with the manufacturer's specifications.

(b) The pH of the solution shall be checked and, if necessary, 0.5N acetic acid shall be manually added to the extractor until the pH reaches 5.0 ± 0.2. The pH of the solution shall be adjusted at 15, 30 and 60 minute intervals, moving to the next longer interval if the pH does not have to be adjusted more than 0.5N pH units.

(c) The adjustment procedure shall be continued for at least 6 hours.

(d) If at the end of the 24-hour extraction period, the pH of the solution is not below 5.2 and the maximum amount of acid (4 ml per gram of solids) has not been added, the pH shall be adjusted to 5.0 ± 0.2 and the extraction continued for an additional four hours, during which the pH shall be adjusted at one hour intervals.

6. At the end of the 24 hour extraction period, deionized water shall be added to the extractor in an amount determined by the following equation:

V=(20)(W)−16(W)−A

V=ml deionized water to be added

W=weight in grams of solid charged to extractor

A=ml of 0.5N acetic acid added during extraction

7. The material in the extractor shall be separated into its component liquid and solid phases as described under "Separation Procedure."

8. The liquids resulting from Steps 2 and 7 shall be combined. This combined liquid (or the waste itself if it has less than ½ percent solids, as noted in step 2) is the extract and shall be analyzed for the presence of any of the contaminants specified in Table I of § 261.24 using the Analytical Procedures designated below.

Separation Procedure

Equipment: A filter holder, designed for filtration media having a nominal pore size of 0.45 micrometers and capable of applying a 5.3 kg/cm² (75 psi) hydrostatic pressure to the solution being filtered, shall be used. For mixtures containing nonabsorptive solids, where separation can be effected without imposing a 5.3 kg/cm² pressure differential, vacuum filters employing a 0.45 micrometers filter media can be used. (For further guidance on filtration equipment or procedures see "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" incorporated by reference, see § 260.11). Procedure:[2]

(i) Following manufacturer's directions, the filter unit shall be assembled with a filter bed consisting of a 0.45 micrometer filter membrane. For difficult or slow to filter mixtures a prefilter bed consisting of the following prefilters in increasing pore size (0.65 micrometer membrane, fine glass fiber prefilter, and coarse glass fiber prefilter) can be used.

(ii) The waste shall be poured into the filtration unit.

(iii) The reservoir shall be slowly pressurized until liquid begins to flow from the filtrate outlet at which point the pressure in the filter shall be immediately lowered to 10–15 psig. Filtration shall be continued until liquid flow ceases.

(iv) The pressure shall be increased stepwise in 10 psi increments to 75 psig and filtration continued until flow ceases or the pressurizing gas begins to exit from the filtrate outlet.

(v) The filter unit shall be depressurized, the solid material removed and weighed and then transferred to the extraction apparatus, or, in the case of final filtration prior to analysis, discarded. Do not allow the material retained on the filter pad to dry prior to weighing.

(vi) The liquid phase shall be stored at 4°C for subsequent use in Step 8.

B. Structural Integrity Procedure

Equipment: A Structural Integrity Tester having a 3.18 cm (1.25 in.) diameter hammer weighing 0.33 kg (0.73 lbs.) and having a free fall of 15.24 cm (6 in.) shall be used. This device is available from Associated Design and Manufacturing Company, Alexandria, VA 22314, as Part No. 125, or it may be fabricated to meet the specifications shown in Figure 1.

Procedure

1. The sample holder shall be filled with the material to be tested. If the sample of waste is a large monolithic block, a portion shall be cut from the block having the dimensions of a 3.3 cm (1.3 in.) diameter x 7.1 cm (2.8 in.) cylinder. For a fixated waste, samples may be cast in the form of a 3.3 cm (1.3 in.) diameter x 7.1 cm (2.8 in.) cylinder for purposes of conducting this test. In such cases, the waste may be allowed to cure for 30 days prior to further testing.

2. The sample holder shall be placed into the Structural Integrity Tester, then the hammer shall be raised to its maximum height and dropped. This shall be repeated fifteen times.

3. The material shall be removed from the sample holder, weighed, and transferred to the extraction apparatus for extraction.

Analytical Procedures for Analyzing Extract Contaminants

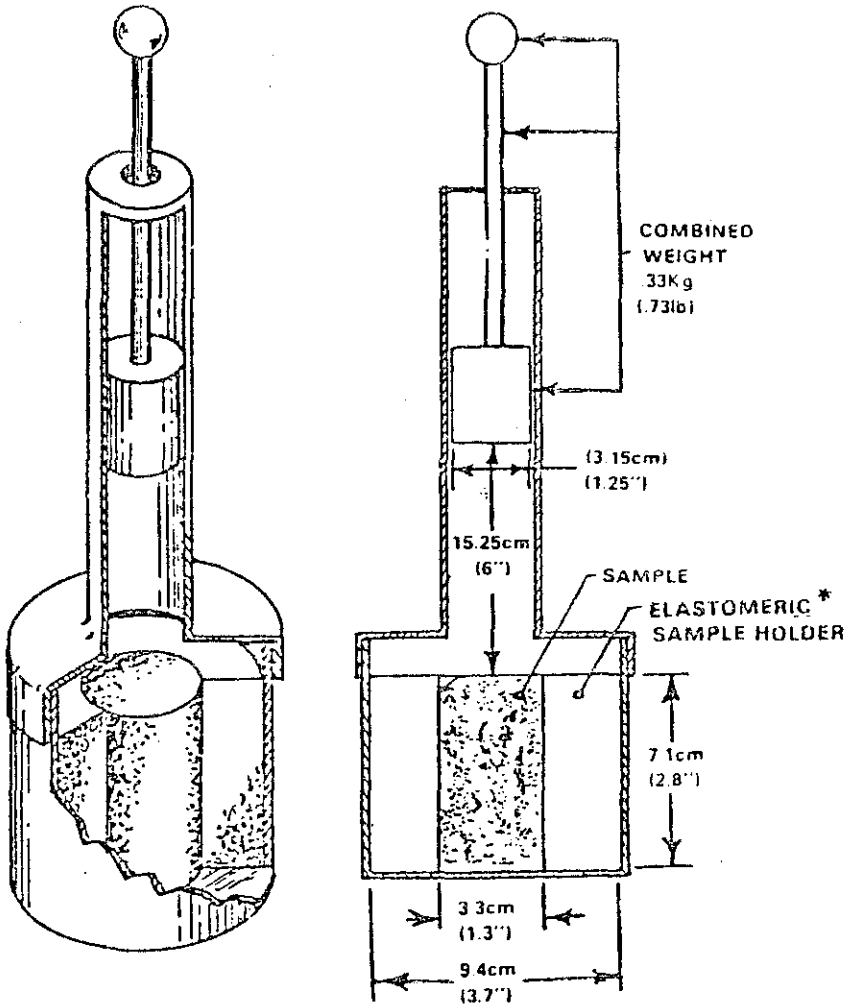
The test methods for analyzing the extract are as follows:

1. For arsenic, barium, cadmium, chromium, lead, mercury, selenium, silver, endrin, lindane, methoxychlor, toxaphene, 2,4-D[2,4-dichlorophenoxyacetic acid] or 2,4,5-TP [2,4,5-trichlorophenoxypropionic acid]: "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods" (incorporated by reference, see § 260.11).

2. [Reserved]

For all analyses, the methods of standard addition shall be used for quantification of species concentration.

[2]This procedure is intended to result in separation of the "free" liquid portion of the waste from any solid matter having a particle size >0.45 μm. If the sample will not filter, various other separation techniques can be used to aid in the filtration. As described above, pressure filtration is employed to speed up the filtration process. This does not alter the nature of the separation. If liquid does not separate during filtration, the waste can be centrifuged. If separation occurs during centrifugation, the liquid portion (centrifugate) is filtered through the 0.45 μm filter prior to becoming mixed with the liquid portion of the waste obtained from the initial filtration. Any material that will not pass through the filter after centrifugation is considered a solid and is extracted.



*ELASTOMERIC SAMPLE HOLDER FABRICATED OF MATERIAL FIRM ENOUGH TO SUPPORT THE SAMPLE

Figure 1

COMPACTION TESTER

[45 FR 33119, May 19, 1980, as amended at 46 FR 35247, July 7, 1981]

Appendix III—Chemical Analysis Test Methods

Tables 1, 2, and 3 specify the appropriate analytical procedures, described in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," (incorporated by reference, see § 260.11) which shall be used to determine whether a sample contains a given Appendix VII or VIII toxic constituent.

Table 1 identifies each Appendix VII or VIII organic constituent along with the approved measurement method. Table 2 identifies the corresponding methods for inorganic species. Table 3 summarizes the contents of SW-846 and supplies specific section and method numbers for sampling and analysis methods.

Prior to final sampling and analysis method selection the analyst should consult the specific section or method described in SW-846 for additional guidance on which of the approved methods should be employed for a specific sample analysis situation.

Table 1—Analysis Methods for Organic Chemicals Contained in SW-846

Compound	First edition method(s)	Second edition method(s)
Acetonitrile	8.03, 8.24	8030, 8240
Acrolein	8.03, 8.24	8030, 8240
Acrylamide	8.01, 8.24	8015, 8240
Acrylonitrile	8.03, 8.24	8030, 8240
Benzene	8.02, 8.24	8020, 8024
Benz(a)anthracene	8.10, 8.25	8100, 8250, 8310
Benzo(a)pyrene	8.10, 8.25	8100, 8250, 8310
Benzotrichloride	8.12, 8.25	8120, 8250
Benzyl chloride	8.01, 8.12, 8.24, 8.25	8120, 8250
Benzo(b)fluoranthene	8.10, 8.25	8100, 8250, 8310
Bis(2-chloroethoxymethane)	8.01, 8.24	8010, 8240
Bis(2-chloroethyl)ether	8.01, 8.24	8010, 8240
Bis(2-chloroisopropyl)ether	8.01, 8.24	8010, 8240
Carbon disulfide	8.01, 8.24	8015, 8240
Carbon tetrachloride	8.01, 8.24	8010, 8240
Chlordane	8.08, 8.25	8080, 8250
Chlorinated dibenzodioxins	8.08, 8.25	8080, 8250
Chlorinated biphenyls	8.08, 8.25	8080, 8250
Chloroacetaldehyde	8.01, 8.24	8010, 8240
Chlorobenzene	8.01, 8.02, 8.24	8020, 8240
Chloroform	8.01, 8.24	8010, 8240
Chloromethane	8.01, 8.24	8010, 8240
2-Chlorophenol	8.04, 8.25	8040, 8250
Chrysene	8.10, 8.25	8100, 8250, 8310
Creosote [1]	8.10, 8.25	8100, 8250
Cresol(s)	8.04, 8.25	8040, 8250
Cresylic Acid(s)	8.04, 8.25	8040, 8250
Dichlorobenzene(s)	8.01, 8.02, 8.12, 8.25	8010, 8120, 8250

Table 1—Analysis Methods for Organic Chemicals Contained in SW-846—Continued

Compound	First edition method(s)	Second edition method(s)
Dichloroethane(s)	8.01, 8.24	8010, 8240
Dichloromethane	8.01, 8.24	8010, 8240
Dichlorophenoxyacetic acid	8.40, 8.25	8150, 8250
Dichloropropanol	8.12, 8.25	8120, 8250
2,4-Dimethylphenol	8.04, 8.25	8040, 8250
Dinitrobenzene	8.09, 8.25	8090, 8250
4,6-Dinitro-o-cresol	8.04, 8.25	8040, 8250
2,4-Dinitrotoluene	8.09, 8.25	8090, 8250
Endrin	8.08, 8.25	8080, 8250
Ethyl ether	8.01, 8.02, 8.24	8015, 8240
Formaldehyde	8.01, 8.24	8015, 8240
Formic acid	8.06, 8.25	8250
Heptachlor	8.06, 8.25	8080, 8250
Hexachlorobenzene	8.12, 8.25	8120, 8250
Hexachlorobutadiene	8.12, 8.25	8120, 8250
Hexachloroethane	8.12, 8.25	8010, 8240
Hexachlorocyclopentadiene	8.12, 8.25	8120, 8250
Lindane	8.08, 8.25	8080, 8250
Maleic anhydride	8.06, 8.25	8250
Methanol	8.01, 8.24	8010, 8240
Methomyl	8.32	8250
Methyl ethyl ketone	8.01, 8.02, 8.24	8015, 8240
Methyl isobutyl ketone	8.01, 8.02, 8.24	8015, 8240
Napthalene	8.10, 8.25	8100, 8250
Napthoquinone	8.06, 8.09, 8.25	8090, 8250
Nitrobenzene	8.09, 8.25	8090, 8250
4-Nitrophenol	8.04, 8.25	8040, 8240
Paraldehyde (trimer of acetaldehyde)	8.01, 8.24	8015, 8240
Pentachlorophenol	8.04, 8.25	8040, 8250
Phenol	8.04, 8.25	8040, 8250
Phorate	8.22	8140
Phosphorodithioic acid esters	8.06, 8.09, 8.22	8140
Phthalic anhydride	8.06, 8.09, 8.25	8090, 8250
2-Picoline	8.06, 8.09, 8.25	8090, 8250
Pyridine	8.06, 8.09, 8.25	8090, 8250
Tetrachlorobenzene(s)	8.12, 8.25	8120, 8250
Tetrachloroethane(s)	8.01, 8.24	8010, 8240
Tetrachloroethene	8.01, 8.24	8010, 8240
Tetrachlorophenol	8.04, 8.24	8040, 8250
Toluene	8.02, 8.24	8020, 8024
Toluenediamine	8.25	8250
Toluene diisocyanate(s)	8.06, 8.25	8250
Toxaphene	8.08, 8.25	8080, 8250
Trichloroethane	8.01, 8.24	8010, 8240
Trichloroethene(s)	8.01, 8.24	8010, 8240
Trichlorofluoromethane	8.01, 8.24	8010, 8240
Trichlorophenol(s)	8.04, 8.25	8040, 8250
2,4,5-Trichlorophenoxy propionic acid	8.40, 8.25	8150, 8250
Trichloropropane	8.01, 8.24	8010, 8240
Vinyl chloride	8.01, 8.24	8010, 8240
Vinylidene chloride	8.01, 8.24	8010, 8240
Xylene	8.02, 8.24	8020, 8240

[1] Analyne for phenanthrene and carbazole; if these are present in a ratio between 1.4:1 and 5:1 creosote should be considered present.

TABLE 2—ANALYSIS METHODS FOR INORGANIC CHEMICALS CONTAINED IN SW-846

Compound	First edition method(s)	Second edition method(s)
Antimony	8.50	7040, 7041
Arsenic	8.51	7060, 7061
Barium	8.52	7080, 7081
Cadmium	8.53	7090, 7091
Chromium	8.54	7190, 7191
Chromium: Hexavalent	8.545, 8.546, 8.547	7195, 7196, 7197
Lead	8.56	7420, 7421
Mercury	8.57	7470, 7471
Nickel	8.58	7520, 7521
Selenium	8.59	7740, 7741
Silver	8.60	7760, 7761
Cyanides	8.55	9010
Total Organic Halogen	8.66	9020
Sulfides	8.67	9030

TABLE 3—SAMPLING AND ANALYSIS METHODS CONTAINED IN SW-846

Title	First edition		Second edition	
	Section No.	Method No.	Section No.	Method No.
Sampling of Solid Wastes	1.0		1.0	
Development of Appropriate Sampling Plans	1.0		1.1	
Regulatory and Scientific Objectives	1.0-2		1.1.1	
Fundamental Statistical Concepts	1.0-3		1.1.2	
Basic Statistical Strategies	1.0-7		1.1.3	
Simple Random Sampling			1.1.3.1	
Stratified Random Sampling			1.1.3.2	
Systematic Random Sampling			1.1.3.3	
Special Considerations	1.0-7			
Composite Sampling			1.1.4.1	
Subsampling			1.1.4.2	
Cost and Loss Functions			1.1.4.3	
Implementation of Sampling Plan	1.0-7		1.2	
Selection of Sampling Equipment			1.2.1	
Composite Liquid Waste Sampler	3.2.1		1.2.1.1	
Weighted Bottle	3.2.2		1.2.1.2	
Dipper	3.2.3		1.2.1.3	
Thief	3.2.4		1.2.1.4	
Trier	3.2.5		1.2.1.5	
Auger	3.2.6		1.2.1.6	
Scoop and Shovel	3.2.7		1.2.1.7	
Selection of Sample Containers	3.3		1.2.2	
Processing and Storage of Samples	3.3		1.2.3	
Documentation of Chain of Custody	2.0		1.3	
Sample Labels	2.0-1		1.3.1	
Sample Seals	2.0-3		1.3.2	
Field Log Book	2.0-5		1.3.3	
Chain-of-Custody Record	2.0-6		1.3.4	
Sample Analysis Request Sheet	2.0-9		1.3.5	
Sample Delivery to Laboratory	2.0-10		1.3.6	
Shipping of Samples	2.0-10		1.3.7	
Receipt and Logging of Sample	2.0-12		1.3.8	
Assignment of Sample for Analysis	2.0-13		1.3.9	
Sampling Methodology	3.0		1.4	
Containers	3.2-2		1.4.1	
Tanks	3.2-2		1.4.2	
Waste Piles	3.2-2		1.4.3	
Landfills and Lagoons	3.2-2		1.4.4	
Waste Evaluation Procedures			2.0	
Characteristics of Hazardous Waste			2.1	
Ignitability	4.0		2.1.1	
Pensky-Martens Closed-Cup Method	4.1		2.1.1	1010
Setaflash Closed-Cup Method	4.1		2.1.1	1020
Corrosivity	5.0		2.1.2	
Corrosivity Toward Steel	5.3		2.1.2	1110
Reactivity	6.0		2.1.3	
Extraction Procedure Toxicity	7.0		2.1.4	
Extraction Procedure Toxicity Test	7.1, 7.2, 7.5			
Method and Structural Integrity Test	7.4		2.1.4	1310

TABLE 3—SAMPLING AND ANALYSIS METHODS CONTAINED IN SW-846—Continued

Title	First edition		Second edition	
	Section No.	Method No.	Section No.	Method No.
Sample Workup Techniques			4.0	
Inorganic Techniques	8.49		4.1	
Acid Digestion for Flame AAS			4.1	3010
Acid Digestion for Furnace AAS			4.1	3020
Acid Digestion of Oil, Grease, or Wax	8.49-9		4.1	3030
Dissolution Procedure for Oil, Grease or Wax	8.49-8			
Alkaline Digestion	8.0	8.458	4.1	3060
Organic Techniques	8.0		4.2	
Separatory Funnel Liquid-Liquid Extraction	9.0	9.1	4.2	3510
Continuous Liquid-Liquid Extraction	9.0	9.01	4.2	3520
Acid-Base Cleanup Extraction	8.0	8.84	4.2	3530
Soxhlet Extraction	8.0	8.86	4.2	3540
Sonication Extraction	8.0	8.85	4.2	3550
Sample Introduction Techniques			5.0	
Headspace	8.0	8.82	5.0	5020
Purge-and-Trap	8.0	8.83	5.0	5030
Inorganic Analytical Methods	8.0		7.0	
Antimony, Flame AAS	8.0	8.50	7.0	7470
Antimony, Furnace AAS	8.0	8.50	7.0	7471
Arsenic, Flame AAS	8.0	8.51	7.0	7060
Arsenic, Furnace AAS	8.0	8.51	7.0	7061
Barium, Flame AAS	8.0	8.52	7.0	7080
Barium, Furnace AAS	8.0	8.52	7.0	7081
Cadmium, Flame AAS	8.0	8.53	7.0	7130
Cadmium, Furnace AAS	8.0	8.53	7.0	7131
Chromium, Flame AAS	8.0	8.54	7.0	7090
Chromium, Furnace AAS	8.0	8.54	7.0	7191
Chromium, Hexavalent, Coprecipitation	8.0	8.545	7.0	7195
Chromium, Hexavalent, Colorimetric	8.0	8.546	7.0	7196
Chromium, Hexavalent, Chelation	8.0	8.547	7.0	7197
Lead, Flame AAS	8.0	8.56	7.0	7420
Lead, Furnace AAS	8.0	8.56	7.0	7421
Mercury, Cold Vapor, Liquid	8.0	8.57	7.0	7470
Mercury, Cold Vapor, Solid	8.0	8.57	7.0	7471
Nickel, Flame AAS	8.0	8.58	7.0	7520
Nickel, Furnace AAS	8.0	8.58	7.0	7521
Selenium, Flame AAS	8.0	8.59	7.0	7740
Selenium, Gaseous Hydride AAS	8.0	8.59	7.0	7741
Silver, Flame AAS	8.0	8.60	7.0	7760
Silver, Furnace AAS	8.0	8.60	7.0	7761
Organic Analytical Methods	8.0		8.0	
Gas Chromatographic Methods	8.0		8.1	
Halogenated Volatile Organics	8.0	8.01	8.1	8010
Nonhalogenated Volatile Organics	8.0	8.01	8.1	8015
Aromatic Volatile Organics	8.0	8.02	8.1	8020
Acrolein, Acrylonitrile, Acetonitrile	8.0	8.03	8.1	8030
Phenols	8.0	8.04	8.1	8040
Phthalate Esters	8.0	8.06	8.1	8060
Organochlorine Pesticides and PCBs	8.0	8.08	8.1	8080
Nitroaromatics and Cyclic Ketones	8.0	8.09	8.1	8090
Polynuclear Aromatic Hydrocarbons	8.0	8.10	8.1	8100
Chlorinated Hydrocarbons	8.0	8.12	8.1	8120
Organophosphorus Pesticides	8.0	8.22	8.1	8140
Chlorinated Herbicides	8.0	8.40	8.1	8150
Gas Chromatographic/Mass Spectroscopy Methods (GC/MS)	8.0		8.2	
GC/MS Volatiles	8.0	8.24	8.2	8240
GC/MS Semi-Volatiles, Packed Column	8.0	8.25	8.2	8250
GC/MS Semi-Volatiles, Capillary	8.0	8.27	8.2	8270
High Performance Liquid Chromatographic Methods (HPLC)	8.0		8.3	
Polynuclear Aromatic Hydrocarbons	8.0	8.10	8.3	8310
Miscellaneous Analytical Methods	8.0		9.0	
Cyanide; Total and Amenable to Chlorination	8.0	8.55	9.0	9010
Total Organic Halogen (TOX)	8.0	8.66	9.0	9020
Sulfides	8.0	8.67	9.0	9030
pH Measurement	5.0	5.2	9.0	9040
Quality Control/Quality Assurance	10.0		10.1	
Introduction	10.0		10.1	
Program Design	10.0		10.2	

TABLE 3—SAMPLING AND ANALYSIS METHODS CONTAINED IN SW-846—Continued

Title	First edition		Second edition	
	Section No.	Method No.	Section No.	Method No.
Sampling	10.0		10.3	
Analysis	10.0		10.4	
Data Handling	10.0		10.5	

[1] See specific metal.

[48 FR 15257, Apr. 8, 1983]

APPENDIX IV—[RESERVED FOR RADIOACTIVE WASTE TEST METHODS]

APPENDIX V—[RESERVED FOR INFECTIOUS WASTE TREATMENT SPECIFICATIONS]

APPENDIX VI—[RESERVED FOR ETIOLOGIC AGENTS]

APPENDIX VII—BASIS FOR LISTING HAZARDOUS WASTE

EPA hazardous waste No.	Hazardous constituents for which listed
F001	Tetrachloroethylene, methylene chloride trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, chlorinated fluorocarbons.
F002	Tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, chlorobenzene, 1,1,2-trichloro-1,2,2-trifluoroethane, ortho-dichlorobenzene, trichlorofluoromethane.
F003	N.A.
F004	Cresols and cresylic acid, nitrobenzene.
F005	Toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine.
F006	Cadmium, hexavalent chromium, nickel, cyanide (complexed).
F007	Cyanide (salts).
F008	Cyanide (salts).
F009	Cyanide (salts).
F010	Cyanide (salts).
F011	Cyanide (salts).
F012	Cyanide (complexed).
F019	Hexavalent chromium, cyanide (complexed).
F024	Chloromethane, dichloromethane, trichloromethane, carbon tetrachloride, chloroethylene, 1,1-dichloroethane, 1,2-dichloroethane, trans-1-2-dichloroethylene, 1,1-dichloroethylene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, trichloroethylene, 1,1,1,2-tetra-chloroethane, 1,1,2,2-tetrachloroethane, tetrachloroethylene, pentachloroethane, hexachloroethane, allyl chloride (3-chloropropene), dichloropropane, dichloropropene, 2-chloro-1,3-butadiene, hexachloro-1,3-butadiene, hexachlorocyclopentadiene, hexachlorocyclohexane, benzene, chlorbenzene, dichlorobenzenes, 1,2,4-trichlorobenzene, tetrachlorobenzene, pentachlorobenzene, hexachlorobenzene, toluene, naphthalene.
K001	Pentachlorophenol, phenol, 2-chlorophenol, p-chloro-m-cresol, 2,4-dimethylphenyl, 2,4-dinitrophenol, trichlorophenols, tetrachlorophenols, 2,4-dinitrophenol, creosote, chrysene, naphthalene, fluoranthene, benzo(b)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, benz(a)anthracene, dibenz(a)anthracene, acenaphthalene.
K002	Hexavalent chromium, lead
K003	Hexavalent chromium, lead.
K004	Hexavalent chromium.
K005	Hexavalent chromium, lead.
K006	Hexavalent chromium.
K007	Cyanide (complexed), hexavalent chromium.
K008	Hexavalent chromium.
K009	Chloroform, formaldehyde, methylene chloride, methyl chloride, paraldehyde, formic acid.
K010	Chloroform, formaldehyde, methylene chloride, methyl chloride, paraldehyde, formic acid, chloroacetaldehyde.
K011	Acrylonitrile, acetonitrile, hydrocyanic acid.
K013	Hydrocyanic acid, acrylonitrile, acetonitrile.
K014	Acetonitrile, acrylamide.
K015	Benzyl chloride, chlorobenzene, toluene, benzotrichloride.
K016	Hexachlorobenzene, hexachlorobutadiene, carbon tetrachloride, hexachloroethane, perchloroethylene.
K017	Epichlorohydrin, chloroethers [bis(chloromethyl) ether and bis (2-chloroethyl) ethers], trichloropropane, dichloropropanols.
K018	1,2-dichloroethane, trichloroethylene, hexachlorobutadiene, hexachlorobenzene.
K019	Ethylene dichloride, 1,1,1-trichloroethane, 1,1,2-trichloroethane, tetrachloroethanes (1,1,2,2-tetrachloroethane and 1,1,1,2-tetrachloroethane), trichloroethylene, tetrachloroethylene, carbon tetrachloride, chloroform, vinyl chloride, vinylidene chloride.
K020	Ethylene dichloride, 1,1,1-trichloroethane, 1,1,2-trichloroethane, tetrachloroethanes (1,1,2,2-tetrachloroethane and 1,1,1,2-tetrachloroethane), trichloroethylene, tetrachloroethylene, carbon tetrachloride, chloroform, vinyl chloride, vinylidene chloride.
K021	Antimony, carbon tetrachloride, chloroform.
K022	Phenol, tars (polycyclic aromatic hydrocarbons).
K023	Phthalic anhydride, maleic anhydride.
K024	Phthalic anhydride, 1,4-naphthoquinone.
K025	Meta-dinitrobenzene, 2,4-dinitrotoluene.
K026	Paraldehyde, pyridines, 2-picoline.
K027	Toluene diisocyanate, toluene-2, 4-diamine.
K028	1,1,1-trichloroethane, vinyl chloride.

EPA hazardous waste No.	Hazardous constituents for which listed
K029	1,2-dichloroethane, 1,1,1-trichloroethane, vinyl chloride, vinylidene chloride, chloroform.
K030	Hexachlorobenzene, hexachlorobutadiene, hexachloroethane, 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane, ethylene dichloride.
K031	Arsenic.
K032	Hexachlorocyclopentadiene.
K033	Hexachlorocyclopentadiene.
K034	Hexachlorocyclopentadiene.
K035	Creosote, chrysene, naphthalene, fluoranthene benzo(b) fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd) pyrene, benzo(a)anthracene, dibenzo(a)anthracene, acenaphthalene.
K036	Toluene, phosphorodithioic and phosphorothioic acid esters.
K037	Toluene, phosphorodithioic and phosphorothioic acid esters.
K038	Phorate, formaldehyde, phosphorodithioic and phosphorothioic acid esters.
K039	Phosphorodithioic and phosphorothioic acid esters.
K040	Phorate, formaldehyde, phosphorodithioic and phosphorothioic acid esters.
K041	Toxaphene.
K042	Hexachlorobenzene, ortho-dichlorobenzene.
K043	2,4-dichlorophenol, 2,6-dichlorophenol, 2,4,6-trichlorophenol.
K044	N.A.
K045	N.A.
K046	Lead.
K047	N.A.
K048	Hexavalent chromium, lead.
K049	Hexavalent chromium, lead.
K050	Hexavalent chromium.
K051	Hexavalent chromium, lead.
K052	Lead.
K060	Cyanide, napthalene, phenolic compounds, arsenic.
K061	Hexavalent chromium, lead, cadmium.
K062	Hexavalent chromium, lead.
K069	Hexavalent chromium, lead, cadmium.
K071	Mercury.
K073	Chloroform, carbon tetrachloride, hexachloroethane, trichloroethane, tetrachloroethylene, dichloroethylene, 1,1,2,2-tetrachloroethane.
K083	Aniline, diphenylamine, nitrobenzene, phenylenediamine.
K084	Arsenic.
K085	Benzene, dichlorobenzenes, trichlorobenzenes, tetrachlorobenzenes, pentachlorobenzene, hexachlorobenzene, benzyl chloride.
K086	Lead, hexavalent chromium.
K087	Phenol, naphthalene.
K093	Phthalic anhydride, maleic anhydride.
K094	Phthalic anhydride.
K095	1,1,2-trichloroethane, 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane.
K096	1,2-dichloroethane, 1,1,1-trichloroethane, 1,1,2-trichloroethane.
K097	Chlordane, heptachlor.
K098	Toxaphene.
K099	2,4-dichlorophenol, 2,4,6-trichlorophenol.
K100	Hexavalent chromium, lead, cadmium.
K101	Arsenic.
K102	Arsenic.
K103	Aniline, nitrobenzene, phenylenediamine.
K104	Aniline, benzene, diphenylamine, nitrobenzene, phenylenediamine.
K105	Benzene, monochlorobenzene, dichlorobenzenes, 2,4,6-trichlorophenol.
K106	Mercury.

N.A.—Waste is hazardous because it fails the test for the characteristic of ignitability, corrosivity, or reactivity.

[46 FR 4619, Jan. 16, 1981, as amended at 46 FR 27477, May 20, 1981; 49 FR 5312, Feb. 10, 1984]

EFFECTIVE DATE NOTE: At 49 FR 5312, Feb. 10, 1984, the entry identified by EPA hazardous waste no. F024, was added to the table in Appendix VII, effective August 10, 1984.

APPENDIX VIII—HAZARDOUS CONSTITUENTS

Acetonitrile (Ethanenitrile)
Acetophenone (Ethanone, 1-phenyl)
3-(alpha-Acetonylbenzyl)-4-hydroxycoumarin and salts (Warfarin)
2-Acetylaminofluorene (Acetamide, N-(9H-fluoren-2-yl)-)
Acetyl chloride (Ethanoyl chloride)
1-Acetyl-2-thiourea (Acetamide, N-(aminothioxomethyl)-)
Acrolein (2-Propenal)
Acrylamide (2-Propenamide)
Acrylonitrile (2-Propenenitrile)
Aflatoxins
Aldrin (1,2,3,4,10,10-Hexachloro-1,4,4a,5,8,8a,8b-hexahydro-endo,exo-1,4:5,8-Dimethanonaphthalene)
Allyl alcohol (2-Propen-1-ol)
Aluminum phosphide
4-Aminobiphenyl ([1,1'-Biphenyl]-4-amine)
6-Amino-1,1a,2,8,8a,8b-hexahydro-8-(hydroxymethyl)-8a-methoxy-5-methylcarbamate azirino[2',3':3,4]pyrrolo[1,2-a]indole-4,7-dione, (ester) (Mitomycin C) (Azirino[2'3':3,4]pyrrolo(1,2-a)indole-4,7-dione, 6-amino-8-[((aminocarbonyl)oxy)methyl]-1,1a,2,8,8a,8b-hexahydro-8amethoxy-5-methy-)
5-(Aminomethyl)-3-isoxazolol (3(2H)-Isoxazolone, 5-(aminomethyl)-) 4-Aminopyridine (4-Pyridinamine)
Amitrole (1H-1,2,4-Triazol-3-amine)
Aniline (Benzenamine)
Antimony and compounds, N.O.S.*
Aramite (Sulfurous acid, 2-chloroethyl-, 2-[4-(1,1-dimethylethyl)phenoxy]-1-methylethyl ester)

* The abbreviation N.O.S. (not otherwise specified) signifies those members of the general class not specifically listed by name in this appendix.

Arsenic and compounds, N.O.S.*
Arsenic acid (Orthoarsenic acid)
Arsenic pentoxide (Arsenic (V) oxide)
Arsenic trioxide (Arsenic (III) oxide)
Auramine (Benzenamine, 4,4'-carbonimidoylbis[N,N-Dimethyl-, monohydrochloride)
Azaserine (L-Serine, diazoacetate (ester))
Barium and compounds, N.O.S.*
Barium cyanide
Benz[c]acridine (3,4-Benzacridine)
Benz[a]anthracene (1,2-Benzanthracene)
Benzene (Cyclohexatriene)
Benzenearsonic acid (Arsonic acid, phenyl-)
Benzene, dichloromethyl- (Benzal chloride)
Benzenethiol (Thiophenol)
Benzidine ([1,1'-Biphenyl]-4,4'diamine)
Benzo[b]fluoranthene (2,3-Benzofluoranthene)
Benzo[j]fluoranthene (7,8-Benzofluoranthene)
Benzo[a]pyrene (3,4-Benzopyrene)
p-Benzoquinone (1,4-Cyclohexadienedione)
Benzotrichloride (Benzene, trichloromethyl)
Benzyl chloride (Benzene, (chloromethyl)-)
Beryllium and compounds, N.O.S.*
Bis(2-chloroethoxy)methane (Ethane, 1,1'-[methylenebis(oxy)]bis[2-chloro-])
Bis(2-chloroethyl) ether (Ethane, 1,1'-oxybis[2-chloro-])
N,N-Bis(2-chloroethyl)-2-naphthylamine (Chlornaphazine)
Bis(2-chloroisopropyl) ether (Propane, 2,2'-oxybis[2-chloro-])
Bis(chloromethyl) ether (Methane, oxybis[chloro-])
Bis(2-ethylhexyl) phthalate (1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester)
Bromoacetone (2-Propanone, 1-bromo-)
Bromomethane (Methyl bromide)
4-Bromophenyl phenyl ether (Benzene, 1-bromo-4-phenoxy-)
Brucine (Strychnidin-10-one, 2,3-dimethoxy-)
2-Butanone peroxide (Methyl ethyl ketone, peroxide)
Butyl benzyl phthalate (1,2-Benzenedicarboxylic acid, butyl phenylmethyl ester)
2-sec-Butyl-4,6-dinitrophenol (DNBP) (Phenol, 2,4-dinitro-6-(1-methylpropyl)-)
Cadmium and compounds, N.O.S.*
Calcium chromate (Chromic acid, calcium salt)
Calcium cyanide
Carbon disulfide (Carbon bisulfide)
Carbon oxyfluoride (Carbonyl fluoride)
Chloral (Acetaldehyde, trichloro-)
Chlorambucil (Butanoic acid, 4-[bis(2-chloroethyl)amino]benzene-)
Chlordane (alpha and gamma isomers) (4,7-Methanoindan, 1,2,4,5,6,7,8,8-octachloro-3,4,7,7a-tetrahydro-) (alpha and gamma isomers)
Chlorinated benzenes, N.O.S.*
Chlorinated ethane, N.O.S.*
Chlorinated fluorocarbons, N.O.S.*
Chlorinated naphthalene, N.O.S.*
Chlorinated phenol, N.O.S.*
Chloroacetaldehyde (Acetaldehyde, chloro-)
Chloroalkyl ethers, N.O.S.*
p-Chloroaniline (Benzenamine, 4-chloro-)
Chlorobenzene (Benzene, chloro-)
Chlorobenzilate (Benzeneacetic acid, 4-chloro-alpha-(4-chlorophenyl)-alpha-hydroxy-, ethyl ester)
2-Chloro-1, 3-butadiene (chloroprene)
p-Chloro-m-cresol (Phenol, 4-chloro-3-methyl)
1-Chloro-2,3-epoxypropane (Oxirane, 2-(chloromethyl)-)
2-Chloroethyl vinyl ether (Ethene, (2-chloroethoxy)-)
Chloroform (Methane, trichloro-)
Chloromethane (Methyl chloride)
Chloromethyl methyl ether (Methane, chloromethoxy-)
2-Chloronaphthalene (Naphthalene, beta-chloro-)
2-Chlorophenol (Phenol, o-chloro-)
1-(o-Chlorophenyl)thiourea (Thiourea, (2-chlorophenyl)-)
3-Chloropropene (allyl chloride)
3-Chloropropionitrile (Propanenitrile, 3-chloro-)
Chromium and compounds, N.O.S.*
Chrysene (1,2-Benzphenanthrene)
Citrus red No. 2 (2-Naphthol, 1-[(2,5-dimethoxyphenyl)azo]-)
Coal tars
Copper cyanide
Creosote (Creosote, wood)
Cresols (Cresylic acid) (Phenol, methyl-)
Crotonaldehyde (2-Butenal)
Cyanides (soluble salts and complexes), N.O.S.*
Cyanogen (Ethanedinitrile)
Cyanogen bromide (Bromine cyanide)
Cyanogen chloride (Chlorine cyanide)
Cycasin (beta-D-Glucopyranoside, (methyl-ONN-azoxy)methyl-)
2-Cyclohexyl-4,6-dinitrophenol (Phenol, 2-cyclohexyl-4,6-dinitro-)
Cyclophosphamide (2H-1,3,2,-Oxazaphosphorine, [bis(2-chloroethyl)amino]-tetrahydro-, 2-oxide)
Daunomycin (5,12-Naphthacenedione, (8S-cis)-8-acetyl-10-[(3-amino-2,3,6-trideoxy)-alpha-L-lyxo-hexopyranosyl)oxy]-7,8,9,10-tetrahydro-6,8,11-trihydroxy-1-methoxy-)
DDD (Dichlorodiphenyldichloroethane) (Ethane, 1,1-dichloro-2,2-bis(p-chlorophenyl)-)
DDE (Ethylene, 1,1-dichloro-2,2-bis(4-chlorophenyl)-)
DDT (Dichlorodiphenyltrichloroethane) (Ethane, 1,1,1-trichloro-2,2-bis(p-chlorophenyl)-)
Diallate (S-(2,3-dichloroallyl) diisopropylthiocarbamate)
Dibenz[a,h]acridine (1,2,5,6-Dibenzacridine)
Dibenz[a,j]acridine (1,2,7,8-Dibenzacridine)

Dibenz[a,h]anthracene (1,2,5,6-Dibenzanthracene)
7H-Dibenzo[c,g]carbazole (3,4,5,6-Dibenzcarbazole)
Dibenzo[a,e]pyrene (1,2,4,5-Dibenzpyrene)
Dibenzo[a,h]pyrene (1,2,5,6-Dibenzpyrene)
Dibenzo[a,i]pyrene (1,2,7,8-Dibenzpyrene)
1,2-Dibromo-3-chloropropane (Propane, 1,2-dibromo-3-chloro-)
1,2-Dibromoethane (Ethylene dibromide)
Dibromomethane (Methylene bromide)
Di-n-butyl phthalate (1,2-Benzenedicarboxylic acid, dibutyl ester)
o-Dichlorobenzene (Benzene, 1,2-dichloro-)
m-Dichlorobenzene (Benzene, 1,3-dichloro-)
p-Dichlorobenzene (Benzene, 1,4-dichloro-)
Dichlorobenzene, N.O.S.* (Benzene, dichloro-, N.O.S.*)
3,3'-Dichlorobenzidine ([1,1'-Biphenyl]-4,4'-diamine, 3,3'-dichloro-)
1,4-Dichloro-2-butene (2-Butene, 1,4-dichloro-)
Dichlorodifluoromethane (Methane, dichlorodifluoro-)
1,1-Dichloroethane (Ethylidene dichloride)
1,2-Dichloroethane (Ethylene dichloride)
trans-1,2-Dichloroethene (1,2-Dichloroethylene)
Dichloroethylene, N.O.S.* (Ethene, dichloro-, N.O.S.*)
1,1-Dichloroethylene (Ethene, 1,1-dichloro-)
Dichloromethane (Methylene chloride)
2,4-Dichlorophenol (Phenol, 2,4-dichloro-)
2,6-Dichlorophenol (Phenol, 2,6-dichloro-)
2,4-Dichlorophenoxyacetic acid (2,4-D), salts and esters (Acetic acid, 2,4-dichlorophenoxy-, salts and esters)
Dichlorophenylarsine (Phenyl dichloroarsine)
Dichloropropane, N.O.S.* (Propane, dichloro-, N.O.S.*)
1,2-Dichloropropane (Propylene dichloride)
Dichloropropanol, N.O.S.* (Propanol, dichloro-, N.O.S.*)
Dichloropropene, N.O.S.* (Propene, dichloro-, N.O.S.*)
1,3-Dichloropropene (1-Propene, 1,3-dichloro-)
Dieldrin (1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octa-hydro-endo,exo-1,4:5,8-Dimethanonaphthalene)
1,2:3,4-Diepoxybutane (2,2'-Bioxirane)
Diethylarsine (Arsine, diethyl-)
N,N-Diethylhydrazine (Hydrazine, 1,2-diethyl)
O,O-Diethyl S-methyl ester of phosphorodithioic acid (Phosphorodithioic acid, O,O-diethyl S-methyl ester
O,O-Diethylphosphoric acid, O-p-nitrophenyl ester (Phosphoric acid, diethyl p-nitrophenyl ester)
Diethyl phthalate (1,2-Benzenedicarboxylic acid, diethyl ester)
O,O-Diethyl O-2-pyrazinyl phosphorothioate (Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester
Diethylstilbesterol (4,4'-Stilbenediol, alpha,alpha-diethyl, bis(dihydrogen phosphate, (E)-)
Dihydrosafrole (Benzene, 1,2-methylenedioxy-4-propyl-)
3,4-Dihydroxy-alpha-(methylamino)methyl benzyl alcohol (1,2-Benzenediol, 4-[1-hydroxy-2-(methylamino)ethyl]-)
Diisopropylfluorophosphate (DFP) (Phosphorofluoridic acid, bis(1-methylethyl) ester)
Dimethoate (Phosphorodithioic acid, O,O-dimethyl S-[2-(methylamino)-2-oxoethyl] ester
3,3'-Dimethoxybenzidine ([1,1'-Biphenyl]-4,4'diamine, 3-3'-dimethoxy-)
p-Dimethylaminoazobenzene (Benzenamine, N,N-dimethyl-4-(phenylazo)-)
7,12-Dimethylbenz[a]anthracene (1,2-Benzanthracene, 7,12-dimethyl-)
3,3'-Dimethylbenzidine ([1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethyl-)
Dimethylcarbamoyl chloride (Carbamoyl chloride, dimethyl-)
1,1-Dimethylhydrazine (Hydrazine, 1,1-dimethyl-)
1,2-Dimethylhydrazine (Hydrazine, 1,2-dimethyl-)
3,3-Dimethyl-1-(methylthio)-2-butanone, O-[(methylamino) carbonyl]oxime (Thiofanox)
alpha,alpha-Dimethylphenethylamine (Ethanamine, 1,1-dimethyl-2-phenyl-)
2,4-Dimethylphenol (Phenol, 2,4-dimethyl-)
Dimethyl phthalate (1,2-Benzenedicarboxylic acid, dimethyl ester)
Dimethyl sulfate (Sulfuric acid, dimethyl ester)
Dinitrobenzene, N.O.S.* (Benzene, dinitro-, N.O.S.*)
4,6-Dinitro-o-cresol and salts (Phenol, 2,4-dinitro-6-methyl-, and salts)
2,4-Dinitrophenol (Phenol, 2,4-dinitro-)
2,4-Dinitrotoluene (Benzene, 1-methyl-2,4-dinitro-)
2,6-Dinitrotoluene (Benzene, 1-methyl-2,6-dinitro-)
Di-n-octyl phthalate (1,2-Benzenedicarboxylic acid, dioctyl ester)
1,4-Dioxane (1,4-Diethylene oxide)
Diphenylamine (Benzenamine, N-phenyl-)
1,2-Diphenylhydrazine (Hydrazine, 1,2-diphenyl-)
Di-n-propylnitrosamine (N-Nitroso-di-n-propylamine)
Disulfoton (O,O-diethyl S-[2-(ethylthio)ethyl] phosphorodithioate)
2,4-Dithiobiuret (Thioimidodicarbonic diamide)
Endosulfan (5-Norbornene, 2,3-dimethanol, 1,4,5,6,7,7-hexachloro-, cyclic sulfite)
Endrin and metabolites (1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-endo,endo-1,4:5,8-dimethanonaphthalene, and metabolites)

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Ethyl carbamate (Urethan) (Carbamic acid, ethyl ester)
Ethyl cyanide (propanenitrile)
Ethylenebisdithiocarbamic acid, salts and esters (1,2-Ethanediylbiscarbamodithioic acid, salts and esters
Ethyleneimine (Aziridine)
Ethylene oxide (Oxirane)
Ethylenethiourea (2-Imidazolidinethione)
Ethyl methacrylate (2-Propenoic acid, 2-methyl-, ethyl ester)
Ethyl methanesulfonate (Methanesulfonic acid, ethyl ester)
Fluoranthene (Benzo[j,k]fluorene)
Fluorine
2-Fluoroacetamide (Acetamide, 2-fluoro-)
Fluoroacetic acid, sodium salt (Acetic acid, fluoro-, sodium salt)
Formaldehyde (Methylene oxide)
Formic acid (Methanoic acid)
Glycidylaldehyde (1-Propanol-2,3-epoxy)
Halomethane, N.O.S.*
Heptachlor (4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-)
Heptachlor epoxide (alpha, beta, and gamma isomers) (4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-2,3-epoxy-3a,4,7,7-tetrahydro-, alpha, beta, and gamma isomers)
Hexachlorobenzene (Benzene, hexachloro-)
Hexachlorobutadiene (1,3-Butadiene, 1,1,2,3,4,4-hexachloro-)
Hexachlorocyclohexane (all isomers) (Lindane and isomers)
Hexachlorocyclopentadiene (1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-)
Hexachloroethane (Ethane, 1,1,1,2,2,2-hexachloro-)
1,2,3,4,10,10-Hexachloro-1,4,4a,5,8,8a-hexahydro-1,4:5,8-endo,endo-dimethanonaphthalene (Hexachlorohexahydro-endo,endo-dimethanonaphthalene)
Hexachlorophene (2,2'-Methylenebis(3,4,6-trichlorophenol))
Hexachloropropene (1-Propene, 1,1,2,3,3,3-hexachloro-)
Hexaethyl tetraphosphate (Tetraphosphoric acid, hexaethyl ester)
Hydrazine (Diamine)
Hydrocyanic acid (Hydrogen cyanide)
Hydrofluoric acid (Hydrogen fluoride)
Hydrogen sulfide (Sulfur hydride)
Hydroxydimethylarsine oxide (Cacodylic acid)
Indeno(1,2,3-cd)pyrene (1,10-(1,2-phenylene)pyrene)
Iodomethane (Methyl iodide)
Iron dextran (Ferric dextran)
Isocyanic acid, methyl ester (Methyl isocyanate)
Isobutyl alcohol (1-Propanol, 2-methyl-)
Isosafrole (Benzene, 1,2-methylenedioxy-4-allyl-)
Kepone (Decachlorooctahydro-1,3,4-Methano-2H-cyclobuta[cd]pentalen-2-one)
Lasiocarpine (2-Butenoic acid, 2-methyl-, 7-[(2,3-dihydroxy-2-(1-methoxyethyl)-3-methyl-1-oxobutoxy)methyl]-2,3,5,7a-tetrahydro-1H-pyrrolizin-1-yl ester)
Lead and compounds, N.O.S.*
Lead acetate (Acetic acid, lead salt)
Lead phosphate (Phosphoric acid, lead salt)
Lead subacetate (Lead, bis(acetato-O)tetrahydroxytri-)
Maleic anhydride (2,5-Furandione)
Maleic hydrazide (1,2-Dihydro-3,6-pyridazinedione)
Malononitrile (Propanedinitrile)
Melphalan (Alanine, 3-[p-bis(2-chloroethyl)amino]phenyl-, L-)
Mercury fulminate (Fulminic acid, mercury salt)
Mercury and compounds, N.O.S.*
Methacrylonitrile (2-Propenenitrile, 2-methyl-)
Methanethiol (Thiomethanol)
Methapyrilene (Pyridine, 2-[(2-dimethylamino)ethyl]-2-thenylamino-)
Metholmyl (Acetimidic acid, N-[(methylcarbamoyl)oxy]thio-, methyl ester
Methoxychlor (Ethane, 1,1,1-trichloro-2,2'-bis(p-methoxyphenyl)-)
2-Methylaziridine (1,2-Propylenimine)
3-Methylcholanthrene (Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-)
Methyl chlorocarbonate (Carbonochloridic acid, methyl ester)
4,4'-Methylenebis(2-chloroaniline) (Benzenamine, 4,4'-methylenebis-(2-chloro-)
Methyl ethyl ketone (MEK) (2-Butanone)
Methyl hydrazine (Hydrazine, methyl-)
2-Methyllactonitrile (Propanenitrile, 2-hydroxy-2-methyl-)
Methyl methacrylate (2-Propenoic acid, 2-methyl-, methyl ester)
Methyl methanesulfonate (Methanesulfonic acid, methyl ester)
2-Methyl-2-(methylthio)propionaldehyde-o-(methylcarbonyl) oxime (Propanal, 2-methyl-2-(methylthio)-, O-[(methylamino)carbonyl]oxime)
N-Methyl-N'-nitro-N-nitrosoguanidine (Guanidine, N-nitroso-N-methyl-N'-nitro-)
Methyl parathion (O,O-dimethyl O-(4-nitrophenyl) phosphorothioate)
Methylthiouracil (4-1H-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-)
Mustard gas (Sulfide, bis(2-chloroethyl)-)
Naphthalene
1,4-Naphthoquinone (1,4-Naphthalenedione)
1-Naphthylamine (alpha-Naphthylamine)
2-Naphthylamine (beta-Naphthylamine)
1-Naphthyl-2-thiourea (Thiourea, 1-naphthalenyl-)
Nickel and compounds, N.O.S.*
Nickel carbonyl (Nickel tetracarbonyl)
Nickel cyanide (Nickel (II) cyanide)

Nicotine and salts (Pyridine, (S)-3-(1-methyl-2-pyrrolidinyl)-, and salts)
Nitric oxide (Nitrogen (II) oxide)
p-Nitroaniline (Benzenamine, 4-nitro-)
Nitrobenzine (Benzene, nitro-)
Nitrogen dioxide (Nitrogen (IV) oxide)
Nitrogen mustard and hydrochloride salt (Ethanamine, 2-chloro-, N-(2-chloroethyl)-N-methyl-, and hydrochloride salt)
Nitrogen mustard N-Oxide and hydrochloride salt (Ethanamine, 2-chloro-, N-(2-chloroethyl)-N-methyl-, and hydrochloride salt)
Nitroglycerine (1,2,3-Propanetriol, trinitrate)
4-Nitrophenol (Phenol, 4-nitro-)
4-Nitroquinoline-1-oxide (Quinoline, 4-nitro-1-oxide-)
Nitrosamine, N.O.S.*
N-Nitrosodi-n-butylamine (1-Butanamine, N-butyl-N-nitroso-)
N-Nitrosodiethanolamine (Ethanol, 2,2'-(nitrosoimino)bis-)
N-Nitrosodiethylamine (Ethanamine, N-ethyl-N-nitroso-)
N-Nitrosodimethylamine (Dimethylnitrosamine)
N-Nitroso-N-ethylurea (Carbamide, N-ethyl-N-nitroso-)
N-Nitrosomethylethylamine (Ethanamine, N-methyl-N-nitroso-)
N-Nitroso-N-methylurea (Carbamide, N-methyl-N-nitroso-)
N-Nitroso-N-methylurethane (Carbamic acid, methylnitroso-, ethyl ester)
N-Nitrosomethylvinylamine (Ethenamine, N-methyl-N-nitroso-)
N-Nitrosomorpholine (Morpholine, N-nitroso-)
N-Nitrosonornicotine (Nornicotine, N-nitroso-)
N-Nitrosopiperidine (Pyridine, hexahydro-, N-nitroso-)
Nitrosopyrrolidine (Pyrrole, tetrahydro-, N-nitroso-)
N-Nitrososarcosine (Sarcosine, N-nitroso-)
5-Nitro-o-toluidine (Benzenamine, 2-methyl-5-nitro-)
Octamethylpyrophosphoramide (Diphosphoramide, octamethyl-)
Osmium tetroxide (Osmium (VIII) oxide)
7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid (Endothal)
Paraldehyde (1,3,5-Trioxane, 2,4,6-trimethyl-)
Parathion (Phosphorothioic acid, O,O-diethyl O-(p-nitrophenyl) ester
Pentachlorobenzene (Benzene, pentachloro-)
Pentachloroethane (Ethane, pentachloro-)
Pentachloronitrobenzene (PCNB) (Benzene, pentachloronitro-)
Pentachlorophenol (Phenol, pentachloro-)
Phenacetin (Acetamide, N-(4-ethoxyphenyl)-)
Phenol (Benzene, hydroxy-)
Phenylenediamine (Benzenediamine)
Phenylmercury acetate (Mercury, acetatophenyl-)
N-Phenylthiourea (Thiourea, phenyl-)
Phosgene (Carbonyl chloride)
Phosphine (Hydrogen phosphide)
Phosphorodithioic acid, O,O-diethyl S-[(ethylthio)methyl] ester (Phorate)
Phosphorothioic acid, O,O-dimethyl O-[p-((dimethylamino)sulfonyl)phenyl] ester (Famphur)
Phthalic acid esters, N.O.S.* (Benzene, 1,2-dicarboxylic acid, esters, N.O.S.*)
Phthalic anhydride (1,2-Benzenedicarboxylic acid anhydride)
2-Picoline (Pyridine, 2-methyl-)
Polychlorinated biphenyl, N.O.S.*
Potassium cyanide
Potassium silver cyanide (Argentate(1-), dicyano-, potassium)
Pronamide (3,5-Dichloro-N-(1,1-dimethyl-2-propynyl)benzamide)
1,3-Propane sultone (1,2-Oxathiolane, 2,2-dioxide)
n-Propylamine (1-Propanamine)
Propylthiouracil (Undecamethylenediamine, N,N'-bis(2-chlorobenzyl)-, dihydrochloride)
2-Propyn-1-ol (Propargyl alcohol)
Pyridine
Reserpine (Yohimban-16-carboxylic acid, 11,17-dimethoxy-18-[(3,4,5-trimethoxybenzoyl)oxy]-, methyl ester)
Resorcinol (1,3-Benzenediol)
Saccharin and salts (1,2-Benzoisothiazolin-3-one, 1,1-dioxide, and salts)
Safrole (Benzene, 1,2-methylenedioxy-4-allyl-)
Selenious acid (Selenium dioxide)
Selenium and compounds, N.O.S.*
Selenium sulfide (Sulfur selenide)
Selenourea (Carbamimidoselenoic acid)
Silver and compounds, N.O.S.*
Silver cyanide
Sodium cyanide
Streptozotocin (D-Glucopyranose, 2-deoxy-2-(3-methyl-3-nitrosoureido)-)
Strontium sulfide
Strychnine and salts (Strychnidin-10-one, and salts)
1,2,4,5-Tetrachlorobenzene (Benzene, 1,2,4,5-tetrachloro-)
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD) (Dibenzo-p-dioxin, 2,3,7,8-tetrachloro-)
Tetrachloroethane, N.O.S.* (Ethane, tetrachloro-, N.O.S.*)
1,1,1,2-Tetrachlorethane (Ethane, 1,1,1,2-tetrachloro-)
1,1,2,2-Tetrachlorethane (Ethane, 1,1,2,2-tetrachloro-)
Tetrachloroethane (Ethene, 1,1,2,2-tetrachloro-)
Tetrachloromethane (Carbon tetrachloride)
2,3,4,6,-Tetrachlorophenol (Phenol, 2,3,4,6-tetrachloro-)
Tetraethyldithiopyrophosphate (Dithiopyrophosphoric acid, tetraethyl-ester)

Tetraethyl lead (Plumbane, tetraethyl-)
Tetraethylpyrophosphate (Pyrophosphoric acide, tetraethyl ester)
Tetranitromethane (Methane, tetranitro-)
Thallium and compounds, N.O.S.*
Thallic oxide (Thallium (III) oxide)
Thallium (I) acetate (Acetic acid, thallium (I) salt)
Thallium (I) carbonate (Carbonic acid, dithallium (I) salt)
Thallium (I) chloride
Thallium (I) nitrate (Nitric acid, thallium (I) salt)
Thallium selenite
Thallium (I) sulfate (Sulfuric acid, thallium (I) salt)
Thioacetamide (Ethanethioamide)
Thiosemicarbazide (Hydrazinecarbothioamide)
Thiourea (Carbamide thio-)
Thiuram (Bis(dimethylthiocarbamoyl) disulfide)
Toluene (Benzene, methyl-)
Toluenediamine (Diaminotoluene)
o-Toluidine hydrochloride (Benzenamine, 2-methyl-, hydrochloride)
Tolylene diisocyanate (Benzene, 1,3-diisocyanatomethyl-)
Toxaphene (Camphene, octachloro-)
Tribromomethane (Bromoform)
1,2,4-Trichlorobenzene (Benzene, 1,2,4-trichloro-)
1,1,1-Trichloroethane (Methyl chloroform)
1,1,2-Trichloroethane (Ethane, 1,1,2-trichloro-)
Trichloroethene (Trichloroethylene)
Trichloromethanethiol (Methanethiol, trichloro-)
Trichloromonofluoromethane (Methane, trichlorofluoro-)
2,4,5-Trichlorophenol (Phenol, 2,4,5-trichloro-)
2,4,6-Trichlorophenol (Phenol, 2,4,6-trichloro-)
2,4,5-Trichlorophenoxyacetic acid (2,4,5-T) (Acetic acid, 2,4,5-trichlorophenoxy-)
2,4,5-Trichlorophenoxypropionic acid (2,4,5-TP) (Silvex) (Propionoic acid, 2-(2,4,5-trichlorophenoxy)-)
Trichloropropane, N.O.S.* (Propane, trichloro-, N.O.S.*)
1,2,3-Trichloropropane (Propane, 1,2,3-trichloro-)
O,O,O-Triethyl phosphorothioate (Phosphorothioic acid, O,O,O-triethyl ester)
sym-Trinitrobenzene (Benzene, 1,3,5-trinitro-)
Tris(1-azridinyl) phosphine sulfide (Phosphine sulfide, tris(1-aziridinyl-)
Tris(2,3-dibromopropyl) phosphate (1-Propanol, 2,3-dibromo-, phosphate)
Trypan blue (2,7-Naphthalenedisulfonic acid, 3,3'-[(3,3'-dimethyl(1,1'-biphenyl)-4,4'-diyl)bis(azo)]bis(5-amino-4-hydroxy-, tetrasodium salt)
Uracil mustard (Uracil 5-[bis(2-chloroethyl)amino]-)
Vanadic acid, ammonium salt (ammonium vanadate)
Vanadium pentoxide (Vanadium (V) oxide)
Vinyl chloride (Ethene, chloro-)
Zinc cyanide
Zinc phosphide

[46 FR 27477, May 20, 1981; 46 FR 29708, June 3, 1981; 49 FR 5312, Feb. 10, 1984]

EFFECTIVE DATE NOTE: At 49 FR 5312, Feb. 10, 1984, the entries for 2-Chloro-1, 3-butadiene (chloroprene), and 3-Chloropropene (allyl chloride), were added to the table in Part 261, App. VIII, effective August 10, 1984.

PART 262—STANDARDS APPLICABLE TO GENERATORS OF HAZARDOUS WASTE

Subpart A—General

Subpart B—The Manifest

Subpart C—Pre-Transport Requirements

Subpart D—Recordkeeping and Reporting

Subpart E—Special Conditions

AUTHORITY: Secs. 2002, 3001, 3002, 3003, 3004, and 3005 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended by (42 U.S.C. 6912, 6921 through 6925).

EFFECTIVE DATE NOTE: At 49 FR 10500, Mar. 20, 1984, the authority citation for Part 262 was published as set forth above, effective September 20, 1984. For the convenience of the user, the superseded authority is set forth below.

AUTHORITY: Secs. 1006, 2002, 3002, 3003, 3004, and 3005, Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended (RCRA) (42 U.S.C. 6905, 6912, 6922, 6923, 6924, 6925).

SOURCE: 45 FR 33142, May 19, 1980, unless otherwise noted.

Subpart A—General

§ 262.10 Purpose, scope, and applicability.

(a) These regulations establish standards for generators of hazardous waste.

(b) A generator who treats, stores, or disposes of hazardous waste on-site must only comply with the following sections of this Part with respect to that waste: Section 262.11 for determining whether or not he has a hazardous waste, § 262.12 for obtaining an EPA identification number, § 262.34 for accumulation of hazadous waste, § 262.40 (c) and (d) for recordkeeping, § 262.43 for additional reporting and if applicable, § 262.51 for farmers.

(c) Any person who imports hazardous waste into the United States must comply with the standards applicable to generators established in this part.

(d) A farmer who generates waste pesticides which are hazardous waste and who complies with all of the requirements of § 262.51 is not required to comply with other standards in this Part or 40 CFR Parts 270, 264, or 265 with respect to such pesticides.

(e) A person who generates a hazardous waste as defined by 40 CFR Part 261 is subject to the compliance requirements and penalties prescribed in Section 3008 of the Act if he does not comply with the requirements of this part.

(f) An owner or operator who initiates a shipment of hazardous waste from a treatment, storage, or disposal facility must comply with the generator standards established in this part.

[NOTE: The provisions of § 262.34 are applicable to the on-site accumulation of hazardous waste by generators. Therefore, the provisions of § 262.34 only apply to owners or operators who are shipping hazardous waste which they generated at that facility.]

NOTE: A generator who treats, stores, or disposes of hazardous waste on-site must comply with the applicable standards and permit requirements set forth in 40 CFR Parts 264, 265, and 266 and Part 270.

[45 FR 33142, May 19, 1980, as amended at 45 FR 86970, Dec. 31, 1980; 47 FR 1251, Jan. 11, 1982; 48 FR 14294, Apr. 1, 1983]

§ 262.11 Hazardous waste determination.

A person who generates a solid waste, as defined in 40 CFR 261.2, must determine if that waste is a hazardous waste using the following method:

(a) He should first determine if the waste is excluded from regulation under 40 CFR 261.4.

(b) He must then determine if the waste is listed as a hazardous waste in Subpart D of 40 CFR Part 261.

NOTE: Even if the waste is listed, the generator still has an opportunity under 40 CFR 260.22 to demonstrate to the Administrator that the waste from his particular facility or operation is not a hazardous waste.

(c) If the waste is not listed as a hazardous waste in Subpart D of 40 CFR Part 261, he must determine whether the waste is identified in Subpart C of 40 CFR Part 261 by either:

(1) Testing the waste according to the methods set forth in Subpart C of 40 CFR Part 261, or according to an equivalent method approved by the Administrator under 40 CFR 260.21; or

(2) Applying knowledge of the hazard characteristic of the waste in light of the materials or the processes used.

[45 FR 33142, May 19, 1980, as amended at 45 FR 76624, Nov. 19, 1980]

§ 262.12 EPA identification numbers.

(a) A generator must not treat, store, dispose of, transport, or offer for transportation, hazardous waste without having received an EPA identification number from the Administrator.

(b) A generator who has not received an EPA identification number may obtain one by applying to the Administrator using EPA form 8700-12. Upon receiving the request the Administrator will assign an EPA identification number to the generator.

(c) A generator must not offer his hazardous waste to transporters or to treatment, storage, or disposal facili-

ties that have not received an EPA identification number.

Subpart B—The Manifest

§ 262.20 General requirements.

(a) A generator who transports, or offers for transportation, hazardous waste for offsite treatment, storage, or disposal must prepare a Manifest OMB control number 2000-0404 on EPA form 8700-22, and, if necessary, EPA form 8700-22A, according to the instructions included in the Appendix to Part 262.

(b) A generator must designate on the manifest one facility which is permitted to handle the waste described on the manifest.

(c) A generator may also designate on the manifest one alternate facility which is permitted to handle his waste in the event an emergency prevents delivery of the waste to the primary designated facility.

(d) If the transporter is unable to deliver the hazardous waste to the designated facility or the alternate facility, the generator must either designate another facility or instruct the transporter to return the waste.

[45 FR 33142, May 19, 1980, as amended at 49 FR 10500, Mar. 20, 1984]

EFFECTIVE DATE NOTE: At 49 FR 10500, Mar. 20, 1984, § 262.20(a) was revised, effective September 20, 1984. For the convenience of the user, the superseded text is set out below.

§ 262.20 General requirements.

(a) A generator who transports, or offers for transportation, hazardous waste for offsite treatment, storage, or disposal must prepare a manifest before transporting the waste off-site.

* * * * *

§ 262.21 Acquisition of manifests.

(a) If the State to which the shipment is manifested (consignment State) supplies the manifest and requires its use, then the generator must use that manifest.

(b) If the consignment State does not supply the manifest, but the State in which the generator is located (generator State) supplies the manifest and requires its use, then the generator must use that State's manifest.

(c) If neither the generator State nor the consignment State supplies the manifest, then the generator may obtain the manifest from any source.

[49 FR 10500, Mar. 20, 1984]

EFFECTIVE DATE NOTE: At 49 FR 10500, Mar. 20, 1984, § 262.21 was revised, effective September 20, 1984. For the convenience of the user, the superseded text is set out below.

§ 262.21 Required information.

(a) The manifest must contain all of the following information:

(1) A manifest document number;

(2) The generator's name, mailing address, telephone number, and EPA identification number;

(3) The name and EPA identification number of each transporter;

(4) The name, address and EPA identification number of the designated facility and an alternate facility, if any;

(5) The description of the waste(s) (e.g., proper shipping name, etc.) required by regulations of the U.S. Department of Transportation in 49 CFR 172.101, 172.202, and 172.203;

(6) The total quantity of each hazardous waste by units of weight or volume, and the type and number of containers as loaded into or onto the transport vehicle.

(b) The following certification must appear on the manifest: "This is to certify that the above named materials are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation and the EPA."

§ 262.22 Number of copies.

The manifest consists of at least the number of copies which will provide the generator, each transporter, and the owner or operator of the designated facility with one copy each for their records and another copy to be returned to the generator.

§ 262.23 Use of the manifest.

(a) The generator must:

(1) Sign the manifest certification by hand; and

(2) Obtain the handwritten signature of the initial transporter and date of acceptance on the manifest; and

(3) Retain one copy, in accordance with § 262.40(a).

(b) The generator must give the transporter the remaining copies of the manifest.

(c) For shipments of hazardous waste within the United States solely by water (bulk shipments only), the generator must send three copies of the manifest dated and signed in accordance with this section to the owner or operator of the designated facility or the last water (bulk shipment) transporter to handle the waste in the United States if exported by water. Copies of the manifest are not required for each transporter.

(d) For rail shipments of hazardous waste within the United States which originate at the site of generation, the generator must send at least three copies of the manifest dated and signed in accordance with this section to:

(i) The next non-rail transporter, if any; or

(ii) The designated facility if transported solely by rail; or

(iii) The last rail transporter to handle the waste in the United States if exported by rail.

NOTE: See § 263.20(e) and (f) for special provisions for rail or water (bulk shipment) transporters.

[45 FR 33142, May 19, 1980, as amended at 45 FR 86973, Dec. 31, 1980]

Subpart C—Pre-Transport Requirements

§ 262.30 Packaging.

Before transporting hazardous waste or offering hazardous waste for transportation off-site, a generator must package the waste in accordance with the applicable Department of Transportation regulations on packaging under 49 CFR Parts 173, 178, and 179.

§ 262.31 Labeling.

Before transporting or offering hazardous waste for transportation off-site, a generator must label each package in accordance with the applicable Department of Transportation regulations on hazardous materials under 49 CFR Part 172.

§ 262.32 Marking.

(a) Before transporting or offering hazardous waste for transportation off-site, a generator must mark each package of hazardous waste in accordance with the applicable Department of Transportation regulations on hazardous materials under 49 CFR Part 172;

(b) Before transporting hazardous waste or offering hazardous waste for transportation off-site, a generator must mark each container of 110 gallons or less used in such transportation with the following words and information displayed in accordance with the requirements of 49 CFR 172.304:

HAZARDOUS WASTE—Federal Law Prohibits Improper Disposal. If found, contact the nearest police or public safety authority or the U.S. Environmental Protection Agency.

Generator's Name and Address ————.
Manifest Document Number ————.

§ 262.33 Placarding.

Before transporting hazardous waste or offering hazardous waste for transportation off-site, a generator must placard or offer the initial transporter the appropriate placards according to Department of Transportation regulations for hazardous materials under 49 CFR Part 172, Subpart F.

§ 262.34 Accumulation time.

(a) A generator may accumulate hazardous waste on-site for 90 days or less without a permit or without having interim status provided that:

(1) The waste is placed in containers and the generator complies with Subpart I of 40 CFR Part 265, or the waste is placed in tanks and the generator complies with Subpart J of 40 CFR Part 265 except § 265.193;

(2) The date upon which each period of accumulation begins is clearly marked and visible for inspection on each container;

(3) While being accumulated on-site, each container and tank is labeled or marked clearly with the words, "Hazardous Waste"; and

(4) The generator complies with the requirements for owners or operators

in Subparts C and D in 40 CFR Part 265 and with § 265.16.

(b) A generator who accumulates hazardous waste for more than 90 days is an operator of a storage facility and is subject to the requirements of 40 CFR Parts 264 and 265 and the permit requirements of 40 CFR Part 270 unless he has been granted an extension to the 90-day period. Such extension may be granted by EPA if hazardous wastes must remain on-site for longer than 90 days due to unforeseen, temporary, and uncontrollable circumstances. An extension of up to 30 days may be granted at the discretion of the Regional Administrator on a case-by-case basis.

[47 FR 1251, Jan. 11, 1982, as amended at 48 FR 14294, Apr. 1, 1983]

Subpart D—Recordkeeping and Reporting

§ 262.40 Recordkeeping.

(a) A generator must keep a copy of each manifest signed in accordance with § 262.23(a) for three years or until he receives a signed copy from the designated facility which received the waste. This signed copy must be retained as a record for at least three years from the date the waste was accepted by the initial transporter.

(b) A generator must keep a copy of each Biennial Report and Exception Report for a period of at least three years from the due date of the report.

(c) A generator must keep records of any test results, waste analyses, or other determinations made in accordance with § 262.11 for at least three years from the date that the waste was last sent to on-site or off-site treatment, storage, or disposal.

(d) The periods or retention referred to in this section are extended automatically during the course of any unresolved enforcement action regarding the regulated activity or as requested by the Administrator.

[45 FR 33142, May 19, 1980, as amended at 48 FR 3981, Jan. 28, 1983]

§ 262.41 Biennial report.

(a) A generator who ships his hazardous waste off-site must prepare and submit a single copy of a biennial report to the Regional Administrator by March 1 of each even numbered year. The biennial report must be submitted on EPA Form 8700-13 A and must cover generator activities during the previous calendar year, and must include the following information:

(1) The EPA identification number, name, and address of the generator;

(2) The calendar year covered by the report;

(3) The EPA identification number, name, and address for each off-site treatment, storage, or disposal facility to which waste was shipped during the year; for exported shipments, the report must give the name and address of the foreign facility.

(4) The name and EPA identification number of each transporter used during the reporting year.

(5) A description, EPA hazardous waste number (from 40 CFR Part 261, Subpart C or D), DOT hazard class, and quantity of each hazardous waste shipped off-site. This information must be listed by EPA identification number of each off-site facility to which waste was shipped.

(6) The certification signed by the generator or his authorized representative.

(b) Any generator who treats, stores, or disposes of hazardous waste on-site must submit a biennial report covering those wastes in accordance with the provisions of 40 CFR Parts 270, 264, 265, and 266.

[48 FR 3981, Jan. 28, 1983, as amended at 48 FR 14294, Apr. 1, 1983]

§ 262.42 Exception reporting.

(a) A generator who does not receive a copy of the manifest with the handwritten signature of the owner or operator of the designated facility within 35 days of the date the waste was accepted by the initial transporter must contact the transporter and/or the owner or operator of the designated facility to determine the status of the hazardous waste.

(b) A generator must submit an Exception Report to the EPA Regional Administrator for the Region in which the generator is located if he has not received a copy of the manifest with the handwritten signature of the

owner or operator of the designated facility within 45 days of the date the waste was accepted by the initial transporter. The Exception Report must include:

(1) A legible copy of the manifest for which the generator does not have confirmation of delivery;

(2) A cover letter signed by the generator or his authorized representative explaining the efforts taken to locate the hazardous waste and the results of those efforts.

§ 262.43 Additional reporting.

The Administrator, as he deems necessary under section 2002(a) and section 3002(6) of the Act, may require generators to furnish additional reports concerning the quantities and disposition of wastes identified or listed in 40 CFR Part 261.

Subpart E—Special Conditions

§ 262.50 International shipments.

(a) Any person who exports hazardous waste to a foreign country or imports hazardous waste from a foreign country into the United States must comply with the requirements of this part and with the special requirements of this section.

(b) When shipping hazardous waste outside the United States, the generator must:

(1) Notify the Administrator in writing four weeks before the initial shipment of hazardous waste to each country in each calendar year;

(i) The waste must be identified by its EPA hazardous waste identification number and its DOT shipping description;

(ii) The name and address of the foreign consignee must be included in this notice;

(iii) These notices must be sent to the Office of International Activities (A-106), United States Environmental Protection Agency, Washington, D.C. 20460.

NOTE: This requirement to notify will not be delegated to States authorized under 40 CFR Part 271. Therefore, all generators must notify the Administrator as required above.

(2) Require that the foreign consignee confirm the delivery of the waste in the foreign country. A copy of the manifest signed by the foreign consignee may be used for this purpose;

(3) Meet the requirements under § 262.20(a) for the manifest except that:

(i) In place of the name, address, and EPA identification number of the designated facility, the name and address of the foreign consignee must be used;

(ii) The generator must identify the point of departure from the United States through which the waste must travel before entering a foreign country.

(4) Obtain the manifest from the generator's State if that State supplies the manifest form and requires its use. If the generator's State does not supply the manifest form, then the generator may obtain the manifest form from any source.

(c) A generator must file an Exception Report, if:

(1) He has not received a copy of the manifest signed by the transporter stating the date and place of departure from the United States within 45 days from the date it was accepted by the initial transporter; or

(2) Within 90 days from the date the waste was accepted by the initial transporter, the generator has not received written confirmation from the foreign consignee that the hazardous waste was received.

(d) When importing hazardous waste, a person must meet all the requirements of § 262.20(a) for the manifest except that:

(1) In place of the generator's name, address and EPA identification number, the name and address of the foreign generator and the importer's name, address and EPA identification number must be used.

(2) In place of the generator's signature on the certification statement, the U.S. importer or his agent must sign and date the certification and obtain the signature of the initial transporter.

(e) A person who imports hazardous waste must obtain the manifest form from the consignment State if that State supplies the manifest and requires its use. If the consignment

State does not supply the manifest form, then the manifest form may be obtained from any source.

[45 FR 33142, May 19, 1980, as amended at 48 FR 13028, Mar. 29, 1983; 48 FR 14294, Apr. 1, 1983; 49 FR 10500, Mar. 20, 1984]

EFFECTIVE DATE NOTE: At 49 FR 10500, Mar. 20, 1984, § 262.50 (b)(3) and (d) introductory texts were revised, and (b)(4) and (e) were added, effective September 20, 1984. For the convenience of the user, the superseded text is set out below.

§ 262.50 International shipments.

* * * * *

(b) * * *

(3) Meet the requirements under § 262.21 for the manifest, except that:

* * * * *

(d) When importing hazardous waste, a person must meet all requirements of § 262.21 for the manifest except that:

* * * * *

§ 262.51 Farmers.

A farmer disposing of waste pesticides from his own use which are hazardous wastes is not required to comply with the standards in this part or other standards in 40 CFR Parts 270, 264 or 265 for those wastes provided he triple rinses each emptied pesticide container in accordance with § 261.7(b)(3) and disposes of the pesticide residues on his own farm in a manner consistent with the disposal instructions on the pesticide label.

[45 FR 33142, May 19, 1980, as amended at 45 FR 78529, Nov. 25, 1980; 48 FR 14294, Apr. 1, 1983]

APPENDIX—UNIFORM HAZARDOUS WASTE MANIFEST AND INSTRUCTIONS (EPA FORMS 8700-22 AND 8700-22A AND THEIR INSTRUCTIONS)

U.S. EPA Form 8700-22

Read all instructions before completing this form.

This form has been designed for use on a 12-pitch (elite) typerwriter; a firm point pen may also be used—press down hard.

Federal regulations require generators and transporters of hazardous waste and owners or operators of hazardous waste treatment, storage, and disposal facilities to use this form (8700-22) and, if necessary, the continuation sheet (Form 8700-22A) for both inter and intrastate transportation.

Federal regulations also require generators and transporters of hazardous waste and owners or operators of hazardous waste treatment, storage and disposal facilities to complete the following information:

* * * * *

GENERATORS

Item 1. Generator's U.S. EPA ID Number—Manifest Document Number

Enter the generator's U.S. EPA twelve digit identification number and the unique five digit number assigned to this Manifest (e.g., 00001) by the generator.

Item 2. Page 1 of ——

Enter the total number of pages used to complete this Manifest, i.e., the first page (EPA Form 8700-22) plus the number of Continuation Sheets (EPA Form 8700-22A), if any.

Item 3. Generator's Name and Mailing Address

Enter the name and mailing address of the generator. The address should be the location that will manage the returned Manifest forms.

Please print or type (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039 Expires 7-31-87

UNIFORM HAZARDOUS WASTE MANIFEST

1 Generator's US EPA ID No | Manifest Document No | 2 Page 1 of | Information in the shaded areas is not required by Federal law.

3 Generator's Name and Mailing Address | A State Manifest Document Number

B State Generator's ID

4 Generator's Phone ( )

5 Transporter 1 Company Name | 6 US EPA ID Number | C State Transporter's ID

D Transporter's Phone

7 Transporter 2 Company Name | 8 US EPA ID Number | E State Transporter's ID

F Transporter's Phone

9 Designated Facility Name and Site Address | 10 US EPA ID Number | G State Facility's ID

H Facility's Phone

	11 US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12 Containers No	12 Containers Type	13 Total Quantity	14 Unit Wt/Vol	I Waste No
GENERATOR	a					
	b					
	c					
	d					

J Additional Descriptions for Materials Listed Above | K Handling Codes for Wastes Listed Above

15 Special Handling Instructions and Additional Information

16 GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations

Printed/Typed Name | Signature | Date Month Day Year

TRANSPORTER

17 Transporter 1 Acknowledgement of Receipt of Materials | Date

Printed/Typed Name | Signature | Month Day Year

18 Transporter 2 Acknowledgement of Receipt of Materials | Date

Printed/Typed Name | Signature | Month Day Year

FACILITY

19 Discrepancy Indication Space

20 Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19 | Date

Printed/Typed Name | Signature | Month Day Year

EPA Form 8700-22 (3-84)

Item 4. Generator's Phone Number

Enter a telephone number where an authorized agent of the generator may be reached in the event of an emergency.

Item 5. Transporter 1 Company Name

Enter the company name of the first transporter who will transport the waste.

Item 6. U.S. EPA ID Number

Enter the U.S. EPA twelve digit identification number of the first transporter identified in item 5.

Item 7. Transporter 2 Company Name

If applicable, enter the company name of the second transporter who will transport the waste. If more than two transporters are used to transport the waste, use a Continuation Sheet(s) (EPA Form 8700-22A) and list the transporters in the order they will be transporting the waste.

Item 8. U.S. EPA ID Number

If applicable, enter the U.S. EPA twelve digit identification number of the second transporter identified in item 7.

NOTE: If more than two transporters are used, enter each additional transporter's company name and U.S. EPA twelve digit identification number in items 24–27 on the Continuation Sheet (EPA Form 8700-22A). Each Continuation Sheet has space to record two additional transporters. Every transporter used between the generator and the designated facility must be listed.

Item 9. Designated Facility Name and Site Address

Enter the company name and site address of the facility designated to receive the waste listed on this Manifest. The address must be the site address, which may differ from the company mailing address.

Item 10. U.S. EPA ID Number

Enter the U.S. EPA twelve digit identification number of the designated facility identified in item 9.

Item 11. U.S. DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number (UN/NA)]

Enter the U.S. DOT Proper Shipping Name, Hazard Class, and ID Number (UN/NA) for each waste as identified in 49 CFR 171 through 177.

NOTE: If additional space is needed for waste descriptions, enter these additional descriptions in item 28 on the Continuation Sheet (EPA Form 8700-22A).

Item 12. Containers (No. and Type)

Enter the number of containers for each waste and the appropriate abbreviation from Table I (below) for the type of container.

Table I—Types of Containers

DM=Metal drums, barrels, kegs
DW=Wooden drums, barrels, kegs
DF=Fiberboard or plastic drums, barrels, kegs
TP=Tanks portable
TT=Cargo tanks (tank trucks)
TC=Tank cars
DT=Dump truck
CY=Cylinders
CM=Metal boxes, cartons, cases (including roll-offs)
CW=Wooden boxes, cartons, cases
CF=Fiber or plastic boxes, cartons, cases
BA=Burlap, cloth, paper or plastic bags

Item 13. Total Quantity

Enter the total quantity of waste described on each line.

Item 14. Unit (Wt./Vol.)

Enter the appropriate abbreviation from Table II (below) for the unit of measure.

Table II—Units of Measure

G=Gallons (liquids only)
P=Pounds
T=Tons (2000 lbs)
Y=Cubic yards
L=Liters (liquids only)
K=Kilograms
M=Metric tons (1000 kg)
N=Cubic meters

Item 15. Special Handling Instructions and Additional Information

Generators may use this space to indicate special transportation, treatment, storage, or disposal information or Bill of Lading information. States may not require additional, new, or different information in this space. For international shipments, generators must enter in this space the point of departure (City and State) for those shipments destined for treatment, storage, or disposal outside the jurisdiction of the United States.

Item 16. Generator's Certification

The generator must read, sign (by hand), and date the certification statement. If a mode *other than* highway is used, the word "highway" should be lined out and the appropriate mode (rail, water, or air) inserted in the space below. If another mode *in addition to* the highway mode is used, enter the appropriate additional mode (e.g., *and rail*) in the space below.

NOTE: All of the above information *except* the handwritten signature required in item 16 may be preprinted.

* * * * *

TRANSPORTERS

Item 17. Transporter 1 Acknowledgement of Receipt of Materials

Enter the name of the person accepting the waste on behalf of the first transporter. That person must acknowledge acceptance of the waste described on the Manifest by signing and entering the date of receipt.

Item 18. Transporter 2 Acknowledgement of Receipt of Materials

Enter, if applicable, the name of the person accepting the waste on behalf of the second transporter. That person must acknowledge acceptance of the waste described on the Manifest by signing and entering the date of receipt.

NOTE: International Shipments—Transporter Responsibilities.

Exports—Transporters must sign and enter the date the waste left the United States in item 15 of Form 8700-22.

Imports—Shipments of hazardous waste regulated by RCRA and transported into the United States from another country must upon entry be accompanied by the U.S. EPA Uniform Hazardous Waste Manifest. Transporters who transport hazardous waste into the United States from another country are responsible for completing the Manifest (40 CFR 263.10(c)(1)).

Owners and Operators of Treatment, Storage, or Disposal Facilities

Item 19. Discrepancy Indication Space

The authorized representative of the designated (or alternate) facility's owner or operator must note in this space any significant discrepancy between the waste described on the Manifest and the waste actually received at the facility.

Owners and operators of facilities located in unauthorized States (i.e., the U.S. EPA administers the hazardous waste management program) who cannot resolve significant discrepancies within 15 days of receiving the waste must submit to their Regional Administrator (see list below) a letter with a copy of the Manifest at issue describing the discrepancy and attempts to reconcile it (40 CFR 264.72 and 265.72).

Owners and operators of facilities located in authorized States (i.e., those States that have received authorization from the U.S. EPA to administer the hazardous waste program) should contact their State agency for information on State Discrepancy Report requirements.

EPA Regional Administrators

Regional Administrator, U.S. EPA Region I, J.F. Kennedy Fed. Bldg., Boston, MA 02203
Regional Administrator, U.S. EPA Region II, 26 Federal Plaza, New York, NY 10278
Regional Administrator, U.S. EPA Region III, 6th and Walnut Sts., Philadelphia, PA 19106
Regional Administrator, U.S. EPA Region IV, 345 Courtland St., NE., Atlanta, GA 30365
Regional Administrator, U.S. EPA Region V, 230 S. Dearborn St., Chicago, IL 60604
Regional Administrator, U.S. EPA Region VI, 1201 Elm Street, Dallas, TX 75270
Regional Administrator, U.S. EPA Region VII, 324 East 11th Street, Kansas City, MO 64106
Regional Administrator, U.S. EPA Region VIII, 1860 Lincoln Street, Denver, CO 80295
Regional Administrator, U.S. EPA Region IX, 215 Freemont Street, San Francisco, CA 94105
Regional Administrator, U.S. EPA Region X, 1200 Sixth Avenue, Seattle, WA 98101

Item 20. Facility Owner or Operator: Certification of Receipt of Hazardous Materials Covered by This Manifest Except as Noted in Item 19

Print or type the name of the person accepting the waste on behalf of the owner or operator of the facility. That person must acknowledge acceptance of the waste described on the Manifest by signing and entering the date of receipt.

Items A–K are not required by Federal regulations for intra- or interstate transportation. However, States may require generators and owners or operators of treatment, storage, or disposal facilities to complete some or all of items A–K as part of State manifest reporting requirements. Generators and owners and operators of treatment, storage, or disposal facilities are advised to contact State officials for guidance on completing the shaded areas of the Manifest.

Please print or type (Form designed for use on elite (12 pitch) typewriter.) Form Approved. OMB No. 2050-0039 Expires 7-31-96

UNIFORM HAZARDOUS WASTE MANIFEST *(Continuation Sheet)*

21 Generator's US EPA ID No. | Manifest Document No. | 22 Page | Information in the shaded areas is not required by Federal law.

23 Generator's Name | L State Manifest Document Number(s)

M State Generator's ID

24 Transporter ___ Company Name | 25 US EPA ID Number | N State Transporter's ID

O Transporter's Phone

26 Transporter ___ Company Name | 27 US EPA ID Number | P State Transporter's ID

Q Transporter's Phone

28 US DOT Description *(Including Proper Shipping Name, Hazard Class, and ID Number)*	29 Containers No.	Type	30 Total Quantity	31 Unit Wt./Vol.	R Waste No.
a					
b					
c					
d					
e					
f					
g					
h					
i					

S Additional Descriptions for Materials Listed Above | T Handling Codes for Wastes Listed Above

32 Special Handling Instructions and Additional Information

GENERATOR

33 Transporter ___ Acknowledgement of Receipt of Materials | Printed/Typed Name | Signature | Date (Month Day Year)

TRANSPORTER

34 Transporter ___ Acknowledgement of Receipt of Materials | Printed/Typed Name | Signature | Date (Month Day Year)

FACILITY

35 Discrepancy Indication Space

EPA Form 8700-22A (3-94)

INSTRUCTIONS—CONTINUATION SHEET, U.S. EPA FORM 8700-22A

Read all instructions before completing this form.

This form has been designed for use on a 12-pitch (elite) typewriter; a firm point pen may also be used—press down hard.

This form must be used as a continuation sheet to U.S. EPA Form 8700-22 if:

- More than two transporters are to be used to transport the waste;
- More space is required for the U.S. DOT description and related information in Item 11 of U.S. EPA Form 8700-22.

Federal regulations require generators and transporters of hazardous waste and owners or operators of hazardous waste treatment, storage, or disposal facilities to use the uniform hazardous waste manifest (EPA Form 8700-22) and, if necessary, this continuation sheet (EPA Form 8700-22A) for both inter- and intrastate transportation.

GENERATORS

Item 21. Generator's U.S. EPA ID Number—Manifest Document Number

Enter the generator's U.S. EPA twelve digit identification number and the unique five digit number assigned to this Manifest (e.g., 00001) as it appears in item 1 on the first page of the Manifest.

Item 22. Page ——

Enter the page number of this Continuation Sheet.

Item 23. Generator's Name

Enter the generator's name as it appears in item 3 on the first page of the Manifest.

Item 24. Transporter —— Company Name

If additional transporters are used to transport the waste described on this Manifest, enter the company name of each additional transporter in the order in which they will transport the waste. Enter after the word "Transporter" the order of the transporter. For example, Transporter 3 Company Name. Each Continuation Sheet will record the names of two additional transporters.

Item 25. U.S. EPA ID Number

Enter the U.S. EPA twelve digit identification number of the transporter described in item 24.

Item 26. Transporter —— Company Name

If additional transporters are used to transport the waste described on this Manifest, enter the company name of each additional transporter in the order in which they will transport the waste. Enter after the word "Transporter" the order of the transporter. For example, Transporter 4 Company Name. Each Continuation Sheet will record the names of two additional transporters.

Item 27. U.S. EPA ID Number

Enter the U.S. EPA twelve digit identification number of the transporter described in item 26.

Item 28. U.S. DOT Description Including Proper Shipping Name, Hazardous Class, and ID Number (UN/NA)

Refer to item 11.

Item 29. Containers (No. and Type)

Refer to item 12.

Item 30. Total Quantity

Refer to item 13.

Item 31. Unit (Wt./Vol.)

Refer to item 14.

Item 32. Special Handling Instructions

Generators may use this space to indicate special transportation, treatment, storage, or disposal information or Bill of Lading information. States are *not* authorized to require additional, new, or different information in this space.

* * * * *

TRANSPORTERS

Item 33. Transporter —— Acknowledgement of Receipt of Materials

Enter the same number of the Transporter as identified in item 24. Enter also the name of the person accepting the waste on behalf of the Transporter (Company Name) identified in item 24. That person must acknowledge acceptance of the waste described on the Manifest by signing and entering the date of receipt.

Item 34. Transporter —— Acknowledgement of Receipt of Materials

Enter the same number as identified in item 26. Enter also the name of the person accepting the waste on behalf of the Transporter (Company Name) identified in item 26. That person must acknowledge acceptance of the waste described on the Manifest by signing and entering the date of receipt.

* * * * *

Owners and Operators of Treatment, Storage, or Disposal Facilities

Item 35. Discrepancy Indication Space

Refer to item 19.

Items L-R are not required by Federal regulations for intra- or interstate transportation. However, States may require generators and owners or operators of treatment, storage, or disposal facilities to complete some or all of items L-R as part of State manifest reporting requirements. Generators and owners and operators of treatment, storage, or disposal facilities are advised to contact State officials for guidance on completing the shaded areas of the manifest.

[49 FR 10501, Mar. 20, 1984]

EFFECTIVE DATE NOTE: Part 262, Appendix, becomes effective September 20, 1984.

PART 263—STANDARDS APPLICABLE TO TRANSPORTERS OF HAZARDOUS WASTE

Subpart A—General

Subpart B—Compliance With the Manifest System and Recordkeeping

Subpart C—Hazardous Waste Discharges

AUTHORITY: Sec. 2002(a), 3002, 3003, 3004 and 3005 of the Solid Waste Disposal Act as amended by the Resource Conservation and Recovery Act of 1976 and as amended by the Quiet Communities Act of 1978, (42 U.S.C. 6912, 6922, 6923, 6924, 6925).

SOURCE: 45 FR 33151, May 19, 1980, unless otherwise noted.

Subpart A—General

§ 263.10 Scope.

(a) These regulations establish standards which apply to persons transporting hazardous waste within the United States if the transportation requires a manifest under 40 CFR Part 262.

NOTE: The regulations set forth in Parts 262 and 263 establish the responsibilities of generators and transporters of hazardous waste in the handling, transportation, and management of that waste. In these regulations, EPA has expressly adopted certain regulations of the Department of Transportation (DOT) governing the transportation of hazardous materials. These regulations concern, among other things, labeling, marking, placarding, using proper containers, and reporting discharges. EPA has expressly adopted these regulations in order to satisfy its statutory obligation to promulgate regulations which are necessary to protect human health and the environment in the transportation of hazardous waste. EPA's adoption of these DOT regulations ensures consistency with the requirements of DOT and thus avoids the establishment of duplicative or conflicting requirements with respect to these matters. These EPA regulations which apply to both interstate and intrastate transportation of hazardous waste are enforceable by EPA.

DOT has revised its hazardous materials transportation regulations in order to encompass the transportation of hazardous waste and to regulate intrastate, as well as interstate, transportation of hazardous waste. Transporters of hazardous waste are cautioned that DOT's regulations are fully applicable to their activities and enforceable by DOT. These DOT regulations are codified in Title 49, Code of Federal Regulations, Subchapter C.

EPA and DOT worked together to develop standards for transporters of hazardous waste in order to avoid conflicting requirements. Except for transporters of bulk shipments of hazardous waste by water, a transporter who meets all applicable requirements of 49 CFR Parts 171 through 179 and the requirements of 40 CFR 263.11 and 263.31 will be deemed in compliance with this part. Regardless of DOT's action, EPA retains its authority to enforce these regulations.

(b) These regulations do not apply to on-site transportation of hazardous waste by generators or by owners or operators of permitted hazardous waste management facilities.

(c) A transporter of hazardous waste must also comply with 40 CFR Part 262, Standards Applicable to Generators of Hazardous Waste, if he:

(1) Transports hazardous waste into the United States from abroad; or

(2) Mixes hazardous wastes of different DOT shipping descriptions by placing them into a single container.

[45 FR 33151, May 19, 1980, as amended at 45 FR 86968, Dec. 31, 1980]

§ 263.11 EPA identification number.

(a) A transporter must not transport hazardous wastes without having received an EPA identification number from the Administrator.

(b) A transporter who has not received an EPA identification number may obtain one by applying to the Administrator using EPA Form 8700-12. Upon receiving the request, the Administrator will assign an EPA identification number to the transporter.

§ 263.12 Transfer facility requirements.

A transporter who stores manifested shipments of hazardous waste in containers meeting the requirements of § 262.30 at a transfer facility for a period of ten days or less is not subject to regulation under Parts 270, 264, and 265 of this chapter with respect to the storage of those wastes.

[45 FR 86968, Dec. 31, 1980, as amended at 48 FR 14294, Apr. 1, 1983]

Subpart B—Compliance With the Manifest System and Recordkeeping

§ 263.20 The manifest system.

(a) A transporter may not accept hazardous waste from a generator unless it is accompanied by a manifest, signed by the generator in accordance with the provisions of 40 CFR Part 262.

(b) Before transporting the hazardous waste, the transporter must sign and date the manifest acknowledging acceptance of the hazardous waste from the generator. The transporter must return a signed copy to the generator before leaving the generator's property.

(c) The transporter must ensure that the manifest accompanies the hazardous waste.

(d) A transporter who delivers a hazardous waste to another transporter or to the designated facility must:

(1) Obtain the date of delivery and the handwritten signature of that transporter or of the owner or operator of the designated facility on the manifest; and

(2) Retain one copy of the manifest in accordance with § 263.22; and

(3) give the remaining copies of the manifest to the accepting transporter or designated facility.

(e) The requirements of paragraphs (c), (d) and (f) of this section do not apply to water (bulk shipment) transporters if:

(1) The hazardous waste is delivered by water (bulk shipment) to the designated facility; and

(2) A shipping paper containing all the information required on the manifest (excluding the EPA identification numbers, generator certification, and signatures) accompanies the hazardous waste; and

(3) The delivering transporter obtains the date of delivery and handwritten signature of the owner or operator of the designated facility on either the manifest or the shipping paper; and

(4) The person delivering the hazardous waste to the initial water (bulk shipment) transporter obtains the date of delivery and signature of the water (bulk shipment) transporter on the manifest and forwards it to the designated facility; and

(5) A copy of the shipping paper or manifest is retained by each water (bulk shipment) transporter in accordance with § 263.22.

(f) For shipments involving rail transportation, the requirements of paragraphs (c), (d) and (e) do not apply and the following requirements do apply:

(1) When accepting hazardous waste from a non-rail transporter, the initial rail transporter must:

(i) Sign and date the manifest acknowledging acceptance of the hazardous waste;

(ii) Return a signed copy of the manifest to the non-rail transporter;

(iii) Forward at least three copies of the manifest to:

(A) The next non-rail transporter, if any; or,

(B) The designated facility, if the shipment is delivered to that facility by rail; or

(C) The last rail transporter designated to handle the waste in the United States;

(iv) Retain one copy of the manifest and rail shipping paper in accordance with § 263.22.

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(2) Rail transporters must ensure that a shipping paper containing all the information required on the manifest (excluding the EPA identification numbers, generator certification, and signatures) accompanies the hazardous waste at all times.

NOTE: Intermediate rail transporters are not required to sign either the manifest or shipping paper.

(3) When delivering hazardous waste to the designated facility, a rail transporter must:

(i) Obtain the date of delivery and handwritten signature of the owner or operator of the designated facility on the manifest or the shipping paper (if the manifest has not been received by the facility); and

(ii) Retain a copy of the manifest or signed shipping paper in accordance with § 263.22.

(4) When delivering hazardous waste to a non-rail transporter a rail transporter must:

(i) Obtain the date of delivery and the handwritten signature of the next non-rail transporter on the manifest; and

(ii) Retain a copy of the manifest in accordance with § 263.22.

(5) Before accepting hazardous waste from a rail transporter, a non-rail transporter must sign and date the manifest and provide a copy to the rail transporter.

(g) Transporters who transport hazardous waste out of the United States must:

(1) Indicate on the manifest the date the hazardous waste left the United States; and

(2) Sign the manifest and retain one copy in accordance with § 263.22(c); and

(3) Return a signed copy of the manifest to the generator.

[45 FR 33151, May 19, 1980, as amended at 45 FR 86973, Dec. 31, 1980]

§ 263.21 Compliance with the manifest.

(a) The transporter must deliver the entire quantity of hazardous waste which he has accepted from a generator or a transporter to:

(1) The designated facility listed on the manifest; or

(2) The alternate designated facility, if the hazardous waste cannot be delivered to the designated facility because an emergency prevents delivery; or

(3) The next designated transporter; or

(4) The place outside the United States designated by the generator.

(b) If the hazardous waste cannot be delivered in accordance with paragraph (a) of this section, the transporter must contact the generator for further directions and must revise the manifest according to the generator's instructions.

§ 263.22 Recordkeeping.

(a) A transporter of hazardous waste must keep a copy of the manifest signed by the generator, himself, and the next designated transporter or the owner or operator of the designated facility for a period of three years from the date the hazardous waste was accepted by the initial transporter.

(b) For shipments delivered to the designated facility by water (bulk shipment), each water (bulk shipment) transporter must retain a copy of the shipping paper containing all the information required in § 263.20(e)(2) for a period of three years from the date the hazardous waste was accepted by the initial transporter.

(c) For shipments of hazardous waste by rail within the United States:

(i) The initial rail transporter must keep a copy of the manifest and shipping paper with all the information required in § 263.20(f)(2) for a period of three years from the date the hazardous waste was accepted by the initial transporter; and

(ii) The final rail transporter must keep a copy of the signed manifest (or the shipping paper if signed by the designated facility in lieu of the manifest) for a period of three years from the date the hazardous waste was accepted by the initial transporter.

NOTE: Intermediate rail transporters are not required to keep records pursuant to these regulations.

(d) A transporter who transports hazardous waste out of the United States must keep a copy of the manifest indicating that the hazardous

waste left the United States for a period of three years from the date the hazardous waste was accepted by the initial transporter.

(e) The periods of retention referred to in this Section are extended automatically during the course of any unresolved enforcement action regarding the regulated activity or as requested by the Administrator.

[45 FR 33151, May 19, 1980, as amended at 45 FR 86973, Dec. 31, 1980]

Subpart C—Hazardous Waste Discharges

§ 263.30 Immediate action.

(a) In the event of a discharge of hazardous waste during transportation, the transporter must take appropriate immediate action to protect human health and the environment (e.g., notify local authorities, dike the discharge area).

(b) If a discharge of hazardous waste occurs during transportation and an official (State or local government or a Federal Agency) acting within the scope of his official responsibilities determines that immediate removal of the waste is necessary to protect human health or the environment, that official may authorize the removal of the waste by transporters who do not have EPA identification numbers and without the preparation of a manifest.

(c) An air, rail, highway, or water transporter who has discharged hazardous waste must:

(1) Give notice, if required by 49 CFR 171.15, to the National Response Center (800-424-8802 or 202-426-2675); and

(2) Report in writing as required by 49 CFR 171.16 to the Director, Office of Hazardous Materials Regulations, Materials Transportation Bureau, Department of Transportation, Washington, D.C. 20590.

(d) A water (bulk shipment) transporter who has discharged hazardous waste must give the same notice as required by 33 CFR 153.203 for oil and hazardous substances.

§ 263.31 Discharge clean up.

A transporter must clean up any hazardous waste discharge that occurs during transportation or take such action as may be required or approved by Federal, State, or local officials so that the hazardous waste discharge no longer presents a hazard to human health or the environment.

PART 264—STANDARDS FOR OWNERS AND OPERATORS OF HAZARDOUS WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITIES

Subpart A—General

Subpart B—General Facility Standards

Subpart C—Preparedness and Prevention

Subpart D—Contingency Plan and Emergency Procedures

AUTHORITY: Secs. 1006, 2002(a), 3004 and 3005 of the Solid Waste Disposal Act as amended by the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C. 6905, 6912(a), 6924, and 6925), unless otherwise noted.

SOURCE: 45 FR 33221, May 19, 1980, unless otherwise noted.

EDITORIAL NOTE: The reporting or recordkeeping provisions included in the final rule published at 47 FR 32274, July 26, 1982, will be submitted for approval to the Office of Management and Budget (OMB). They are not effective until OMB approval has been obtained. EPA will publish a notice of the effective date of the reporting and recordkeeping provisions of this rule after it obtains OMB approval.

Subpart A—General

§ 264.1 Purpose, scope and applicability.

(a) The purpose of this part is to establish minimum national standards which define the acceptable management of hazardous waste.

(b) The standards in this part apply to owners and operators of all facilities which treat, store, or dispose of hazardous waste, except as specifically provided otherwise in this part or Part 261 of this chapter.

(c) The requirements of this part apply to a person disposing of hazardous waste by means of ocean disposal subject to a permit issued under the Marine Protection, Research, and Sanctuaries Act only to the extent they are included in a RCRA permit by rule granted to such a person under Part 270 of this chapter.

[*Comment:* These Part 264 regulations do apply to the treatment or storage of hazardous waste before it is loaded onto an ocean vessel for incineration or disposal at sea.]

(d) The requirements of this part apply to a person disposing of hazardous waste by means of underground injection subject to a permit issued under an Underground Injection Con-

trol (UIC) program approved or promulgated under the Safe Drinking Water Act only to the extent they are required by § 144.14 of this chapter.

[*Comment:* These Part 264 regulations do apply to the above-ground treatment or storage of hazardous waste before it is injected underground.]

(e) The requirements of this part apply to the owner or operator of a POTW which treats, stores, or disposes of hazardous waste only to the extent they are included in a RCRA permit by rule granted to such a person under Part 270 of this chapter.

(f) The requirements of this part do not apply to a person who treats, stores, or disposes of hazardous waste in a State with a RCRA hazardous waste program authorized under Subpart A of Part 271 of this chapter, or in a State authorized under Subpart B of Part 271 of this chapter for the component or components of Phase II interim authorization which correspond to the person's treatment, storage or disposal processes; except that this part will apply:

(1) As stated in paragraph (d) of this section, if the authorized State RCRA program does not cover disposal of hazardous waste by means of underground injection; and

(2) To a person who treats, stores or disposes of hazardous waste in a State authorized under Subpart A of Part 271 of this chapter, at a facility which was not covered by standards under this part when the State obtained authorization, and for which EPA promulgates standards under this part after the State is authorized. This paragraph will only apply until the State is authorized to permit such facilities under Subpart A of Part 271 of this chapter.

(g) The requirements of this part do not apply to:

(1) The owner or operator of a facility permitted, licensed, or registered by a State to manage municipal or industrial solid waste, if the only hazardous waste the facility treats, stores, or disposes of is excluded from regulation under this part by § 261.5 of this chapter;

(2) The owner or operator of a facility which treats or stores hazardous waste, which treatment or storage meets the criteria in § 261.6(a) of this chapter, except to the extent that § 261.6(b) of this chapter provides otherwise;

(3) A generator accumulating waste on-site in compliance with § 262.34 of this chapter;

(4) A farmer disposing of waste pesticides from his own use in compliance with § 262.51 of this chapter; or

(5) The owner or operator of a totally enclosed treatment facility, as defined in § 260.10.

(6) The owner or operator of an elementary neutralization unit or a wastewater treatment unit as defined in § 260.10 of this chapter.

(7) [Reserved]

(8)(i) Except as provided in paragraph (g)(8)(ii) of this section, a person engaged in treatment or containment activities during immediate response to any of the following situations:

(A) A discharge of a hazardous waste;

(B) An imminent and substantial threat of a discharge of hazardous waste;

(C) A discharge of a material which, when discharged, becomes a hazardous waste.

(ii) An owner or operator of a facility otherwise regulated by this part must comply with all applicable requirements of Subparts C and D.

(iii) Any person who is covered by paragraph (g)(8)(i) of this section and who continues or initiates hazardous waste treatment or containment activities after the immediate response is over is subject to all applicable requirements of this part and Parts 122—124 of this chapter for those activities.

(9) A transporter storing manifested shipments of hazardous waste in containers meeting the requirements of 40 CFR 262.30 at a transfer facility for a period of ten days or less.

(10) The addition of absorbent material to waste in a container (as defined in § 260.10 of this chapter) or the addition of waste to absorbent material in a container, provided that these actions occur at the time waste is first placed in the container; and §§ 264.17(b), 264.171, and 264.172 are complied with.

[45 FR 33221, May 19, 1980, as amended at 45 FR 76075, Nov. 17, 1980; 45 FR 86968, Dec. 31, 1980; 46 FR 27480, May 20, 1981; 47 FR 8306, Feb. 25, 1982; 47 FR 32384, July 26, 1982; 48 FR 2511, Jan. 19, 1983; 48 FR 14294, Apr. 1, 1983]

§ 264.2 [Reserved]

§ 264.3 Relationship to interim status standards.

A facility owner or operator who has fully complied with the requirements for interim status—as defined in section 3005(e) of RCRA and regulations under § 270.70 of this chapter—must comply with the regulations specified in Part 265 of this chapter in lieu of the regulations in this part, until final administrative disposition of his permit application is made.

[*Comment:* As stated in section 3005(a) of RCRA, after the effective date of regulations under that section, i.e., Parts 270 and 124 of this chapter, the treatment, storage, or disposal of hazardous waste is prohibited except in accordance with a permit. Section 3005(e) of RCRA provides for the continued operation of an existing facility which meets certain conditions until final administrative disposition of the owner's or operator's permit application is made.]

[45 FR 33221, May 19, 1980, as amended at 48 FR 14294, Apr. 1, 1983]

§ 264.4 Imminent hazard action.

Notwithstanding any other provisions of these regulations, enforcement actions may be brought pursuant to section 7003 of RCRA.

Subpart B—General Facility Standards

§ 264.10 Applicability.

(a) The regulations in this subpart apply to owners and operators of all hazardous waste facilities, except as provided in § 264.1 and in paragraph (b) of this section.

(b) Section 264.18(b) applies only to facilities subject to regulation under Subparts I through O of this part.

[46 FR 2848, Jan. 12, 1981, as amended at 47 FR 32349, July 26, 1982]

§ 264.11 Identification number.

Every facility owner or operator must apply to EPA for an EPA identification number in accordance with the EPA notification procedures (45 FR 12746).

§ 264.12 Required notices.

(a) The owner or operator of a facility that has arranged to receive hazardous waste from a foreign source must notify the Regional Administrator in writing at least four weeks in advance of the date the waste is expected to arrive at the facility. Notice of subsequent shipments of the same waste from the same foreign source is not required.

(b) The owner or operator of a facility that receives hazardous waste from an off-site source (except where the owner or operator is also the generator) must inform the generator in writing that he has the appropriate permit(s) for, and will accept, the waste the generator is shipping. The owner or operator must keep a copy of this written notice as part of the operating record.

(c) Before transferring ownership or operation of a facility during its operating life, or of a disposal facility during the post-closure care period, the owner or operator must notify the new owner or operator in writing of the requirements of this part and Part 270 of this chapter.

[*Comment:* An owner's or operator's failure to notify the new owner or operator of the requirements of this part in no way relieves the new owner or operator of his obligation to comply with all applicable requirements.]

[45 FR 33221, May 19, 1980, as amended at 48 FR 14294, Apr. 1, 1983]

§ 264.13 General waste analysis.

(a)(1) Before an owner or operator treats, stores, or disposes of any hazardous waste, he must obtain a detailed chemical and physical analysis of a representative sample of the waste. At a minimum, this analysis must contain all the information which must be known to treat, store, or dispose of the waste in accordance with the requirements of this part or with the conditions of a permit issued under Part 270 and Part 124 of this chapter.

(2) The analysis may include data developed under Part 261 of this chap-

ter, and existing published or documented data on the hazardous waste or on hazardous waste generated from similar processes.

[*Comment:* For example, the facility's records of analyses performed on the waste before the effective date of these regulations, or studies conducted on hazardous waste generated from processes similar to that which generated the waste to be managed at the facility, may be included in the data base required to comply with paragraph (a)(1) of this section. The owner or operator of an off-site facility may arrange for the generator of the hazardous waste to supply part or all of the information required by paragraph (a)(1) of this section. If the generator does not supply the information, and the owner or operator chooses to accept a hazardous waste, the owner or operator is responsible for obtaining the information required to comply with this section.]

(3) The analysis must be repeated as necessary to ensure that it is accurate and up to date. At a minimum, the analysis must be repeated:

(i) When the owner or operator is notified, or has reason to believe, that the process or operation generating the hazardous waste has changed; and

(ii) For off-site facilities, when the results of the inspection required in paragraph (a)(4) of this section indicate that the hazardous waste received at the facility does not match the waste designated on the accompanying manifest or shipping paper.

(4) The owner or operator of an off-site facility must inspect and, if necessary, analyze each hazardous waste movement received at the facility to determine whether it matches the identity of the waste specified on the accompanying manifest or shipping paper.

(b) The owner or operator must develop and follow a written waste analysis plan which describes the procedures which he will carry out to comply with paragraph (a) of this section. He must keep this plan at the facility. At a minimum, the plan must specify:

(1) The parameters for which each hazardous waste will be analyzed and the rationale for the selection of these parameters (i.e., how analysis for these parameters will provide sufficient information on the waste's properties to comply with paragraph (a) of this section);

(2) The test methods which will be used to test for these parameters;

(3) The sampling method which will be used to obtain a representative sample of the waste to be analyzed. A representative sample may be obtained using either:

(i) One of the sampling methods described in Appendix I of Part 261 of this chapter; or

(ii) An equivalent sampling method.

[*Comment:* See § 260.21 of this chapter for related discussion.]

(4) The frequency with which the initial analysis of the waste will be reviewed or repeated to ensure that the analysis is accurate and up to date; and

(5) For off-site facilities, the waste analyses that hazardous waste generators have agreed to supply.

(6) Where applicable, the methods which will be used to meet the additional waste analysis requirements for specific waste management methods as specified in §§ 264.17 and 264.341.

(c) For off-site facilities, the waste analysis plan required in paragraph (b) of this section must also specify the procedures which will be used to inspect and, if necessary, analyze each movement of hazardous waste received at the facility to ensure that it matches the identity of the waste designated on the accompanying manifest or shipping paper. At a minimum, the plan must describe:

(1) The procedures which will be used to determine the identity of each movement of waste managed at the facility; and

(2) The sampling method which will be used to obtain a representative sample of the waste to be identified, if the identification method includes sampling.

[*Comment:* Part 270 of this chapter requires that the waste analysis plan be submitted with Part B of the permit application.]

[45 FR 33221, May 19, 1980, as amended at 46 FR 2848, Jan. 12, 1981; 46 FR 7678, Jan. 23, 1981; 48 FR 14294, Apr. 1, 1983]

§ 264.14 Security.

(a) The owner or operator must prevent the unknowing entry, and minimize the possibility for the unauthorized entry, of persons or livestock onto the active portion of his facility, *unless* he can demonstrate to the Regional Administrator that:

(1) Physical contact with the waste, structures, or equipment within the active portion of the facility will not injure unknowing or unauthorized persons or livestock which may enter the active portion of a facility; and

(2) Disturbance of the waste or equipment, by the unknowing or unauthorized entry of persons or livestock onto the active portion of a facility, will not cause a violation of the requirements of this part.

[*Comment:* Part 270 of this chapter requires that an owner or operator who wishes to make the demonstration referred to above must do so with Part B of the permit application.]

(b) Unless the owner or operator has made a successful demonstration under paragraphs (a)(1) and (a)(2) of this section, a facility must have:

(1) A 24-hour surveillance system (e.g., television monitoring or surveillance by guards or facility personnel) which continuously monitors and controls entry onto the active portion of the facility; or

(2)(i) An artificial or natural barrier (e.g., a fence in good repair or a fence combined with a cliff), which completely surrounds the active portion of the facility; and

(ii) A means to control entry, at all times, through the gates or other entrances to the active portion of the facility (e.g., an attendant, television monitors, locked entrance, or controlled roadway access to the facility).

[*Comment:* The requirements of paragraph (b) of this section are satisfied if the facility or plant within which the active portion is located itself has a surveillance system, or a barrier and a means to control entry, which complies with the requirements of paragraph (b)(1) or (b)(2) of this section.]

(c) Unless the owner or operator has made a successful demonstration under paragraphs (a)(1) and (a)(2) of this section, a sign with the legend, "Danger—Unauthorized Personnel Keep Out", must be posted at each entrance to the active portion of a facility, and at other locations, in sufficient numbers to be seen from any approach to this active portion. The legend must be written in English and in any other language predominant in the area surrounding the facility (e.g., facilities in counties bordering the Canadian province of Quebec must post signs in French; facilities in counties bordering Mexico must post signs in Spanish), and must be legible from a distance of at least 25 feet. Existing signs with a legend other than "Danger—Unauthorized Personnel Keep Out" may be used if the legend on the sign indicates that only authorized personnel are allowed to enter the active portion, and that entry onto the active portion can be dangerous.

[*Comment:* See § 264.117(b) for discussion of security requirements at disposal facilities during the post-closure care period.]

[45 FR 33221, May 19, 1980, as amended at 46 FR 2848, Jan. 12, 1981; 48 FR 14294, Apr. 1, 1983]

§ 264.15 General inspection requirements.

(a) The owner or operator must inspect his facility for malfunctions and deterioration, operator errors, and discharges which may be causing—or may lead to—(1) release of hazardous waste constituents to the environment or (2) a threat to human health. The owner or operator must conduct these inspections often enough to identify problems in time to correct them before they harm human health or the environment.

(b)(1) The owner or operator must develop and follow a written schedule for inspecting monitoring equipment, safety and emergency equipment, security devices, and operating and structural equipment (such as dikes and sump pumps) that are important to preventing, detecting, or responding to environmental or human health hazards.

(2) He must keep this schedule at the facility.

(3) The schedule must identify the types of problems (e.g., malfunctions or deterioration) which are to be looked for during the inspection (e.g., inoperative sump pump, leaking fitting, eroding dike, etc.).

(4) The frequency of inspection may vary for the items on the schedule. However, it should be based on the

rate of possible deterioration of the equipment and the probability of an environmental or human health incident if the deterioration or malfunction of any operator error goes undetected between inspections. Areas subject to spills, such as loading and unloading areas, must be inspected daily when in use. At a minimum, the inspection schedule must include the terms and frequencies called for in §§ 264.174, 264.194, 264.226, 264.253, 264.254, 264.303, and 264.347, where applicable.

[*Comment:* Part 270 of this chapter requires the inspection schedule to be submitted with Part B of the permit application. EPA will evaluate the schedule along with the rest of the application to ensure that it adequately protects human health and the environment. As part of this review, EPA may modify or amend the schedule as may be necessary.]

(c) The owner or operator must remedy any deterioration or malfunction of equipment or structures which the inspection reveals on a schedule which ensures that the problem does not lead to an environmental or human health hazard. Where a hazard is imminent or has already occurred, remedial action must be taken immediately.

(d) The owner or operator must record inspections in an inspection log or summary. He must keep these records for at least three years from the date of inspection. At a minimum, these records must include the date and time of the inspection, the name of the inspector, a notation of the observations made, and the date and nature of any repairs or other remedial actions.

[45 FR 33221, May 19, 1980, as amended at 47 FR 32350, July 26, 1982; 48 FR 14294, Apr. 1, 1983]

§ 264.16 Personnel training.

(a)(1) Facility personnel must successfully complete a program of classroom instruction or on-the-job training that teaches them to perform their duties in a way that ensures the facility's compliance with the requirements of this part. The owner or operator must ensure that this program includes all the elements described in the document required under paragraph (d)(3) of this section.

[*Comment:* Part 270 of this chapter requires that owners and operators submit with Part B of the RCRA permit application, an outline of the training program used (or to be used) at the facility and a brief description of how the training program is designed to meet actual job tasks.]

(2) This program must be directed by a person trained in hazardous waste management procedures, and must include instruction which teaches facility personnel hazardous waste management procedures (including contingency plan implementation) relevant to the positions in which they are employed.

(3) At a minimum, the training program must be designed to ensure that facility personnel are able to respond effectively to emergencies by familiarizing them with emergency procedures, emergency equipment, and emergency systems, including, where applicable:

(i) Procedures for using, inspecting, repairing, and replacing facility emergency and monitoring equipment;

(ii) Key parameters for automatic waste feed cut-off systems;

(iii) Communications or alarm systems;

(iv) Response to fires or explosions;

(v) Response to ground-water contamination incidents; and

(vi) Shutdown of operations.

(b) Facility personnel must successfully complete the program required in paragraph (a) of this section within six months after the effective date of these regulations or six months after the date of their employment or assignment to a facility, or to a new position at a facility, whichever is later. Employees hired after the effective date of these regulations must not work in unsupervised positions until they have completed the training requirements of paragraph (a) of this section.

(c) Facility personnel must take part in an annual review of the initial training required in paragraph (a) of this section.

(d) The owner or operator must maintain the following documents and records at the facility:

(1) The job title for each position at the facility related to hazardous waste management, and the name of the employee filling each job;

(2) A written job description for each position listed under paragraph (d)(1) of this section. This description may be consistent in its degree of specificity with descriptions for other similar positions in the same company location or bargaining unit, but must include the requisite skill, education, or other qualifications, and duties of employees assigned to each position;

(3) A written description of the type and amount of both introductory and continuing training that will be given to each person filling a position listed under paragraph (d)(1) of this section;

(4) Records that document that the training or job experience required under paragraphs (a), (b), and (c) of this section has been given to, and completed by, facility personnel.

(e) Training records on current personnel must be kept until closure of the facility; training records on former employees must be kept for at least three years from the date the employee last worked at the facility. Personnel training records may accompany personnel transferred within the same company.

[45 FR 33221, May 19, 1980, as amended at 46 FR 2848, Jan. 12, 1981; 48 FR 14294, Apr. 1, 1983]

§ 264.17 General requirements for ignitable, reactive, or incompatible wastes.

(a) The owner or operator must take precautions to prevent accidental ignition or reaction of ignitable or reactive waste. This waste must be separated and protected from sources of ignition or reaction including but not limited to: open flames, smoking, cutting and welding, hot surfaces, frictional heat, sparks (static, electrical, or mechanical), spontaneous ignition (e.g., from heat-producing chemical reactions), and radiant heat. While ignitable or reactive waste is being handled, the owner or operator must confine smoking and open flame to specially designated locations. "No Smoking" signs must be conspicuously placed wherever there is a hazard from ignitable or reactive waste.

(b) Where specifically required by other sections of this part, the owner or operator of a facility that treats, stores or disposes ignitable or reactive waste, or mixes incompatible waste or incompatible wastes and other materials, must take precautions to prevent reactons which:

(1) Generate extreme heat or pressure, fire or explosions, or violent reactions;

(2) Produce uncontrolled toxic mists, fumes, dusts, or gases in sufficient quantities to threaten human health or the environment;

(3) Produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosions;

(4) Damage the structural integrity of the device or facility;

(5) Through other like means threaten human health or the environment.

(c) When required to comply with paragraph (a) or (b) of this section, the owner or operator must document that compliance. This documentation may be based on references to published scientific or engineering literature, data from trial tests (e.g., bench scale or pilot scale tests), waste analyses (as specified in § 264.13), or the results of the treatment of similar wastes by similar treatment processes and under similar operating conditions.

[46 FR 2848, Jan. 12, 1981]

§ 264.18 Location standards.

(a) *Seismic considerations.* (1) Portions of new facilities where treatment, storage, or disposal of hazardous waste will be conducted must not be located within 61 meters (200 feet) of a fault which has had displacement in Holocene time.

(2) As used in paragraph (a)(1) of this section:

(i) "Fault" means a fracture along which rocks on one side have been displaced with respect to those on the other side.

(ii) "Displacement" means the relative movement of any two sides of a fault measured in any direction.

(iii) "Holocene" means the most recent epoch of the Quarternary

period, extending from the end of the Pleistocene to the present.

[*Comment:* Procedures for demonstrating compliance with this standard in Part B of the permit application are specified in § 270.14(b)(11). Facilities which are located in political jurisdictions other than those listed in Appendix VI of this part, are assumed to be in compliance with this requirement.]

(b) *Floodplains.* (1) A facility located in a 100-year floodplain must be designed, constructed, operated, and maintained to prevent washout or any hazardous waste by a 100-year flood, *unless* the owner or operator can demonstrate to the Regional Administrator's satisfaction that:

(i) Procedures are in effect which will cause the waste to be removed safely, before flood waters can reach the facility, to a location where the wastes will not be vulnerable to flood waters; or

(ii) For existing surface impoundments, waste piles, land treatment units, and landfills, no adverse effects on human health or the environment will result if washout occurs, considering:

(A) The volume and physical and chemical characteristics of the waste in the facility;

(B) The concentration of hazardous constituents that would potentially affect surface waters as a result of washout;

(C) The impact of such concentrations on the current or potential uses of and water quality standards established for the affected surface waters; and

(D) The impact of hazardous constituents on the sediments of affected surface waters or the soils of the 100-year floodplain that could result from washout.

[*Comment:* The location where wastes are moved must be a facility which is either permitted by EPA under Part 270 of this chapter, authorized to manage hazardous waste by a State with a hazardous waste management program authorized under Part 271 of this chapter, or in interim status under Parts 270 and 265 of this chapter.]

(2) As used in paragraph (b)(1) of this section:

(i) "100-year floodplain" means any land area which is subject to a one percent or greater chance of flooding in any given year from any source.

(ii) "Washout" means the movement of hazardous waste from the active portion of the facility as a result of flooding.

(iii) "100-year flood" means a flood that has a one percent chance of being equalled or exeeded in any given year.

[*Comment:* (1) Requirements pertaining to other Federal laws which affect the location and permitting of facilities are found in § 270.3 of this chapter. For details relative to these laws, see EPA's manual for SEA (special environmental area) requirements for hazardous waste facility permits. Through EPA is responsible for complying with these requirements, applicants are advised to consider them in planning the location of a facility to help prevent subsequent project delays.]

[46 FR 2848, Jan. 12, 1981, as amended at 47 FR 32350, July 26, 1982; 48 FR 14294, Apr. 1, 1983; 48 FR 30115, June 30, 1983]

Subpart C—Preparedness and Prevention

§ 264.30 Applicability.

The regulations in this subpart apply to owners and operators of all hazardous waste facilities, except as § 264.1 provides otherwise.

§ 264.31 Design and operation of facility.

Facilities must be designed, constructed, maintained, and operated to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment.

§ 264.32 Required equipment.

All facilities must be equipped with the following, *unless* it can be demonstrated to the Regional Administrator that none of the hazards posed by waste handled at the facility could require a particular kind of equipment specified below:

(a) An internal communications or alarm system capable of providing immediate emergency instruction (voice or signal) to facility personnel;

(b) A device, such as a telephone (immediately available at the scene of

operations) or a hand-held two-way radio, capable of summoning emergency assistance from local police departments, fire departments, or State or local emergency response teams;

(c) Portable fire extinguishers, fire control equipment (including special extinguishing equipment, such as that using foam, inert gas, or dry chemicals), spill control equipment, and decontamination equipment; and

(d) Water at adequate volume and pressure to supply water hose streams, or foam producing equipment, or automatic sprinklers, or water spray systems.

[*Comment:* Part 270 of this chapter requires that an owner or operator who wishes to make the demonstration referred to above must do so with Part B of the permit application.]

[45 FR 33221, May 19, 1980, as amended at 48 FR 14294, Apr. 1, 1983]

§ 264.33 Testing and maintenance of equipment.

All facility communications or alarm systems, fire protection equipment, spill control equipment, and decontamination equipment, where required, must be tested and maintained as necessary to assure its proper operation in time of emergency.

§ 264.34 Access to communications or alarm system.

(a) Whenever hazardous waste is being poured, mixed, spread, or otherwise handled, all personnel involved in the operation must have immediate access to an internal alarm or emergency communication device, either directly or through visual or voice contact with another employee, *unless* the Regional Administrator has ruled that such a device is not required under § 264.32.

(b) If there is ever just one employee on the premises while the facility is operating, he must have immediate access to a device, such as a telephone (immediately available at the scene of operation) or a hand-held two-way radio, capable of summoning external emergency assistance, *unless* the Regional Administrator has ruled that such a device is not required under § 264.32.

§ 264.35 Required aisle space.

The owner or operator must maintain aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in an emergency, *unless* it can be demonstrated to the Regional Administrator that aisle space is not needed for any of these purposes.

[*Comment:* Part 270 of this chapter requires that an owner or operator who wishes to make the demonstration referred to above must do so with Part B of the permit application.]

[45 FR 33221, May 19, 1980, as amended at 48 FR 14294, Apr. 1, 1983]

§ 264.36 [Reserved]

§ 264.37 Arrangements with local authorities.

(a) The owner or operator must attempt to make the following arrangements, as appropriate for the type of waste handled at his facility and the potential need for the services of these organizations:

(1) Arrangements to familiarize police, fire departments, and emergency response teams with the layout of the facility, properties of hazardous waste handled at the facility and associated hazards, places where facility personnel would normally be working, entrances to and roads inside the facility, and possible evacuation routes;

(2) Where more than one police and fire department might respond to an emergency, agreements designating primary emergency authority to a specific police and a specific fire department, and agreements with any others to provide support to the primary emergency authority;

(3) Agreements with State emergency response teams, emergency response contractors, and equipment suppliers; and

(4) Arrangements to familiarize local hospitals with the properties of hazardous waste handled at the facility and the types of injuries or illnesses which could result from fires, explosions, or releases at the facility.

(b) Where State or local authorities decline to enter into such arrange-

ments, the owner or operator must document the refusal in the operating record.

Subpart D—Contingency Plan and Emergency Procedures

§ 264.50 Applicability.

The regulations in this subpart apply to owners and operators of all hazardous waste facilities, except as § 264.1 provides otherwise.

§ 264.51 Purpose and implementation of contingency plan.

(a) Each owner or operator must have a contingency plan for his facility. The contingency plan must be designed to minimize hazards to human health or the environment from fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water.

(b) The provisions of the plan must be carried out immediately whenever there is a fire, explosion, or release of hazardous waste or hazardous waste constituents which could threaten human health or the environment.

§ 264.52 Content of contingency plan.

(a) The contingency plan must describe the actions facility personnel must take to comply with §§ 264.51 and 264.56 in response to fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water at the facility.

(b) If the owner or operator has already prepared a Spill Prevention, Control, and Countermeasures (SPCC) Plan in accordance with Part 112 of this chapter, or Part 1510 of Chapter V, or some other emergency or contingency plan, he need only amend that plan to incorporate hazardous waste management provisions that are sufficient to comply with the requirements of this part.

(c) The plan must describe arrangements agreed to by local police departments, fire departments, hospitals, contractors, and State and local emergency response teams to coordinate emergency services, pursuant to § 264.37.

(d) The plan must list names, addresses, and phone numbers (office and home) of all persons qualified to act as emergency coordinator (see § 264.55), and this list must be kept up to date. Where more than one person is listed, one must be named as primary emergency coordinator and others must be listed in the order in which they will assume responsibility as alternates. *For new facilities,* this information must be supplied to the Regional Administrator at the time of certification, rather than at the time of permit application.

(e) The plan must include a list of all emergency equipment at the facility (such as fire extinguishing systems, spill control equipment, communications and alarm systems (internal and external), and decontamination equipment), where this equipment is required. This list must be kept up to date. In addition, the plan must include the location and a physical description of each item on the list, and a brief outline of its capabilities.

(f) The plan must include an evacuation plan for facility personnel where there is a possibility that evacuation could be necessary. This plan must describe signal(s) to be used to begin evacuation, evacuation routes, and alternate evacuation routes (in cases where the primary routes could be blocked by releases of hazardous waste or fires).

[45 FR 33221, May 19, 1980, as amended at 46 FR 27480, May 20, 1981]

§ 264.53 Copies of contingency plan.

A copy of the contingency plan and all revisions to the plan must be:

(a) Maintained at the facility; and

(b) Submitted to all local police departments, fire departments, hospitals, and State and local emergency response teams that may be called upon to provide emergency services.

[*Comment:* The contingency plan must be submitted to the Regional Administrator with Part B of the permit application under Part 270, of this chapter and, after modification or approval, will become a condition of any permit issued.]

[45 FR 33221, May 19, 1980, as amended at 48 FR 30115, June 30, 1983]

§ 264.54 Amendment of contingency plan.

The contingency plan must be reviewed, and immediately amended, if necessary, whenever:

(a) The facility permit is revised;

(b) The plan fails in an emergency;

(c) The facility changes—in its design, construction, operation, maintenance, or other circumstances—in a way that materially increases the potential for fires, explosions, or releases of hazardous waste or hazardous waste constituents, or changes the response necessary in an emergency;

(d) The list of emergency coordinators changes; or

(e) The list of emergency equipment changes.

[*Comment:* A change in the lists of facility emergency coordinators or equipment in the contingency plan constitutes a minor modification to the facility permit to which the plan is a condition.]

§ 264.55 Emergency coordinator.

At all times, there must be at least one employee either on the facility premises or on call (i.e., available to respond to an emergency by reaching the facility within a short period of time) with the responsibility for coordinating all emergency response measures. This emergency coordinator must be thoroughly familiar with all aspects of the facility's contingency plan, all operations and activities at the facility, the location and characteristics of waste handled, the location of all records within the facility, and the facility layout. In addition, this person must have the authority to commit the resources needed to carry out the contingency plan.

[*Comment:* The emergency coordinator's responsibilities are more fully spelled out in § 264.56. Applicable responsibilities for the emergency coordinator vary, depending on factors such as type and variety of waste(s) handled by the facility, and type and complexity of the facility.]

§ 264.56 Emergency procedures.

(a) Whenever there is an imminent or actual emergency situation, the emergency coordinator (or his designee when the emergency coordinator is on call) must immediately:

(1) Activate internal facility alarms or communication systems, where applicable, to notify all facility personnel; and

(2) Notify appropriate State or local agencies with designated response roles if their help is needed.

(b) Whenever there is a release, fire, or explosion, the emergency coordinator must immediately identify the character, exact source, amount, and areal extent of any released materials. He may do this by observation or review of facility records or manifests, and, if necessary, by chemical analysis.

(c) Concurrently, the emergency coordinator must assess possible hazards to human health or the environment that may result from the release, fire, or explosion. This assessment must consider both direct and indirect effects of the release, fire, or explosion (e.g., the effects of any toxic, irritating, or asphyxiating gases that are generated, or the effects of any hazardous surface water run-off from water or chemical agents used to control fire and heat-induced explosions).

(d) If the emergency coordinator determines that the facility has had a release, fire, or explosion which could threaten human health, or the environment, outside the facility, he must report his findings as follows:

(1) If his assessment indicates that evacuation of local areas may be advisable, he must immediately notify appropriate local authorities. He must be available to help appropriate officials decide whether local areas should be evacuated; and

(2) He must immediately notify either the government official designated as the on-scene coordinator for that geographical area, (in the applicable regional contingency plan under Part 1510 of this Title) or the National Response Center (using their 24-hour toll free number 800/424-8802). The report must include:

(i) Name and telephone number of reporter;

(ii) Name and address of facility;

(iii) Time and type of incident (e.g., release, fire);

(iv) Name and quantity of material(s) involved, to the extent known;

(v) The extent of injuries, if any; and

(vi) The possible hazards to human health, or the environment, outside the facility.

(e) During an emergency, the emergency coordinator must take all reasonable measures necessary to ensure that fires, explosions, and releases do not occur, recur, or spread to other hazardous waste at the facility. These measures must include, where applicable, stopping processes and operations, collecting and containing release waste, and removing or isolating containers.

(f) If the facility stops operations in response to a fire, explosion, or release, the emergency coordinator must monitor for leaks, pressure buildup, gas generation, or ruptures in valves, pipes, or other equipment, wherever this is appropriate.

(g) Immediately after an emergency, the emergency coordinator must provide for treating, storing, or disposing of recovered waste, contaminated soil or surface water, or any other material that results from a release, fire, or explosion at the facility.

[*Comment:* Unless the owner or operator can demonstrate, in accordance with § 261.3(c) or (d) of this chapter, that the recovered material is not a hazardous waste, the owner or operator becomes a generator of hazardous waste and must manage it in accordance with all applicable requirements of Parts 262, 263, and 264 of this Chapter.]

(h) The emergency coordinator must ensure that, in the affected area(s) of the facility:

(1) No waste that may be incompatible with the released material is treated, stored, or disposed of until cleanup procedures are completed; and

(2) All emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed.

(i) The owner or operator must notify the Regional Administrator, and appropriate State and local authorities, that the facility is in compliance with paragraph (h) of this section before operations are resumed in the affected area(s) of the facility.

(j) The owner or operator must note in the operating record the time, date, and details of any incident that requires implementing the contingency plan. Within 15 days after the incident, he must submit a written report on the incident to the Regional Administrator. The report must include:

(1) Name, address, and telephone number of the owner or operator;

(2) Name, address, and telephone number of the facility;

(3) Date, time, and type of incident (e.g., fire, explosion);

(4) Name and quantity of material(s) involved;

(5) The extent of injuries, if any;

(6) An assessment of actual or potential hazards to human health or the environment, where this is applicable; and

(7) Estimated quantity and disposition of recovered material that resulted from the incident.

Subpart E—Manifest System, Recordkeeping, and Reporting

§ 264.70 Applicability.

The regulations in this subpart apply to owners and operators of both on-site and off-site facilities, except as § 264.1 provides otherwise. Sections 264.71, 264.72, and 264.76 do not apply to owners and operators of on-site facilities that do not receive any hazardous waste from off-site sources.

§ 264.71 Use of manifest system.

(a) If a facility receives hazardous waste accompanied by a manifest, the owner or operator, or his agent, must:

(1) Sign and date each copy of the manifest to certify that the hazardous waste covered by the manifest was received;

(2) Note any significant discrepancies in the manifest (as defined in § 264.72(a)) on each copy of the manifest;

[*Comment:* The Agency does not intend that the owner or operator of a facility whose procedures under § 264.13(c) include waste analysis must perform that analysis before signing the manifest and giving it to the transporter. Section 264.72(b), however, requires reporting an unreconciled discrepancy discovered during later analysis.]

(3) Immediately give the transporter at least one copy of the signed manifest;

(4) Within 30 days after the delivery, send a copy of the manifest to the generator; and

(5) Retain at the facility a copy of each manifest for at least three years from the date of delivery.

(b) If a facility receives, from a rail or water (bulk shipment) transporter, hazardous waste which is accompanied by a shipping paper containing all the information required on the manifest (excluding the EPA identification numbers, generator's certification, and signatures), the owner or operator, or his agent, must:

(1) Sign and date each copy of the manifest or shipping paper (if the manifest has not been received) to certify that the hazardous waste covered by the manifest or shipping paper was received;

(2) Note any significant discrepancies (as defined in § 264.72(a)) in the manifest or shipping paper (if the manifest has not been received) on each copy of the manifest or shipping paper.

[*Comment:* The Agency does not intend that the owner or operator of a facility whose procedures under § 264.13(c) include waste analysis must perform that analysis before signing the shipping paper and giving it to the transporter. Section 264.72(b), however, requires reporting an unreconciled discrepancy discovered during later analysis.]

(3) Immediately give the rail or water (bulk shipment) transporter at least one copy of the manifest or shipping paper (if the manifest has not been received);

(4) Within 30 days after the delivery, send a copy of the signed and dated manifest to the generator; however, if the manifest has not been received within 30 days after delivery, the owner or operator, or his agent, must send a copy of the shipping paper signed and dated to the generator; and

[*Comment:* Section 262.23(c) of this chapter requires the generator to send three copies of the manifest to the facility when hazardous waste is sent by rail or water (bulk shipment).]

(5) Retain at the facility a copy of the manifest and shipping paper (if signed in lieu of the manifest at the time of delivery) for at least three years from the date of delivery.

(c) Whenever a shipment of hazardous waste is initiated from a facility, the owner or operator of that facility must comply with the requirements of Part 262 of this chapter.

[*Comment:* The provisions of § 262.34 are applicable to the on-site accumulation of hazardous wastes by generators. Therefore, the provisions of § 262.34 only apply to owners or operators who are shipping hazardous waste which they generated at that facility.]

[45 FR 33221, May 19, 1980, as amended at 45 FR 86970, 86974, Dec. 31, 1980]

§ 264.72 Manifest discrepancies.

(a) Manifest discrepancies are differences between the quantity or type of hazardous waste designated on the manifest or shipping paper, and the quantity or type of hazardous waste a facility actually receives. Significant discrepancies in quantity are: (1) For bulk waste, variations greater than 10 percent in weight, and (2) for batch waste, any variation in piece count, such as a discrepancy of one drum in a truckload. Significant discrepancies in type are obvious differences which can be discovered by inspection or waste analysis, such as waste solvent substituted for waste acid, or toxic constituents not reported on the manifest or shipping paper.

(b) Upon discovering a significant discrepancy, the owner or operator must attempt to reconcile the discrepancy with the waste generator or transporter (e.g., with telephone conversations). If the discrepancy is not resolved within 15 days after receiving the waste, the owner or operator must immediately submit to the Regional Administrator a letter describing the discrepancy and attempts to reconcile it, and a copy of the manifest or shipping paper at issue.

§ 264.73 Operating record.

(a) The owner or operator must keep a written operating record at his facility.

(b) The following information must be recorded, as it becomes available, and maintained in the operating record until closure of the facility:

(1) A description and the quantity of each hazardous waste received, and the method(s) and date(s) of its treat-

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ment, storage, or disposal at the facility as required by Appendix I;

(2) The location of each hazardous waste within the facility and the quantity at each location. For disposal facilities, the location and quantity of each hazardous waste must be recorded on a map or diagram of each cell or disposal area. For all facilities, this information must include cross-references to specific manifest document numbers, if the waste was accompanied by a manifest;

[*Comment:* See § 264.119 for related requirements.]

(3) Records and results of waste analyses performed as specified in §§ 264.13, 264.17, and 264.341;

(4) Summary reports and details of all incidents that require implementing the contingency plan as specified in § 264.56(j);

(5) Records and results of inspections as required by § 264.15(d) (except these data need be kept only three years);

(6) Monitoring, testing, or analytical data where required by Subpart F and §§ 264.226, 264.253, 264.254, 264.276, 264.278, 264.280, 264.303, 264.309, and 264.347;

(7) For off-site facilities, notices to generators as specified in § 264.12(b); and

(8) All closure cost estimates under § 264.142, and, for disposal facilities, all post-closure cost estimates under § 264.144.

[45 FR 33221, May 19, 1980, as amended at 46 FR 2849, Jan. 12, 1981; 46 FR 7678, Jan. 23, 1981; 47 FR 32350, July 26, 1982]

§ 264.74 Availability, retention, and disposition of records.

(a) All records, including plans, required under this part must be furnished upon request, and made available at all reasonable times for inspection, by any officer, employee, or representative of EPA who is duly designated by the Administrator.

(b) The retention period for all records required under this Part is extended automatically during the course of any unresolved enforcement action regarding the facility or as requested by the Administrator.

(c) A copy of records of waste disposal locations and quantities under § 264.73(b)(2) must be submitted to the Regional Administrator and local land authority upon closure of the facility.

§ 264.75 Biennial report.

The owner or operator must prepare and submit a single copy of a biennial report to the Regional Administrator by March 1 of each even numbered year. The biennial report must be submitted on EPA form 8700-13B. The report must cover facility activities during the previous calendar year and must include:

(a) The EPA identification number, name, and address of the facility;

(b) The calendar year covered by the report;

(c) For off-site facilities, the EPA identification number of each hazardous waste generator from which the facility received a hazardous waste during the year; for imported shipments, the report must give the name and address of the foreign generator;

(d) A description and the quantity of each hazardous waste the facility received during the year. For off-site facilities, this information must be listed by EPA identification number of each generator;

(e) The method of treatment, storage, or disposal for each hazardous waste;

(f) [Reserved]

(g) The most recent closure cost estimate under § 264.142, and, for disposal facilities, the most recent post-closure cost estimate under § 264.144; and

(h) The certification signed by the owner or operator of the facility or his authorized representative.

[45 FR 33221, May 19, 1980, as amended at 46 FR 2849, Jan. 12, 1981; 48 FR 3982, Jan. 28, 1983]

§ 264.76 Unmanifested waste report.

If a facility accepts for treatment, storage, or disposal any hazardous waste from an off-site source without an accompanying manifest, or without an accompanying shipping paper as described in § 263.20(e)(2) of this Chapter, and if the waste is not excluded from the manifest requirement

by § 261.5 of this Chapter, then the owner or operator must prepare and submit a single copy of a report to the Regional Administrator within fifteen days after receiving the waste. The unmanifested waste report must be submitted on EPA form 8700-13B. Such report must be designated 'Unmanifested Waste Report' and include the following information:

(a) The EPA identification number, name, and address of the facility;

(b) The date the facility received the waste;

(c) The EPA identification number, name, and address of the generator and the transporter, if available;

(d) A description and the quantity of each unmanifested hazardous waste and facility received;

(e) The method of treatment, storage, or disposal for each hazardous waste;

(f) The certification signed by the owner or operator of the facility or his authorized representative; and

(g) A brief explanation of why the waste was unmanifested, if known.

[*Comment:* Small quantities of hazardous waste are excluded from regulation under this Part and do not require a manifest. Where a facility receives unmanifested hazardous wastes, the Agency suggests that the owner or operator obtain from each generator a certification that the waste qualifies for exclusion. Otherwise, the Agency suggests that the owner or operator file an unmanifested waste report for the hazardous waste movement.]

[45 FR 33221, May 19, 1980, as amended at 48 FR 3982, Jan. 28, 1983]

§ 264.77 Additional reports.

In addition to submitting the biennial reports and unmanifested waste reports described in §§ 264.75 and 264.76, the owner or operator must also report to the Regional Administrator:

(a) Releases, fires, and explosions as specified in § 264.56(j);

(b) Facility closures specified in §264.115; and

(c) As otherwise required by Subparts F and K—N.

[46 FR 2849, Jan. 12, 1981, as amended at 47 FR 32350, July 26, 1982; 48 FR 3982, Jan. 28, 1983]

Subpart F—Ground-water Protection

SOURCE: 47 FR 32350, July 26, 1982, unless otherwise noted.

§ 264.90 Applicability.

(a) Except as provided in paragraph (b) of this section, the regulations in this subpart apply to owners and operators of facilities that treat, store, or dispose of hazardous waste in surface impoundments, waste piles, land treatment units, or landfills. The owner or operator must satisfy the requirements of this subpart for all wastes (or constituents thereof) contained in any such waste management unit at the facility that receives hazardous waste after the effective date of this subpart (hereinafter referred to as a "regulated unit"). Any waste or waste constituent migrating beyond the waste management area under § 264.95(b) is assumed to originate from a regulated unit unless the Regional Administrator finds that such waste or waste constituent originated from another source.

(b) The owner or operator is not subject to regulation under this subpart if:

(1) He is exempted under § 264.1;

(2) He designs and operates a surface impoundment in compliance with § 264.222, a pile in compliance with § 264.250(c), § 264.252, or § 264.253, or a landfill in compliance with § 264.302;

(3) The Regional Administrator finds, pursuant to § 264.280(d), that the treatment zone of a land treatment unit does not contain levels of hazardous constituents that are above background levels of those constituents by an amount that is statistically significant, and if an unsaturated zone monitoring program meeting the requirements of § 264.278 has not shown a statistically significant increase in hazardous constituents below the treatment zone during the operating life of the unit. An exemption under this paragraph can only relieve an owner or operator of responsibility to meet the requirements of this subpart during the post-closure care period; or

(4) The Regional Administrator finds that there is no potential for migration of liquid from a regulated unit

to the uppermost aquifer during the active life of the regulated unit (including the closure period) and the post-closure care period specified under § 264.117. This demonstration must be certified by a qualified geologist or geotechnical engineer. In order to provide an adequate margin of safety in the prediction of potential migration of liquid, the owner or operator must base any predictions made under this paragraph on assumptions that maximize the rate of liquid migration.

(c) The regulations under this subpart apply during the active life of the regulated unit (including the closure period). After closure of the regulated unit, the regulations in this subpart:

(1) Do not apply if all waste, waste residues, contaminated containment system components, and contaminated subsoils are removed or decontaminated at closure;

(2) Apply during the post-closure care period under § 264.117 if the owner or operator is conducting a detection monitoring program under § 264.98; or

(3) Apply during the compliance period under § 264.96 if the owner or operator is conducting a compliance monitoring program under § 264.99 or a corrective action program under § 264.100.

§ 264.91 Required programs.

(a) Owners and operators subject to this subpart must conduct a monitoring and response program as follows:

(1) Whenever hazardous constituents under § 264.93 from a regulated unit are detected at the compliance point under § 264.95, the owner or operator must institute a compliance monitoring program under § 264.99;

(2) Whenever the ground-water protection standard under § 264.92 is exceeded, the owner or operator must institute a corrective action program under § 264.100;

(3) Whenever hazardous constituents under § 264.93 from a regulated unit exceed concentration limits under § 264.94 in ground water between the compliance point under § 264.95 and the downgradient facility property boundary, the owner or operator must institute a corrective action program under § 264.100; or

(4) In all other cases, the owner or operator must institute a detection monitoring program under § 264.98.

(b) The Regional Administrator will specify in the facility permit the specific elements of the monitoring and response program. The Regional Administrator may include one or more of the programs identified in paragraph (a) of this section in the facility permit as may be necessary to protect human health and the environment and will specify the circumstances under which each of the programs will be required. In deciding whether to require the owner or operator to be prepared to institute a particular program, the Regional Administrator will consider the potential adverse effects on human health and the environment that might occur before final administrative action on a permit modification application to incorporate such a program could be taken.

§ 264.92 Ground-water protection standard.

The owner or operator must comply with conditions specified in the facility permit that are designed to ensure that hazardous constituents under § 264.93 entering the ground water from a regulated unit do not exceed the concentration limits under § 264.94 in the uppermost aquifer underlying the waste management area beyond the point of compliance under § 264.95 during the compliance period under § 264.96. The Regional Administrator will establish this ground-water protection standard in the facility permit when hazardous constituents have entered the ground water from a regulated unit.

§ 264.93 Hazardous constituents.

(a) The Regional Administrator will specify in the facility permit the hazardous constituents to which the ground-water protection standard of § 264.92 applies. Hazardous constituents are constituents identified in Appendix VIII of Part 261 of this chapter that have been detected in ground water in the uppermost aquifer underlying a regulated unit and that are

reasonably expected to be in or derived from waste contained in a regulated unit, unless the Regional Administrator has excluded them under paragraph (b) of this section.

(b) The Regional Administrator will exclude an Appendix VIII constituent from the list of hazardous constituents specified in the facility permit if he finds that the constituent is not capable of posing a substantial present or potential hazard to human health or the environment. In deciding whether to grant an exemption, the Regional Administrator will consider the following:

(1) Potential adverse effects on ground-water quality, considering:

(i) The physical and chemical characteristics of the waste in the regulated unit, including its potential for migration;

(ii) The hydrogeological characteristics of the facility and surrounding land;

(iii) The quantity of ground water and the direction of ground-water flow;

(iv) The proximity and withdrawal rates of ground-water users;

(v) The current and future uses of ground water in the area;

(vi) The existing quality of ground water, including other sources of contamination and their cumulative impact on the ground-water quality;

(vii) The potential for health risks caused by human exposure to waste constituents;

(viii) The potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents;

(ix) The persistence and permanence of the potential adverse effects; and

(2) Potential adverse effects on hydraulically-connected surface water quality, considering:

(i) The volume and physical and chemical characteristics of the waste in the regulated unit;

(ii) The hydrogeological characteristics of the facility and surrounding land;

(iii) The quantity and quality of ground water, and the direction of ground-water flow;

(iv) The patterns of rainfall in the region;

(v) The proximity of the regulated unit to surface waters;

(vi) The current and future uses of surface waters in the area and any water quality standards established for those surface waters;

(vii) The existing quality of surface water, including other sources of contamination and the cumulative impact on surface-water quality;

(viii) The potential for health risks caused by human exposure to waste constituents;

(ix) The potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents; and

(x) The persistence and permanence of the potential adverse effects.

(c) In making any determination under paragraph (b) of this section about the use of ground water in the area around the facility, the Regional Administrator will consider any identification of underground sources of drinking water and exempted aquifers made under § 144.8 of this chapter.

[47 FR 32350, July 26, 1982, as amended at 48 FR 14294, Apr. 1, 1983]

§ 264.94 Concentration limits.

(a) The Regional Administrator will specify in the facility permit concentration limits in the ground water for hazardous constituents established under § 264.93. The concentration of a hazardous constituent:

(1) Must not exceed the background level of that constituent in the ground water at the time that limit is specified in the permit; or

(2) For any of the constituents listed in Table 1, must not exceed the respective value given in that Table if the background level of the constituent is below the value given in Table 1; or

(3) Must not exceed an alternate limit established by the Regional Administrator under paragraph (b) of this section.

(b) The Regional Administrator will establish an alternate concentration limit for a hazardous constituent if he finds that the constituent will not pose a substantial present or potential hazard to human health or the environment as long as the alternate concentration limit is not exceeded. In es-

tablishing alternate concentration limits, the Regional Administrator will consider the following factors:

(1) Potential adverse effects on ground-water quality, considering:

TABLE 1—MAXIMUM CONCENTRATION OF CONSTITUENTS FOR GROUND-WATER PROTECTION

Constituent	Maximum concentration [1]
Arsenic	0.05
Barium	1.0
Cadmium	0.01
Chromium	0.05
Lead	0.05
Mercury	0.002
Selenium	0.01
Silver	0.05
Endrin (1,2,3,4,10,10-hexachloro-1,7-epoxy-1,4,4a,5,6,7,8,9a-octahydro-1, 4-endo, endo-5,8-dimethano naphthalene)	0.0002
Lindane (1,2,3,4,5,6-hexachlorocyclohexane, gamma isomer)	0.004
Methoxychlor (1,1,1-Trichloro-2,2-bis (p-methoxyphenylethane)	0.1
Toxaphene ($C_{10}H_{10}Cl_8$, Technical chlorinated camphene, 67–69 percent chlorine)	0.005
2,4-D (2,4-Dichlorophenoxyacetic acid)	0.1
2,4,5-TP Silvex (2,4,5-Trichlorophenoxypropionic acid)	0.01

[1] Milligrams per liter.

(i) The physical and chemical characteristics of the waste in the regulated unit, including its potential for migration;

(ii) The hydrogeological characteristics of the facility and surrounding land;

(iii) The quantity of ground water and the direction of ground-water flow;

(iv) The proximity and withdrawal rates of ground-water users;

(v) The current and future uses of ground water in the area;

(vi) The existing quality of ground water, including other sources of contamination and their cumulative impact on the ground-water quality;

(vii) The potential for health risks caused by human exposure to waste constituents;

(viii) The potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents;

(ix) The persistence and permanence of the potential adverse effects; and

(2) Potential adverse effects on hydraulically-connected surface-water quality, considering:

(i) The volume and physical and chemical characteristics of the waste in the regulated unit;

(ii) The hydrogeological characteristics of the facility and surrounding land;

(iii) The quantity and quality of ground water, and the direction of ground-water flow;

(iv) The patterns of rainfall in the region;

(v) The proximity of the regulated unit to surface waters;

(vi) The current and future uses of surface waters in the area and any water quality standards established for those surface waters;

(vii) The existing quality of surface water, including other sources of contamination and the cumulative impact on surface water quality;

(viii) The potential for health risks caused by human exposure to waste constituents;

(ix) The potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents; and

(x) The persistence and permanence of the potential adverse effects.

(c) In making any determination under paragraph (b) of this section about the use of ground water in the area around the facility the Regional Administrator will consider any identification of underground sources of drinking water and exempted aquifers made under § 144.8 of this chapter.

[47 FR 32350, July 26, 1982, as amended at 48 FR 14294, Apr. 1, 1983]

§ 264.95 Point of compliance.

(a) The Regional Administrator will specify in the facility permit the point of compliance at which the ground-water protection standard of § 264.92 applies and at which monitoring must be conducted. The point of compliance is a vertical surface located at the hydraulically downgradient limit of the waste management area that extends down into the uppermost aquifer underlying the regulated units.

(b) The waste management area is the limit projected in the horizontal

plane of the area on which waste will be placed during the active life of a regulated unit.

(1) The waste management area includes horizontal space taken up by any liner, dike, or other barrier designed to contain waste in a regulated unit.

(2) If the facility contains more than one regulated unit, the waste management area is described by an imaginary line circumscribing the several regulated units.

§ 264.96 Compliance period.

(a) The Regional Administrator will specify in the facility permit the compliance period during which the ground-water protection standard of § 264.92 applies. The compliance period is the number of years equal to the active life of the waste management area (including any waste management activity prior to permitting, and the closure period.)

(b) The compliance period begins when the owner or operator initiates a compliance monitoring program meeting the requirements of § 264.99.

(c) If the owner or operator is engaged in a corrective action program at the end of the compliance period specified in paragraph (a) of this section, the compliance period is extended until the owner or operator can demonstrate that the ground-water protection standard of § 264.92 has not been exceeded for a period of three consecutive years.

§ 264.97 General ground-water monitoring requirements.

The owner or operator must comply with the following requirements for any ground-water monitoring program developed to satisfy § 264.98, § 264.99, or § 264.100:

(a) The ground-water monitoring system must consist of a sufficient number of wells, installed at appropriate locations and depths to yield ground-water samples from the uppermost aquifer that:

(1) Represent the quality of background water that has not been affected by leakage from a regulated unit; and

(2) Represent the quality of ground water passing the point of compliance.

(b) If a facility contains more than one regulated unit, separate ground-water monitoring systems are not required for each regulated unit provided that provisions for sampling the ground water in the uppermost aquifer will enable detection and measurement at the compliance point of hazardous constituents from the regulated units that have entered the ground water in the uppermost aquifer.

(c) All monitoring wells must be cased in a manner that maintains the integrity of the monitoring-well bore hole. This casing must be screened or perforated and packed with gravel or sand, where necessary, to enable collection of ground-water samples. The annular space (i.e., the space between the bore hole and well casing) above the sampling depth must be sealed to prevent contamination of samples and the ground water.

(d) The ground-water monitoring program must include consistent sampling and analysis procedures that are designed to ensure monitoring results that provide a reliable indication of ground-water quality below the waste management area. At a minimum the program must include procedures and techniques for:

(1) Sample collection;

(2) Sample preservation and shipment;

(3) Analytical procedures; and

(4) Chain of custody control.

(e) The ground-water monitoring program must include sampling and analytical methods that are appropriate for ground-water sampling and that accurately measure hazardous constituents in ground-water samples.

(f) The ground-water monitoring program must include a determination of the ground-water surface elevation each time ground water is sampled.

(g) Where appropriate, the ground-water monitoring program must establish background ground-water quality for each of the hazardous constituents or monitoring parameters or constituents specified in the permit.

(1) In the detection monitoring program under § 264.98, background ground-water quality for a monitoring parameter or constituent must be based on data from quarterly sampling

of wells upgradient from the waste management area for one year.

(2) In the compliance monitoring program under § 264.99, background ground-water quality for a hazardous constituent must be based on data from upgradient wells that:

(i) Is available before the permit is issued;

(ii) Accounts for measurement errors in sampling and analysis; and

(iii) Accounts, to the extent feasible, for seasonal fluctuations in background ground-water quality if such fluctuations are expected to affect the concentration of the hazardous constituent.

(3) Background quality may be based on sampling of wells that are not upgradient from the waste management area where:

(i) Hydrogeologic conditions do not allow the owner or operator to determine what wells are upgradient; or

(ii) Sampling at other wells will provide an indication of background ground-water quality that is as representative or more representative than that provided by the upgradient wells.

(4) In developing the data base used to determine a background value for each parameter or constituent, the owner or operator must take a minimum of one sample from each well and a minimum of four samples from the entire system used to determine background ground-water quality, each time the system is sampled.

(h) The owner or operator must use the following statistical procedure in determining whether background values or concentration limits have been exceeded:

(1) If, in a detection monitoring program, the level of a constituent at the compliance point is to be compared to the constituent's background value and that background value has a sample coefficient of variation less than 1.00:

(i) The owner or operator must take at least four portions from a sample at each well at the compliance point and determine whether the difference between the mean of the constituent at each well (using all portions taken) and the background value for the constituent is significant at the 0.05 level using the Cochran's Approximation to the Behrens-Fisher Student's t-test as described in Appendix IV of this part. If the test indicates that the difference is significant, the owner or operator must repeat the same procedure (with at least the same number of portions as used in the first test) with a fresh sample from the monitoring well. If this second round of analyses indicates that the difference is significant, the owner or operator must conclude that a statistically significant change has occurred; or

(ii) The owner or operator may use an equivalent statistical procedure for determining whether a statistically significant change has occurred. The Regional Administrator will specify such a procedure in the facility permit if he finds that the alternative procedure reasonably balances the probability of falsely identifying a non-contaminating regulated unit and the probability of failing to identify a contaminating regulated unit in a manner that is comparable to that of the statistical procedure described in paragraph (h)(1)(i) of this section.

(2) In all other situations in a detection monitoring program and in a compliance monitoring program, the owner or operator must use a statistical procedure providing reasonable confidence that the migration of hazardous constituents from a regulated unit into and through the aquifer will be indicated. The Regional Administrator will specify a statistical procedure in the facility permit that he finds:

(i) Is appropriate for the distribution of the data used to establish background values or concentration limits; and

(ii) Provides a reasonable balance between the probability of falsely identifying a non-contaminating regulated unit and the probability of failing to identify a contaminating regulated unit.

§ 264.98 Detection monitoring program.

An owner or operator required to establish a detection monitoring program under this subpart must, at a minimum, discharge the following responsibilities:

(a) The owner or operator must monitor for indicator parameters (e.g., specific conductance, total organic carbon, or total organic halogen), waste constituents, or reaction products that provide a reliable indication of the presence of hazardous constituents in ground water. The Regional Administrator will specify the parameters or constituents to be monitored in the facility permit, after considering the following factors:

(1) The types, quantities, and concentrations of constituents in wastes managed at the regulated unit;

(2) The mobility, stability, and persistance of waste constituents or their reaction products in the unsaturated zone beneath the waste management area;

(3) The detectability of indicator parameters, waste constituents, and reaction products in ground water; and

(4) The concentrations or values and coefficients of variation of proposed monitoring parameters or constituents in the ground-water background.

(b) The owner or operator must install a ground-water monitoring system at the compliance point as specified under § 264.95. The ground-water monitoring system must comply with § 264.97(a)(2), (b), and (c).

(c) The owner or operator must establish a background value for each monitoring parameter or constituent specified in the permit pursuant to paragraph (a) of this section. The permit will specify the background values for each parameter or specify the procedures to be used to calculate the background values.

(1) The owner or operator must comply with § 264.97(g) in developing the data base used to determine background values.

(2) The owner or operator must express background values in a form necessary for the determination of statistically significant increases under § 264.97(h).

(3) In taking samples used in the determination of background values, the owner or operator must use a ground-water monitoring system that complies with § 264.97(a)(1), (b), and (c).

(d) The owner or operator must determine ground-water quality at each monitoring well at the compliance point at least semi-annually during the active life of a regulated unit (including the closure period) and the post-closure care period. The owner or operator must express the ground-water quality at each monitoring well in a form necessary for the determination of statistically significant increases under § 264.97(h).

(e) The owner or operator must determine the ground-water flow rate and direction in the uppermost aquifer at least annually.

(f) The owner or operator must use procedures and methods for sampling and analysis that meet the requirements of § 264.97 (d) and (e).

(g) The owner or operator must determine whether there is a statistically significant increase over background values for any parameter or constituent specified in the permit pursuant to paragraph (a) of this section each time he determines ground-water quality at the compliance point under paragraph (d) of this section.

(1) In determining whether a statistically significant increase has occurred, the owner or operator must compare the ground-water quality at each monitoring well at the compliance point for each parameter or constituent to the background value for that parameter or constituent, according to the statistical procedure specified in the permit under § 264.97(h).

(2) The owner or operator must determine whether there has been a statistically significant increase at each monitoring well at the compliance point within a reasonable time period after completion of sampling. The Regional Administrator will specify that time period in the facility permit, after considering the complexity of the statistical test and the availability of laboratory facilities to perform the analysis of ground-water samples.

(h) If the owner or operator determines, pursuant to paragraph (g) of this section, that there is a statistically significant increase for parameters or constituents specified pursuant to paragraph (a) of this section at any monitoring well at the compliance point, he must:

(1) Notify the Regional Administrator of this finding in writing within seven days. The notification must indi-

cate what parameters or constituents have shown statistically significant increases;

(2) Immediately sample the ground water in all monitoring wells and determine the concentration of all constituents identified in Appendix VIII of Part 261 of this chapter that are present in ground water;

(3) Establish a background value for each Appendix VIII constituent that has been found at the compliance point under paragraph (h)(2) of this section, as follows:

(i) The owner or operator must comply with § 264.97(g) in developing the data base used to determine background values;

(ii) The owner or operator must express background values in a form necessary for the determination of statistically significant increases under § 264.97(h); and

(iii) In taking samples used in the determination of background values, the owner or operator must use a ground-water monitoring system that complies with § 264.97(a)(1), (b), and (c);

(4) Within 90 days, submit to the Regional Administrator an application for a permit modification to establish a compliance monitoring program meeting the requirements of § 264.99. The application must include the following information:

(i) An identification of the concentration of any Appendix VIII constituents found in the ground water at each monitoring well at the compliance point;

(ii) Any proposed changes to the ground-water monitoring system at the facility necessary to meet the requirements of § 264.99;

(iii) Any proposed changes to the monitoring frequency, sampling and analysis procedures or methods, or statistical procedures used at the facility necessary to meet the requirements of § 264.99;

(iv) For each hazardous constituent found at the compliance point, a proposed concentration limit under § 264.94(a)(1) or (2), or a notice of intent to seek a variance under § 264.94(b); and

(5) Within 180 days, submit to the Regional Administrator:

(i) All data necessary to justify any variance sought under § 264.94(b); and

(ii) An engineering feasibility plan for a corrective action program necessary to meet the requirements of § 264.100, unless:

(A) All hazardous constituents identified under paragraph (h)(2) of this section are listed in Table 1 of § 264.94 and their concentrations do not exceed the respective values given in that Table; or

(B) The owner or operator has sought a variance under § 264.94(b) for every hazardous constituent identified under paragraph (h)(2) of this section.

(i) If the owner or operator determines, pursuant to paragraph (g) of this section, that there is a statistically significant increase of parameters or consitutents specified pursuant to paragraph (a) of this section at any monitoring well at the compliance point, he may demonstrate that a source other than a regulated unit caused the increase or that the increase resulted from error in sampling, analysis, or evaluation. While the owner or operator may make a demonstration under this paragraph in addition to, or in lieu of, submitting a permit modification application under paragraph (h)(4) of this section, he is not relieved of the requirement to submit a permit modification application within the time specified in paragraph (h)(4) of this section unless the demonstration made under this paragraph successfully shows that a source other than a regulated unit caused the increase or that the increase resulted from error in sampling, analysis, or evaluation. In making a demonstration under this paragraph, the owner or operator must:

(1) Notify the Regional Administrator in writing within seven days of determining a statistically significant increase at the compliance point that he intends to make a demonstration under this paragraph;

(2) Within 90 days, submit a report to the Regional Administrator which demonstrates that a source other than a regulated unit caused the increase, or that the increase resulted from error in sampling, analysis, or evaluation;

(3) Within 90 days, submit to the Regional Administrator an application for a permit modification to make any appropriate changes to the detection monitoring program at the facility; and

(4) Continue to monitor in accordance with the detection monitoring program established under this section.

(j) If the owner or operator determines that the detection monitoring program no longer satisfies the requirements of this section, he must, within 90 days, submit an application for a permit modification to make any appropriate changes to the program.

(k) The owner or operator must assure that monitoring and corrective action measures necessary to achieve compliance with the ground-water protection standard under § 264.92 are taken during the term of the permit.

§ 264.99 Compliance monitoring program.

An owner or operator required to establish a compliance monitoring program under this subpart must, at a minimum, discharge the following responsibilities:

(a) The owner or operator must monitor the ground water to determine whether regulated units are in compliance with the ground-water protection standard under § 264.92. The Regional Administrator will specify the ground-water protection standard in the facility permit, including:

(1) A list of the hazardous constituents identified under § 264.93;

(2) Concentration limits under § 264.94 for each of those hazardous constituents;

(3) The compliance point under § 264.95; and

(4) The compliance period under § 264.96.

(b) The owner or operator must install a ground-water monitoring system at the compliance point as specified under § 264.95. The ground-water monitoring system must comply with § 264.97(a)(2), (b), and (c).

(c) Where a concentration limit established under paragraph (a)(2) of this section is based on background ground-water guality, the Regional Administrator will specify the concentration limit in the permit as follows:

(1) If there is a high temporal correlation between upgradient and compliance point concentrations of the hazardous constitutents, the owner or operator may establish the concentration limit through sampling at upgradient wells each time ground water is sampled at the compliance point. The Regional Administrator will specify the procedures used for determining the concentration limit in this manner in the permit. In all other cases, the concentration limit will be the mean of the pooled data on the concentration of the hazardous constituent.

(2) If a hazardous constituent is identified on Table 1 under § 264.94 and the difference between the respective concentration limit in Table 1 and the background value of that constituent under § 264.97(g) is not statistically significant, the owner or operator must use the background value of the constituent as the concentration limit. In determining whether this difference is statistically significant, the owner or operator must use a statistical procedure providing reasonable confidence that a real difference will be indicated. The statistical procedure must:

(i) Be appropriate for the distribution of the data used to establish background values; and

(ii) Provide a reasonable balance between the probability of falsely identifying a significant difference and the probability of failing to identify a significant difference.

(3) The owner or operator must:

(i) Comply with § 264.97(g) in developing the data base used to determine background values;

(ii) Express background values in a form necessary for the determination of statistically significant increases under § 264.97(h); and

(iii) Use a ground-water monitoring system that complies with § 264.97(a)(1), (b), and (c).

(d) The owner or operator must determine the concentration of hazardous constituents in ground water at each monitoring well at the compliance point at least quarterly during the compliance period. The owner or operator must express the concentration at each monitoring well in a form necessary for the determination of sta-

tistically significant increases under § 264.97(h).

(e) The owner or operator must determine the ground-water flow rate and direction in the uppermost aquifer at least annually.

(f) The owner or operator must analyze samples from all monitoring wells at the compliance point for all constituents contained in Appendix VIII of Part 261 of this chapter at least annually to determine whether additional hazardous constituents are present in the uppermost aquifer. If the owner or operator finds Appendix VIII constituents in the ground water that are not identified in the permit as hazardous constituents, the owner or operator must report the concentrations of these additional constituents to the Regional Administrator within seven days after completion of the analysis.

(g) The owner or operator must use procedures and methods for sampling and analysis that meet the requirements of § 264.97(d) and (e).

(h) The owner or operator must determine whether there is a statistically significant increase over the concentration limits for any hazardous constituents specified in the permit pursuant to paragraph (a) of this section each time he determines the concentration of hazardous constituents in ground water at the compliance point.

(1) In determining whether a statistically significant increase has occurred, the owner or operator must compare the ground-water quality at each monitoring well at the compliance point for each hazardous constituent to the concentration limit for that constituent according to the statistical procedures specified in the permit under § 264.97(h).

(2) The owner or operator must determine whether there has been a statistically significant increase at each monitoring well at the compliance point, within a reasonable time period after completion of sampling. The Regional Administrator will specify that time period in the facility permit, after considering the complexity of the statistical test and the availability of laboratory facilities to perform the analysis of ground-water samples.

(i) If the owner or operator determines, pursuant to paragraph (h) of this section, that the ground-water protection standard is being exceeded at any monitoring well at the point of compliance, he must:

(1) Notify the Regional Administrator of this finding in writing within seven days. The notification must indicate what concentration limits have been exceeded.

(2) Submit to the Regional Administrator an application for a permit modification to establish a corrective action program meeting the requirements of § 264.100 within 180 days, or within 90 days if an engineering feasibility study has been previously submitted to the Regional Administrator under § 264.98(h)(5). The application must at a minimum include the following information:

(i) A detailed description of corrective actions that will achieve compliance with the ground-water protection standard specified in the permit under paragraph (a) of this section; and

(ii) A plan for a ground-water monitoring program that will demonstrate the effectiveness of the corrective action. Such a ground-water monitoring program may be based on a compliance monitoring program developed to meet the requirements of this section.

(j) If the owner or operator determines, pursuant to paragraph (h) of this section, that the ground-water protection standard is being exceeded at any monitoring well at the point of compliance, he may demonstrate that a source other than a regulated unit caused the increase or that the increase resulted from error in sampling, analysis or evaluation. While the owner or operator may make a demonstration under this paragraph in addition to, or in lieu of, submitting a permit modification application under paragraph (i)(2) of this section, he is not relieved of the requirement to submit a permit modification application within the time specified in paragraph (i)(2) of this section unless the demonstration made under this paragraph successfully shows that a source other than a regulated unit caused the increase or that the increase resulted from error in sampling, analysis, or evaluation. In making a demonstration

under this paragraph, the owner or operator must:

(1) Notify the Regional Administrator in writing within seven days that he intends to make a demonstration under this paragraph;

(2) Within 90 days, submit a report to the Regional Administrator which demonstrates that a source other than a regulated unit caused the standard to be exceeded or that the apparent noncompliance with the standards resulted from error in sampling, analysis, or evaluation;

(3) Within 90 days, submit to the Regional Administrator an application for a permit modification to make any appropriate changes to the compliance monitoring program at the facility; and

(4) Continue to monitor in accord with the compliance monitoring program established under this section.

(k) If the owner or operator determines that the compliance monitoring program no longer satisfies the requirements of this section, he must, within 90 days, submit an application for a permit modification to make any appropriate changes to the program.

(l) The owner or operator must assure that monitoring and corrective action measures necessary to achieve compliance with the ground-water protection standard under § 264.92 are taken during the term of the permit.

§ 264.100 Corrective action program.

An owner or operator required to establish a corrective action program under this subpart must, at a minimum, discharge the following responsibilities:

(a) The owner or operator must take corrective action to ensure that regulated units are in compliance with the ground-water protection standard under § 264.92. The Regional Administrator will specify the ground-water protection standard in the facility permit, including:

(1) A list of the hazardous constituents identified under § 264.93;

(2) Concentration limits under § 264.94 for each of those hazardous constituents;

(3) The compliance point under § 264.95; and

(4) The compliance period under § 264.96.

(b) The owner or operator must implement a corrective action program that prevents hazardous constituents from exceeding their respective concentration limits at the compliance point by removing the hazardous waste constituents or treating them in place. The permit will specify the specific measures that will be taken.

(c) The owner or operator must begin corrective action within a reasonable time period after the ground-water protection standard is exceeded. The Regional Administrator will specify that time period in the facility permit. If a facility permit includes a corrective action program in addition to a compliance monitoring program, the permit will specify when the corrective action will begin and such a requirement will operate in lieu of § 264.99(i)(2).

(d) In conjunction with a corrective action program, the owner or operator must establish and implement a ground-water monitoring program to demonstrate the effectiveness of the corrective action program. Such a monitoring program may be based on the requirements for a compliance monitoring program under § 264.99 and must be as effective as that program in determining compliance with the ground-water protection standard under § 264.92 and in determining the success of a corrective action program under paragraph (e) of this section, where appropriate.

(e) In addition to the other requirements of this section, the owner or operator must conduct a corrective action program to remove or treat in place any hazardous constituents under § 264.93 that exceed concentration limits under § 264.94 in ground water between the compliance point under § 264.95 and the downgradient facility property boundary. The permit will specify the measures to be taken.

(1) Corrective action measures under this paragraph must be initiated and completed within a reasonable period of time considering the extent of contamination.

(2) Corrective action measures under this paragraph may be terminated

once the concentration of hazardous constituents under § 264.93 is reduced to levels below their respective concentration limits under § 264.94.

(f) The owner or operator must continue corrective action measures during the compliance period to the extent necessary to ensure that the ground-water protection standard is not exceeded. If the owner or operator is conducting corrective action at the end of the compliance period, he must continue that corrective action for as long as necessary to achieve compliance with the ground-water protection standard. The owner or operator may terminate corrective action measures taken beyond the period equal to the active life of the waste management area (including the closure period) if he can demonstrate, based on data from the ground-water monitoring program under paragraph (d) of this section, that the ground-water protection standard of § 264.92 has not been exceeded for a period of three consecutive years.

(g) The owner or operator must report in writing to the Regional Administrator on the effectiveness of the corrective action program. The owner or operator must submit these reports semi-annually.

(h) If the owner or operator determines that the corrective action program no longer satisfies the requirements of this section, he must, within 90 days, submit an application for a permit modification to make any appropriate changes to the program.

§§ 264.101—264.109 [Reserved]

Subpart G—Closure and Post-Closure

SOURCE: 46 FR 2849, Jan. 12, 1981, unless otherwise noted.

§ 264.110 Applicability.

Except as § 264.1 provides otherwise:

(a) Sections 264.111—264.115 (which concern closure) apply to the owners and operators of all hazardous waste management facilities; and

(b) Sections 264.117—264.120 (which concern post-closure care) apply to the owners and operators of:

(1) All hazardous waste disposal facilities; and

(2) Piles, and surface impoundments from which the owner or operator intends to remove the wastes at closure, to the extent that these sections are made applicable to such facilities in §§ 264.228 and 264.258.

[46 FR 2849, Jan. 12, 1981, as amended at 47 FR 32356, July 26, 1982]

§ 264.111 Closure performance standard.

The owner or operator must close the facility in a manner that:

(a) Minimizes the need for further maintenance, and

(b) Controls, minimizes or eliminates, to the extent necessary to prevent threats to human health and the environment, post-closure escape of hazardous waste, hazardous waste constituents, leachate, contaminated rainfall, or waste decomposition products to the ground or surface waters or to the atmosphere.

§ 264.112 Closure plan; amendment of plan.

(a) The owner or operator of a hazardous waste management facility must have a written closure plan. The plan must be submitted with the permit application, in accordance with § 270.14(b)(13) of this chapter, and approved by the Regional Administrator as part of the permit issuance proceeding under Part 124 of this chapter. In accordance with § 122.29 of this chapter, the approved closure plan will become a condition of any RCRA permit. The Regional Administrator's decision must assure that that approved closure plan is consistent with §§ 264.111, 264.113, 264.114, 264.115, and the applicable requirements of §§ 264.178, 264.197, 264.228, 264.258, 264.280, 264.310, and 264.351. A copy of the approved plan and all revisions to the plan must be kept at the facility until closure is completed and certified in accordance with § 264.115. The plan must identify steps necessary to completely or partially close the facility at any point during its intended operating life and to completely close the facility at the end of its intended operating life. The closure plan must include, at least:

(1) A description of how and when the facility will be partially closed, if applicable, and finally closed. The description must identify the maximum extent of the operation which will be unclosed during the life of the facility, and how the requirements of §§ 264.111, 264.113, 264.114, 264.115, and the applicable closure requirements of §§ 264.178, 264.197, 264.228, 264.258, 264.280, 264.310, and 264.351 will be met;

(2) An estimate of the maximum inventory of wastes in storage and in treatment at any time during the life of the facility. (Any change in this estimate is a minor modification under § 270.42);

(3) A description of the steps needed to decontaminate facility equipment during closure; and

(4) An estimate of the expected year of closure and a schedule for final closure. The schedule must include, at a minimum, the total time required to close the facility and the time required for intervening closure activities which will allow tracking of the progress of closure. (For example, in the case of a landfill, estimates of the time required to treat and dispose of all waste inventory and of the time required to place a final cover must be included.)

(b) The owner or operator may amend his closure plan at any time during the active life of the facility. (The active life of the facility is that period during which wastes are periodically received.) The owner or operator must amend the plan whenever changes in operating plans or facility design affect the closure plan, or whenever there is a change in the expected year of closure. When the owner or operator requests a permit modification to authorize a change in operating plans or facility design, he must request a modification of the closure plan at the same time (see § 124.5(a)). If a permit modification is not needed to authorize the change in operating plans or facility design, the request for modification of the closure plan must be made within 60 days after the change in plans or design occurs.

[*Comment:* Changes in estimates of maximum inventory and of the estimated year of closure under § 264.112(a) (2) and (4) may be made as minor permit modifications under § 270.42(c)]

(c) The owner or operator must notify the Regional Administrator at least 180 days prior to the date he expects to begin closure.

[*Comment:* The date when he "expects to begin closure" should be within 30 days after the date on which he expects to receive the final volume of wastes. If the facility's permit is terminated, or if the facility is otherwise ordered, by judicial decree or compliance order under Section 3008 of RCRA, to cease receiving wastes or to close, then the requirement of this paragraph does not apply. However, the owner or operator must close the facility in accordance with the deadlines established in § 264.113]

(Secs. 1006, 2002(a), 3004, 3005, and 3007 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended, 42 U.S.C. 6905, 6912(a), 6924, 6925 and 6927)

[46 FR 2849, Jan. 12, 1981, as amended at 47 FR 32356, July 26, 1982; 48 FR 14294, Apr. 1, 1983]

§ 264.113 Closure; time allowed for closure.

(a) Within 90 days after receiving the final volume of hazardous wastes, the owner or operator must treat, remove from the site, or dispose of on-site, all hazardous wastes in accordance with the approved closure plan. The Regional Administrator may approve a longer period if the owner or operator demonstrates that:

(1)(i) The activities required to comply with this paragraph will, of necessity, take longer than 90 days to complete; or

(ii)(A) The facility has the capacity to receive additional wastes;

(B) There is a reasonable likelihood that a person other than the owner or operator will recommence operation of the site; and

(C) Closure of the facility would be incompatible with continued operation of the site; and

(2) He has taken and will continue to take all steps to prevent threats to human health and the environment.

(b) The owner or operator must complete closure activities in accordance with the approved closure plan and within 180 days after receiving the final volume of wastes. The Regional Administrator may approve a longer

closure period if the owner or operator demonstrates that:

(1)(i) The closure activities will, of necessity, take longer than 180 days to complete; or

(ii)(A) The facility has the capacity to receive additional wastes;

(B) There is reasonable likelihood that a person other than the owner or operator will recommence operation of the site; and

(C) Closure of the facility would be incompatible with continued operation of the site; and

(2) He has taken and will continue to take all steps to prevent threats to human health and the environment from the unclosed but inactive facility.

[*Comment:* Any extension of the 90 or 180 day period in this section may be made as a minor modification under § 270.42. Under paragraphs (a)(1)(ii) and (b)(1)(ii) of this Section, if operation of the site is recommenced, the Regional Administrator may defer completion of closure activities until the new operation is terminated.]

[46 FR 2849, Jan. 12, 1981, as amended at 48 FR 14294, Apr. 1, 1983]

§ 264.114 Disposal or decontamination of equipment.

When closure is completed, all facility equipment and structures must have been properly disposed of, or decontaminated by removing all hazardous waste and residues.

§ 264.115 Certification of closure.

When closure is completed, the owner or operator must submit to the Regional Administrator certification both by the owner or operator and by an independent registered professional engineer that the facility has been closed in accordance with the specifications in the approved closure plan.

§ 264.116 [Reserved]

§ 264.117 Post-closure care and use of property.

(a)(1) Post-closure care must continue for 30 years after the date of completing closure and must consist of at least the following:

(i) Monitoring and reporting in accordance with the requirements of Subparts F, K, L, M, and N of this part; and

(ii) Maintenance and monitoring of waste containment systems in accordance with the requirements of Subparts F, K, L, M, and N of this part.

(2)(i) During the 180-day period preceding closure (see § 264.112(c)) or at any time thereafter, the Regional Administrator may reduce the post-closure care period to less than 30 years if he finds that the reduced period is sufficient to protect human health and the environment (e.g., leachate or groundwater monitoring results, characteristics of the waste, application of advanced technology, or alternative disposal, treatment, or re-use techniques indicate that the facility is secure).

(ii) Prior to the time that the post-closure care period is due to expire, the Regional Administrator may extend the post-closure care period if he finds that the extended period is necessary to protect human health and the environment (e.g., leachate or groundwater monitoring results indicate a potential for migration of waste at levels which may be harmful to human health and the environment).

(b) The Regional Administrator may require, at closure, continuation of any of the security requirements of (§ 264.14 during part or all of the post-closure period after the date of completing closure when:

(1) Wastes may remain exposed after completion of closure; or

(2) Access by the public or domestic livestock may pose a hazard to human health.

(c) Post-closure use of property on or in which hazardous wastes remain after closure must never be allowed to disturb the integrity of the final cover, liner(s), or any other components of any containment system, or the function of the facility's monitoring systems, unless the Regional Administrator finds that the disturbance:

(1) Is necessary to the proposed use of the property, and will not increase the potential hazard to human health or the environment; or

(2) Is necessary to reduce a threat to human health or the environment.

(d) All post-closure care activities must be in accordance with the provisions of the approved post-closure plan as specified in § 264.118.

[46 FR 2849, Jan. 12, 1981, as amended at 47 FR 32356, July 26, 1982]

§ 264.118 Post-closure plan; amendment of plan.

(a) The owner or operator of a disposal facility must have a written post-closure plan. In addition, certain piles and certain surface impoundments from which the owner or operator intends to remove the wastes at closure are required by §§ 264.228 and 264.258 to have post-closure plans. The plan must be submitted with a permit application, in accordance with § 270.14(b)(13) of this chapter, and approved by the Regional Administrator as part of the permit issuance proceeding under Part 124 of this chapter. In accordance with § 270.32 of this chapter, the approved post-closure plan will become a condition of any permit issued. A copy of the approved plan and all revisions to the plan must be kept at the facility until the post-closure care period begins. This plan must identify the activities that will be carried on after closure and the frequency of these activities, and include at least:

(1) A description of the planned monitoring activities and frequencies at which they will be performed to comply with Subparts F, K, L, M, and N of this part during the post-closure care period;

(2) A description of the planned maintenance activities, and frequencies at which they will be performed, to ensure:

(i) The intergrity of the cap and final cover or other containment systems in accordance with the requirements of Subparts K, L, M, and N of this part; and

(ii) The function of the facility monitoring equipment in accordance with the requirements of Subparts F, K, L, M, and N of this part; and

(3) The name, address, and phone number of the person or office to contact about the disposal facility during the post-closure period. This person or office must keep an updated post-closure plan during the post-closure period.

(b) The owner or operator may amend his post-closure plan at any time during the active life of the disposal facility or during the post-closure care period. The owner or operator must amend his plan whenever changes in operating plans or facility design, or events which occur during the active life of the facility or during the post-closure period, affect his post-closure plan. He must also amend his plan whenever there is a change in the expected year of closure.

(c) When a permit modification is requested during the active life of the facility to authorize a change in operating plans or facility design, modification of the post-closure plan must be requested at the same time (see § 124.5(a)). In all other cases, the request for modification of the post-closure plan must be made within 60 days after the change in operating plans or facility design or the events which affect his post-closure plan occur.

[46 FR 2849, Jan. 12, 1981, as amended at 47 FR 32356, July 26, 1982; 48 FR 14294, Apr. 1, 1983]

§ 264.119 Notice to local land authority.

Within 90 days after closure is completed, the owner or operator of a disposal facility must submit to the local zoning authority or the authority with jurisdiction over local land use and to the Regional Administrator a survey plat indicating the location and dimensions of landfill cells or other disposal areas with respect to permanently surveyed benchmarks. This plat must be prepared and certified by a professional land surveyor. The plat filed with the local zoning authority or the authority with jurisdiction over local land use must contain a note, prominently displayed, which states the owner's or operator's obligation to restrict disturbance of the site as specified in § 264.117(c). In addition, the owner or operator must submit to the local zoning authority or the authority with jurisdiction over local land use and to the Regional Administrator a record of the type, location, and quantity of hazardous wastes disposed of within each cell or area of the facility. For wastes disposed of before these regulations were promulgated, the owner or operator must identify the type, location and quantity of the wastes to the best of his knowledge

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and in accordance with any records he has kept. Any changes in the type, location, or quantity of hazardous wastes disposed of within each cell or area of the facility that occur after the survey plat and record of wastes have been filed must be reported to the local zoning authority or the authority with jurisdiction over local land use and to the Regional Administrator.

§ 264.120 Notice in deed to property.

(a) The owner of the property on which a disposal facility is located must record, in accordance with State law, a notation on the deed to the facility property—or on some other instrument which is normally examined during title search—that will in perpetuity notify any potential purchaser of the property that:

(1) The land has been used to manage hazardous wastes;

(2) Its use is restricted under § 264.117(c); and

(3) The survey plat and record of the type, location, and quantity of hazardous wastes disposed of within each cell or area of the facility required in § 265.119 have been filed with the local zoning authority or the authority with jurisdiction over local land use and with the Regional Administrator of the Environmental Protection Agency.

(b) If at any time the owner or operator or any subsequent owner of the land upon which a hazardous waste facility was located removes the waste and waste residues, the liner, if any, and all contaminated underlying and surrounding soil, he may remove the notation on the deed to the facility property or other instrument normally examined during title search, or he may add a notation to the deed or instrument indicating the removal of the waste.

[*Comment:* On removing the waste and waste residues, the liner, if any, and the contaminated soil, the owner or operator, unless he can demonstrate in accordance with § 261.3(d) of this chapter that any solid waste removed is not a hazardous waste, becomes a generator of hazardous waste and must manage it in accordance with all applicable requirements of Parts 262 through 266 of this chapter.]

Subpart H—Financial Requirements

SOURCE: 47 FR 15047, Apr. 7, 1982, unless otherwise noted.

§ 264.140 Applicability.

(a) The requirements of §§ 264.142, 264.143, and 264.147 through 264.151 apply to owners and operators of all hazardous waste facilities, except as provided otherwise in this section or in § 264.1.

(b) The requirements of §§ 264.144 and 264.145 apply only to owners and operators of:

(1) Disposal facilities, and

(2) Piles, and surface impoundments from which the owner or operator intends to remove the wastes at closure, to the extent that these sections are made applicable to such facilities in §§ 264.228 and 264.258.

(c) States and the Federal government are exempt from the requirements of this subpart.

[47 FR 15047, Apr. 7, 1982, as amended at 47 FR 32357, July 26, 1982]

§ 264.141 Definitions of terms as used in this subpart.

(a) "Closure plan" means the plan for closure prepared in accordance with the requirements of § 264.112.

(b) "Current closure cost estimate" means the most recent of the estimates prepared in accordance with § 264.142 (a), (b), and (c).

(c) "Current post-closure cost estimate" means the most recent of the estimates prepared in accordance with § 264.144 (a), (b), and (c).

(d) "Parent corporation" means a corporation which directly owns at least 50 percent of the voting stock of the corporation which is the facility owner or operator; the latter corporation is deemed a "subsidiary" of the parent corporation.

(e) "Post-closure plan" means the plan for post-closure care prepared in accordance with the requirements of §§ 264.117 through 264.120.

(f) The following terms are used in the specifications for the financial tests for closure, post-closure care, and liability coverage. The definitions are intended to assist in the understanding of these regulations and are not intended to limit the meanings of terms in a way that conflicts with generally accepted accounting practices.

"Assets" means all existing and all probable future economic benefits obtained or controlled by a particular entity.

"Current assets" means cash or other assets or resources commonly identified as those which are reasonably expected to be realized in cash or sold or consumed during the normal operating cycle of the business.

"Current liabilities" means obligations whose liquidation is reasonably expected to require the use of existing resources properly classifiable as current assets or the creation of other current liabilities.

"Independently audited" refers to an audit performed by an independent certified public accountant in accordance with generally accepted auditing standards.

"Liabilities" means probable future sacrifices of economic benefits arising from present obligations to transfer assets or provide services to other entities in the future as a result of past transactions or events.

"Net working capital" means current assets minus current liabilities.

"Net worth" means total assets minus total liabilities and is equivalent to owner's equity.

"Tangible net worth" means the tangible assets that remain after deducting liabilities; such assets would not include intangibles such as goodwill and rights to patents or royalties.

(g) In the liability insurance requirements the terms "bodily injury" and "property damage" shall have the meanings given these terms by applicable State law. However, these terms do not include those liabilities which, consistent with standard industry practices, are excluded from coverage in liability policies for bodily injury and property damage. The Agency intends the meanings of other terms used in the liability insurance requirements to be consistent with their common meanings within the insurance industry. The definitions given below of several of the terms are intended to assist in the understanding of these regulations and are not intended to limit their meanings in a way that conflicts with general insurance industry usage.

"Accidental occurrence" means an accident, including continuous or repeated exposure to conditions, which results in bodily injury or property damage neither expected nor intended from the standpoint of the insured.

"Legal defense costs" means any expenses that an insurer incurs in defending against claims of third parties brought under the terms and conditions of an insurance policy.

"Nonsudden accidental occurrence" means an occurrence which takes place over time and involves continuous or repeated exposure.

"Sudden accidental occurrence" means an occurrence which is not continuous or repeated in nature.

[47 FR 16554, Apr. 16, 1982]

§ 264.142 Cost estimate for closure.

(a) The owner or operator must have a written estimate, in current dollars, of the cost of closing the facility in accordance with the requirements in §§ 264.111 through 264.115 and applicable closure requirements in §§ 264.178, 264.197, 264.228, 264.258, 264.280, 264.310, and 264.351. The estimate must equal the cost of closure at the point in the facility's operating life when the extent and manner of its operation would make closure the most expensive, as indicated by its closure plan (see § 264.112(a)).

(b) The owner or operator must adjust the closure cost estimate for inflation within 30 days after each anniversary of the date on which the first closure cost estimate was prepared. The adjustment must be made as specified in paragraphs (b)(1) and (b)(2) of this section, using an inflation factor derived from the annual Implicit Price Deflator for Gross National Product as published by the U.S. Department of Commerce in its *Survey of Current Business*. The inflation factor is the result of dividing the latest published annual Deflator by the Deflator for the previous year.

(1) The first adjustment is made by multiplying the closure cost estimate by the inflation factor. The result is the adjusted closure cost estimate.

(2) Subsequent adjustments are made by multiplying the lastest adjusted closure cost estimate by the latest inflation factor.

(c) The owner or operator must revise the closure cost estimate whenever a change in the closure plan increases the cost of closure. The revised closure cost estimate must be adjusted for inflation as specified in § 264.142(b).

(d) The owner or operator must keep the following at the facility during the operating life of the facility: The latest closure cost estimate prepared in accordance with § 264.142 (a) and (c) and, when this estimate has been adjusted in accordance with § 264.142(b), the latest adjusted closure cost estimate.

[47 FR 15047, Apr. 7, 1982, as amended at 47 FR 32357, July 26, 1982]

§ 264.143 Financial assurance for closure.

An owner or operator of each facility must establish financial assurance for closure of the facility. He must choose from the options as specified in paragraphs (a) through (f) of this section.

(a) *Closure trust fund.* (1) An owner or operator may satisfy the requirements of this section by establishing a closure trust fund which conforms to the requirements of this paragraph and submitting an originally signed duplicate of the trust agreement to the Regional Administrator. An owner or operator of a new facility must submit the originally signed duplicate of the trust agreement to the Regional Administrator at least 60 days before the date on which hazardous waste is first received for treatment, storage, or disposal. The trustee must be an entity which has the authority to act as a trustee and whose trust operations are regulated and examined by a Federal or State agency.

(2) The wording of the trust agreement must be identical to the wording specified in § 264.151(a)(1), and the trust agreement must be accompanied by a formal certification of acknowledgment (for example, see § 264.151(a)(2)). Schedule A of the trust agreement must be updated within 60 days after a change in the amount of the current closure cost estimate covered by the agreement.

(3) Payments into the trust fund must be made annually by the owner or operator over the term of the initial RCRA permit or over the remaining operating life of the facility as estimated in the closure plan, whichever period is shorter; this period is hereafter referred to as the "pay-in period." The payments into the closure trust fund must be made as follows:

(i) For a new facility, the first payment must be made before the initial receipt of hazardous waste for treatment, storage, or disposal. A receipt from the trustee for this payment must be submitted by the owner or operator to the Regional Administrator before this initial receipt of hazardous waste. The first payment must be at least equal to the current closure cost estimate, except as provided in § 264.143(g), divided by the number of years in the pay-in period. Subsequent payments must be made no later than 30 days after each anniversary date of the first payment. The amount of each subsequent payment must be determined by this formula:

$$\text{Next payment} = \frac{CE - CV}{Y}$$

where CE is the current closure cost estimate, CV is the current value of the trust fund, and Y is the number of years remaining in the pay-in period.

(ii) If an owner or operator establishes a trust fund as specified in § 265.143(a) of this chapter, and the value of that trust fund is less than the current closure cost estimate when a permit is awarded for the facility, the amount of the current closure cost estimate still to be paid into the trust fund must be paid in over the pay-in period as defined in paragraph (a)(3) of this section. Payments must continue to be made no later than 30 days after each anniversary date of the first payment made pursuant to Part 265 of this chapter. The amount of each payment must be determined by this formula:

$$\text{Next payment} = \frac{CE - CV}{Y}$$

where CE is the current closure cost estimate, CV is the current value of the trust fund, and Y is the number of years remaining in the pay-in period.

(4) The owner or operator may accelerate payments into the trust fund or he may deposit the full amount of the current closure cost estimate at the time the fund is established. However, he must maintain the value of the fund at no less than the value that the fund would have if annual payments were made as specified in paragraph (a)(3) of this section.

(5) If the owner or operator establishes a closure trust fund after having used one or more alternate mechanisms specified in this section or in § 265.143 of this chapter, his first payment must be in at least the amount that the fund would contain if the trust fund were established initially and annual payments made according to specifications of this paragraph and § 265.143(a) of this chapter, as applicable.

(6) After the pay-in period is completed, whenever the current closure cost estimate changes, the owner or operator must compare the new estimate with the trustee's most recent annual valuation of the trust fund. If the value of the fund is less than the amount of the new estimate, the owner or operator, within 60 days after the change in the cost estimate, must either deposit an amount into the fund so that its value after this deposit at least equals the amount of the current closure cost estimate, or obtain other financial assurance as specified in this section to cover the difference.

(7) If the value of the trust fund is greater than the total amount of the current closure cost estimate, the owner or operator may submit a written request to the Regional Administrator for release of the amount in excess of the current closure cost estimate.

(8) If an owner or operator substitutes other financial assurance as specified in this section for all or part of the trust fund, he may submit a written request to the Regional Administrator for release of the amount in excess of the current closure cost estimate covered by the trust fund.

(9) Within 60 days after receiving a request from the owner or operator for release of funds as specified in paragraphs (a) (7) or (8) of this section, the Regional Administrator will instruct the trustee to release to the owner or operator such funds as the Regional Administrator specifies in writing.

(10) After beginning final closure, an owner or operator or any other person authorized to perform closure may request reimbursement for closure expenditures by submitting itemized bills to the Regional Administrator. Within 60 days after receiving bills for closure activities, the Regional Administrator will determine whether the closure expenditures are in accordance with the closure plan or otherwise justified, and if so, he will instruct the trustee to make reimbursement in such amounts as the Regional Administrator specifies in writing. If the Regional Administrator has reason to believe that the cost of closure will be significantly greater than the value of the trust fund, he may withhold reimbursement of such amounts as he deems prudent until he determines, in accordance with § 264.143(i), that the owner or operator is no longer required to maintain financial assurance for closure.

(11) The Regional Administrator will agree to termination of the trust when:

(i) An owner or operator substitutes alternate financial assurance as specified in this section; or

(ii) The Regional Administrator releases the owner or operator from the requirements of this section in accordance with § 264.143(i).

(b) *Surety bond guaranteeing payment into a closure trust fund.* (1) An owner or operator may satisfy the requirements of this section by obtaining a surety bond which conforms to the requirements of this paragraph and submitting the bond to the Regional Administrator. An owner or operator of a new facility must submit the bond to the Regional Administrator at least 60 days before the date on which hazardous waste is first received for treatment, storage, or disposal. The bond must be effective before this

initial receipt of hazardous waste. The surety company issuing the bond must, at a minimum, be among those listed as acceptable sureties on Federal bonds in Circular 570 of the U.S. Department of the Treasury.

(2) The wording of the surety bond must be identical to the wording specified in § 264.151(b).

(3) The owner or operator who uses a surety bond to satisfy the requirements of this section must also establish a standby trust fund. Under the terms of the bond, all payments made thereunder will be deposited by the surety directly into the standby trust fund in accordance with instructions from the Regional Administrator. This standby trust fund must meet the requirements specified in § 264.143(a), except that:

(i) An originally signed duplicate of the trust agreement must be submitted to the Regional Administrator with the surety bond; and

(ii) Until the standby trust fund is funded pursuant to the requirements of this section, the following are not required by these regulations:

(A) Payments into the trust fund as specified in § 264.143(a);

(B) Updating of Schedule A of the trust agreement (see § 264.151(a)) to show current closure cost estimates;

(C) Annual valuations as required by the trust agreement; and

(D) Notices of nonpayment as required by the trust agreement.

(4) The bond must guarantee that the owner or operator will:

(i) Fund the standby trust fund in an amount equal to the penal sum of the bond before the beginning of final closure of the facility; or

(ii) Fund the standby trust fund in an amount equal to the penal sum within 15 days after an order to begin closure is issued by the Regional Administrator or a U.S. district court or other court of competent jurisdiction; or

(iii) Provide alternate financial assurance as specified in this section, and obtain the Regional Administrator's written approval of the assurance provided, within 90 days after receipt by both the owner or operator and the Regional Administrator of a notice of cancellation of the bond from the surety.

(5) Under the terms of the bond, the surety will become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond.

(6) The penal sum of the bond must be in an amount at least equal to the current closure cost estimate, except as provided in § 264.143(g).

(7) Whenever the current closure cost estimate increases to an amount greater then the penal sum, the owner or operator, within 60 days after the increase, must either cause the penal sum to be increased to an amount at least equal to the current closure cost estimate and submit evidence of such increase to the Regional Administrator, or obtain other financial assurance as specified in this section to cover the increase. Whenever the current closure cost estimate decreases, the penal sum may be reduced to the amount of the current closure cost estimate following written approval by the Regional Administrator.

(8) Under the terms of the bond, the surety may cancel the bond by sending notice of cancellation by certified mail to the owner or operator and to the Regional Administrator. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the Regional Administrator, as evidence by the return receipts.

(9) The owner or operator may cancel the bond if the Regional Administrator has given prior written consent based on his receipt of evidence of alternate financial assurance as specified in this section.

(c) *Surety bond guaranteeing performance of closure.* (1) An owner or operator may satisfy the requirements of this section by obtaining a surety bond which conforms to the requirements of this paragraph and submitting the bond to the Regional Administrator. An owner or operator of a new facility must submit the bond to the Regional Administrator at least 60 days before the date on which hazardous waste is first received for treatment, storage, or disposal. The bond must be effective before this initial receipt of hazardous waste. The surety company issuing the bond must, at a minimum, be among those listed as acceptable sureties on Federal bonds in Circular 570 of the U.S. Department of the Treasury.

(2) The wording of the surety bond must be identical to the wording specified in § 264.151(c).

(3) The owner or operator who uses a surety bond to satisfy the requirements of this section must also establish a standby trust fund. Under the terms of the bond, all payments made thereunder will be deposited by the surety directly into the standby trust fund in accordance with instructions from the Regional Administrator. This standby trust must meet the requirements specified in § 264.143(a), except that:

(i) An originally signed duplicate of the trust agreement must be submitted to the Regional Administrator with the surety bond; and

(ii) Unless the standby trust fund is funded pursuant to the requirements of this section, the following are not required by these regulations:

(A) Payments into the trust fund as specified in § 264.143(a);

(B) Updating of Schedule A of the trust agreement (see § 264.151(a)) to show current closure cost estimates;

(C) Annual valuations as required by the trust agreement; and

(D) Notices of nonpayment as required by the trust agreement.

(4) The bond must guarantee that the owner or operator will:

(i) Perform final closure in accordance with the closure plan and other requirements of the permit for the facility whenever required to do so; or

(ii) Provide alternate financial assurance as specified in this section, and obtain the Regional Administrator's written approval of the assurance provided, within 90 days after receipt by both the owner or operator and the Regional Administrator of a notice of cancellation of the bond from the surety.

(5) Under the terms of the bond, the surety will become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond. Following a determination pursuant to Section 3008 of RCRA that the owner or operator has failed to perform final closure in accordance with the closure plan and other permit requirements when required to do so, under the terms of the bond the surety will perform final closure as guaranteed by the bond or will deposit the amount of the penal sum into the standby trust fund.

(6) The penal sum of the bond must be in an amount at least equal to the current closure cost estimate.

(7) Whenever the current closure cost estimate increases to an amount greater than the penal sum, the owner or operator, within 60 days after the increase, must either cause the penal sum to be increased to an amount at least equal to the current closure cost estimate and submit evidence of such increase to the Regional Administrator, or obtain other financial assurance as specified in this section. Whenever the current closure cost estimate decreases, the penal sum may be reduced to the amount of the current closure cost estimate following written approval by the Regional Administrator.

(8) Under the terms of the bond, the surety may canel the bond by sending notice of cancellation by certified mail to the owner or operator and to the Regional Administrator. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the Regional Administrator, as evidenced by the return receipts.

(9) The owner or operator may cancel the bond if the Regional Administrator has given prior written consent. The Regional Administrator will provide such written consent when:

(i) An owner or operator substitutes alternate financial assurance as specified in this section; or

(ii) The Regional Administrator releases the owner or operator from the requirements of this section in accordance with § 264.143(i).

(10) The surety will not be liable for deficiencies in the performance of closure by the owner or operator after the Regional Administrator releases the owner or operator from the re-

quirements of this section in accordance with § 264.143(i).

(d) *Closure letter of credit.* (1) An owner or operator may satisfy the requirements of this section by obtaining an irrevocable standby letter of credit which conforms to the requirements of this paragraph and submitting the letter to the Regional Administrator. An owner or operator of a new facility must submit the letter of credit to the Regional Administrator at least 60 days before the date on which hazardous waste is first received for treatment, storage, or disposal. The letter of credit must be effective before this initial receipt of hazardous waste. The issuing institution must be an entity which has the authority to issue letters of credit and whose letter-of-credit operations are regulated and examined by a Federal or State agency.

(2) The wording of the letter of credit must be identical to the wording specified in § 264.151(d).

(3) An owner or operator who uses a letter of credit to satisfy the requirements of this section must also establish a standby trust fund. Under the terms of the letter of credit, all amounts paid pursuant to a draft by the Regional Administrator will be deposited by the issuing institution directly into the standby trust fund in accordance with instructions from the Regional Administrator. This standby trust fund must meet the requirements of the trust fund specified in § 264.143(a), except that:

(i) An originally signed duplicate of the trust agreement must be submitted to the Regional Administrator with the letter of credit; and

(ii) Unless the standby trust fund is funded pursuant to the requirements of this section, the following are not required by these regulations:

(A) Payments into the trust fund as specified in § 264.143(a);

(B) Updating of Schedule A of the trust agreement (see § 264.151(a)) to show current closure cost estimates;

(C) Annual valuations as required by the trust agreement; and

(D) Notices of nonpayment as required by the trust agreement.

(4) The letter of credit must be accompanied by a letter from the owner or operator referring to the letter of credit by number, issuing institution, and date, and providing the following information: the EPA Identification Number, name, and address of the facility, and the amount of funds assured for closure of the facility by the letter of credit.

(5) The letter of credit must be irrevocable and issued for a period of at least 1 year. The letter of credit must provide that the expiration date will be automatically extended for a period of at least 1 year unless, at least 120 days before the current expiration date, the issuing institution notifies both the owner or operator and the Regional Administrator by certified mail of a decision not to extend the expiration date. Under the terms of the letter of credit, the 120 days will begin on the date when both the owner or operator and the Region Administrator have received the notice, as evidenced by the return receipts.

(6) The letter of credit must be issued in an amount at least equal to the current closure cost estimate, except as provided in § 264.143(g).

(7) Whenever the current closure cost estimate increases to an amount greater than the amount of the credit, the owner or operator, within 60 days after the increase, must either cause the amount of the credit to be increased so that it at least equals the current closure cost estimate and submit evidence of such increase to the Regional Administrator, or obtain other financial assurance as specified in this section to cover the increase. Whenever the current closure cost estimate decreases, the amount of the credit may be reduced to the amout of the current closure cost estimate following written approval by the Regional Administrator.

(8) Following a determination pursuant to Section 3008 of RCRA that the owner or operator has failed to perform final closure in accordance with the closure plan and other permit requirements when required to do so, the Regional Administrator may draw on the letter of credit.

(9) If the owner or operator does not establish alternate financial assurance as specified in this section and obtain written approval of such alternate assurance from the Regional Administrator within 90 days after receipt by both the owner or operator and the Regional Administrator of a notice from issuing institution that it has decided not to extend the letter of credit beyond the current expiration date, the Regional Administrator will draw on the letter of credit. The Regional Administrator may delay the drawing if the issuing institution grants an extension of the term of the credit. During the last 30 days of any such extension the Regional Administrator will draw on the letter of credit if the owner or operator has failed to provide alternate financial assurance as specified in this section and obtain written approval of such assurance from the Regional Administrator.

(10) The Regional Administrator will return the letter of credit to the issuing institution for termination when:

(i) An owner or operator substitutes alternate financial assurance as specified in this section; or

(ii) The Regional Administrator releases the owner or operator from the requirements of this section in accordance with § 264.143(i).

(e) *Closure insurance.* (1) An owner or operator may satisfy the requirements of this section by obtaining closure insurance which conforms to the requirements of this paragraph and submitting a certificate of such insurance to the Regional Administrator. An owner or operator of a new facility must submit the certificate of insurance to the Regional Administrator at least 60 days before the date on which hazardous waste is first received for treatment, storage, or disposal. The insurance must be effective before this initial receipt of hazardous waste. At a minimum, the insurer must be licensed to transact the business of insurance, or eligible to provide insurance as an excess or suplus lines insurer, in one or more States.

(2) The wording of the certificate of insurance must be identical to the wording specified in § 264.151(e).

(3) The closure insurance policy must be issued for a face amount at least equal to the current closure cost estimate, except as provided in § 264.143(g). The term "face amount" means the total amount the insurer is obligated to pay under the policy. Actual payments by the insurer will not change the face amount, although the insurer's future liability will be lowered by the amount of the payments.

(4) The closure insurance policy must guarantee that funds will be available to close the facility whenever final closure occurs. The policy must also guarantee that once final closure begins, the insurer will be responsible for paying out funds, up to an amount equal to the face amount of the policy, upon the direction of the Regional Administrator, to such party or parties as the Regional Administrator specifies.

(5) After beginning final closure, an owner or operator or any other person authorized to perform closure may request reimbursement for closure expenditures by submitting itemized bills to the Regional Administrator. Within 60 days after receiving bills for closure activities, the Regional Administrator will determine whether the closure expenditures are in accordance with the closure plan or otherwise justified, and if so, he will instruct the insurer to make reimbursement in such amounts as the Regional Administrator specifies in writing. If the Regional Administrator has reason to believe that the cost of closure will be significantly greater than the face amount of the policy, he may withhold reimbursement of such amounts as he deems prudent until he determines, in accordance with § 264.143(i), that the owner or operator is no longer required to maintain financial assurance for closure of the facility.

(6) The owner or operator must maintain the policy in full force and effect until the Regional Administrator consents to termination of the policy by the owner or operator as specified in paragraph (e)(10) of this section. Failure to pay the premium, without substitution of alternate financial assurance as specified in this section, will constitute a significant violation of these regulations, warranting such remedy as the Regional Administrator deems necessary. Such violation will be deemed to begin upon receipt by the Regional Adminstrator of a notice of future cancellation, termination, or failure to renew due to

nonpayment of the premium, rather than upon the date of expiration.

(7) Each policy must contain a provision allowing assignment of the policy to a successor owner or operator. Such assignment may be conditional upon consent of the insurer, provided such consent is not unreasonably refused.

(8) The policy must provide that the insurer may not cancel, terminate, or fail to renew the policy except for failure to pay the premium. The automatic renewal of the policy must, at a minimum, provide the insured with the option of renewal at the face amount of the expiring policy. If there is a failure to pay the premium, the insurer may elect to cancel, terminate, or fail to renew the policy by sending notice by certified mail to the owner or operator and the Regional Administrator. Cancellation, termination, or failure to renew may not occur, however, during the 120 days beginning with the date of receipt of the notice by both the Regional Administrator and the owner or operator, as evidenced by the return receipts. Cancellation, termination, or failure to renew may not occur and the policy will remain in full force and effect in the event that on or before the date of expiration:

(i) The Regional Administrator deems the facility abandoned; or

(ii) The permit is terminated or revoked or a new permit is denied; or

(iii) Closure is ordered by the Regional Administrator or a U.S. district court or other court of competent jurisdiction; or

(iv) The owner or operator is named as debtor in a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code; or

(v) The premium due is paid.

(9) Whenever the current closure cost estimate increases to an amount greater than the face amount of the policy, the owner or operator, within 60 days after the increase, must either cause the face amount to be increased to an amount at least equal to the current closure cost estimate and submit evidence of such increase to the Regional Administrator, or obtain other financial assurance as specified in this section to cover the increase. Whenever the current closure cost estimate decreases, the face amount may be reduced to the amount of the current closure cost estimate following written approval by the Regional Administrator.

(10) The Regional Administrator will give written consent to the owner or operator that he may terminate the insurance policy when:

(i) An owner or operator substitutes alternate financial assurance as specified in this section; or

(ii) The Regional Administrator releases the owner or operator from the requirements of this section in accordance with § 264.143(i).

(f) *Financial test and corporate guarantee for closure.* (1) An owner or operator may satisfy the requirements of this section by demonstrating that he passes a financial test as specified in this paragraph. To pass this test the owner or operator must meet the criteria of either paragraph (f)(1)(i) or (f)(1)(ii) of this section:

(i) The owner or operator must have:

(A) Two of the following three ratios: a ratio of total liabilities to net worth less than 2.0; a ratio of the sum of net income plus depreciation, depletion, and amortization to total liabilities greater than 0.1; and a ratio of current assets to current liabilities greater than 1.5; and

(B) Net working capital and tangible net worth each at least six times the sum of the current closure and post-closure cost estimates; and

(C) Tangible net worth of at least $10 million; and

(D) Assets in the United States amounting to at least 90 percent of his total assets or at least six times the sum of the current closure and post-closure cost estimates.

(ii) The owner or operator must have:

(A) A current rating for his most recent bond issuance of AAA, AA, A, or BBB as issued by Standard and Poor's or Aaa, Aa, A, or Baa as issued by Moody's; and

(B) Tangible net worth at least six times the sum of the current closure and post-closure cost estimates; and

(C) Tangible net worth of at least $10 million; and

(D) Assets located in the United States amounting to at least 90 percent of his total assets or at least six

times the sum of the current closure and post-closure cost estimates.

(2) The phrase "current closure and post-closure cost estimates" as used in paragraph (f)(1) of this section refers to the cost estimates required to be shown in paragraphs 1–4 of the letter from the owner's or operator's chief financial officer (§ 264.151(f)).

(3) To demonstrate that he meets this test, the owner or operator must submit the following items to the Regional Administrator:

(i) A letter signed by the owner's or operator's chief financial officer and worded as specified in § 264.151(f); and

(ii) A copy of the independent certified public accountant's report on examination of the owner's or operator's financial statements for the latest completed fiscal year; and

(iii) A special report from the owner's or operator's independent certified public accountant to the owner or operator stating that:

(A) He has compared the data which the letter from the chief financial officer specifies as having been derived from the independently audited, year-end financial statements for the latest fiscal year with the amounts in such financial statements; and

(B) In connection with that procedure, no matters came to his attention which caused him to believe that the specified data should be adjusted.

(4) An owner or operator of a new facility must submit the items specified in paragraph (f)(3) of this section to the Regional Administrator at least 60 days before the date on which hazardous waste is first received for treatment, storage, or disposal.

(5) After the initial submission of items specified in paragraph (f)(3) of this section, the owner or operator must send updated information to the Regional Administrator within 90 days after the close of each succeeding fiscal year. This information must consist of all three items specified in paragraph (f)(3) of this section.

(6) If the owner or operator no longer meets the requirements of paragraph (f)(1) of this section, he must send notice to the Regional Administrator of intent to establish alternate financial assurance as specified in this section. The notice must be sent by certified mail within 90 days after the end of the fiscal year for which the year-end financial data show that the owner or operator no longer meets the requirements. The owner or operator must provide the alternate financial assurance within 120 days after the end of such fiscal year.

(7) The Regional Administrator may, based on a reasonable belief that the owner or operator may no longer meet the requirements of paragraph (f)(1) of this section, require reports of financial condition at any time from the owner or operator in addition to those specified in paragraph (f)(3) of this section. If the Regional Administrator finds, on the basis of such reports or other information, that the owner or operator no longer meets the requirements of paragraph (f)(1) of this section, the owner or operator must provide alternate financial assurance as specified in this section within 30 days after notification of such a finding.

(8) The Regional Administrator may disallow use of this test on the basis of qualifications in the opinion expressed by the independent certified public accountant in his report on examination of the owner's or operator's financial statements (see paragraph (f)(3)(ii) of this section). An adverse opinion or a disclaimer of opinion will be cause for disallowance. The Regional Administrator will evaluate other qualifications on an individual basis. The owner or operator must provide alternate financial assurance as specified in this section within 30 days after notification of the disallowance.

(9) The owner or operator is no longer required to submit the items specified in paragraph (f)(3) of this section when:

(i) An owner or operator substitutes alternate financial assurance as specified in this section; or

(ii) The Regional Administrator releases the owner or operator from the requirements of this section in accordance with § 264.143(i).

(10) An owner or operator may meet the requirements of this section by obtaining a written guarantee, hereafter referred to as "corporate guarantee." The guarantor must be the parent corporation of the owner or operator.

The guarantor must meet the requirements for owners or operators in paragraphs (f)(1) through (f)(8) of this section and must comply with the terms of the corporate guarantee. The wording of the corporate guarantee must be identical to the wording specified in § 264.151(h). The corporate guarantee must accompany the items sent to the Regional Administrator as specified in paragraph (f)(3) of this section. The terms of the corporate guarantee must provide that:

(i) If the owner or operator fails to perform final closure of a facility covered by the corporate guarantee in accordance with the closure plan and other permit requirements whenever required to do so, the guarantor will do so or establish a trust fund as specified in § 264.143(a) in the name of the owner or operator.

(ii) The corporate guarantee will remain in force unless the guarantor sends notice of cancellation by certified mail to the owner or operator and to the Regional Administrator. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the Regional Administrator, as evidenced by the return receipts.

(iii) If the owner or operator fails to provide alternate financial assurance as specified in this section and obtain the written approval of such alternate assurance from the Regional Administrator within 90 days after receipt by both the owner or operator and the Regional Administrator of a notice of cancellation of the corporate guarantee from the guarantor, the guarantor will provide such alternative financial assurance in the name of the owner or operator.

(g) *Use of multiple financial mechanisms.* An owner or operator may satisfy the requirements of this section by establishing more than one financial mechanism per facility. These mechanisms are limited to trust funds, surety bonds guaranteeing payment into a trust fund, letters of credit, and insurance. The mechanisms must be as specified in paragraphs (a), (b), (d), and (e), respectively, of this section, except that it is the combination of mechanisms, rather than the single mechanism, which must provide financial assurance for an amount at least equal to the current closure cost estimate. If an owner or operator uses a trust fund in combination with a surety bond or a letter of credit, he may use the trust fund as the standby trust fund for the other mechanisms. A single standby trust fund may be established for two or more mechanisms. The Regional Administrator may use any or all of the mechanisms to provide for closure of the facility.

(h) *Use of a financial mechanism for multiple facilities.* An owner or operator may use a financial assurance mechanism specified in this section to meet the requirements of this section for more than one facility. Evidence of financial assurance submitted to the Regional Administrator must include a list showing, for each facility, the EPA Identification Number, name, address, and the amount of funds for closure assured by the mechanism. If the facilities covered by the mechanism are in more than one Region, identical evidence of financial assurance must be submitted to and maintained with the Regional Administrators of all such Regions. The amount of funds available through the mechanism must be no less than the sum of funds that would be available if a separate mechanism had been established and maintained for each facility. In directing funds available through the mechanism for closure of any of the facilities covered by the mechanism, the Regional Administrator may direct only the amount of funds designated for that facility, unless the owner or operator agrees to the use of additional funds available under the mechanism.

(i) *Release of the owner or operator from the requirements of this section.* Within 60 days after receiving certifications from the owner or operator and an independent registered professional engineer that closure has been accomplished in accordance with the closure plan, the Regional Administrator will notify the owner or operator in writing that he is no longer required by this section to maintain financial assurance for closure of the particular facility, unless the Regional Administrator has reason to believe

that closure has not been in accordance with the closure plan.

§ 264.144 Cost estimate for post-closure care.

(a) The owner or operator of a facility subject to post-closure monitoring or maintenance requirements must have a written estimate, in current dollars, of the annual cost of post-closure monitoring and maintenance of the facility in accordance with the applicable post-closure regulations in §§ 264.117 through 264.120, 264.228, 264.258, 264.280, and 264.310. The post-closure cost estimate is calculated by multiplying the annual post-closure cost estimate by the number of years of post-closure care required under Subpart G of Part 264.

(b) During the operating life of the facility, the owner or operator must adjust the post-closure cost estimate for inflation within 30 days after each anniversary of the date on which the first post-closure cost estimate was prepared. The adjustment must be made as specified in paragraphs (b)(1) and (b)(2) of this section, using an inflation factor derived from the annual Implicit Price Deflator for Gross National Product as published by the U.S. Department of Commerce in its *Survey of Current Business*. The inflation factor is the result of dividing the latest published annual Deflator by the Deflator for the previous year.

(1) The first adjustment is made by multiplying the post-closure cost estimate by the inflation factor. The result is the adjusted post-closure cost estimate.

(2) Subsequent adjustments are made by multiplying the latest adjusted post-closure cost estimate by the latest inflation factor.

(c) The owner or operator must revise the post-closure cost estimate during the operating life of the facility whenever a change in the post-closure plan increases the cost of post-closure care. The revised post-closure cost estimate must be adjusted for inflation as specified in § 264.144(b).

(d) The owner or operator must keep the following at the facility during the operating life of the facility: The latest post-closure cost estimate prepared in accordance with § 264.144 (a) and (c) and, when this estimate has been adjusted in accordance with § 264.144(b), the latest adjusted post-closure cost estimate.

[47 FR 15047, Apr. 7, 1982, as amended at 47 FR 32357, July 26, 1982]

§ 264.145 Financial assurance for post-closure care.

The owner or operator of a facility subject to post-closure monitoring or maintenance requirements must establish financial assurance for post-closure care in accordance with the approved post-closure plan for the facility. He must choose from the following options:

(a) *Post-closure trust fund.* (1) An owner or operator may satisfy the requirements of this section by establishing a post-closure trust fund which conforms to the requirements of this paragraph and submitting an originally signed duplicate of the trust agreement to the Regional Administrator. An owner or operator of a new facility must submit the originally signed duplicate of the trust agreement to the Regional Administrator at least 60 days before the date on which hazardous waste is first received for disposal. The trustee must be an entity which has the authority to act as a trustee and whose trust operations are regulated and examined by a Federal or State agency.

(2) The wording of the trust agreement must be identical to the wording specified in § 264.151(a)(1), and the trust agreement must be accompanied by a formal certification of acknowledgment (for example, see § 264.151(a)(2)). Schedule A of the trust agreement must be updated within 60 days after a change in the amount of the current post-closure cost estimate covered by the agreement.

(3) Payments into the trust fund must be made annually by the owner or operator over the term of the initial RCRA permit or over the remaining operating life of the facility as estimated in the closure plan, whichever period is shorter; this period is hereafter referred to as the "pay-in period." The payments into the post-closure trust fund must be made as follows:

(i) For a new facility, the first payment must be made before the initial receipt of hazardous waste for disposal. A receipt from the trustee for this payment must be submitted by the owner or operator to the Regional Administrator before this initial receipt of hazardous waste. The first payment must be at least equal to the current post-closure cost estimate, except as provided in § 264.145(g), divided by the number of years in the pay-in period. Subsequent payments must be made no later than 30 days after each anniversay date of the first payment. The amount of each subsequent payment must be determined by this formula:

$$\text{Next payment} = \frac{CE - CV}{Y}$$

where CE is the current post-closure cost estimate, CV is the current value of the trust fund, and Y is the number of years remaining in the pay-in period.

(ii) If an owner or operator establishes a trust fund as specified in § 265.145(a) of this chapter, and the value of that trust fund is less than the current post-closure cost estimate when a permit is awarded for the facility, the amount of the current post-closure cost estimate still to be paid into the fund must be paid in over the pay-in period as defined in paragraph (a)(3) of this section. Payments must continue to be made no later than 30 days after each anniversary date of the first payment made pursuant to Part 265 of this chapter. The amount of each payment must be determined by this formula:

$$\text{Next payment} = \frac{CE - CV}{Y}$$

where CE is the current post-closure cost estimate, CV is the current value of the trust fund, and Y is the number of years remaining in the pay-in period.

(4) The owner or operator may accelerate payments into the trust fund or he may deposit the full amount of the current post-closure cost estimate at the time the fund is established. However, he must maintain the value of the fund at no less than the value that the fund would have if annual payments were made as specified in paragraph (a)(3) of this section.

(5) If the owner or operator establishes a post-closure trust fund after having used one or more alternate mechanisms specified in this section or in § 265.145 of this chapter, his first payment must be in at least the amount that the fund would contain if the trust fund were established initially and annual payments made according to specifications of this paragraph and § 265.145(a) of this chapter, as applicable.

(6) After the pay-in period is completed, whenever the current post-closure cost estimate changes during the operating life of the facility, the owner or operator must compare the new estimate with the trustee's most recent annual valuation of the trust fund. If the value of the fund is less than the amount of the new estimate, the owner or operator, within 60 days after the change in the cost estimate, must either deposit an amount into the fund so that its value after this deposit at least equals the amount of the current post-closure cost estimate, or obtain other financial assurance as specified in this section to cover the difference.

(7) During the operating life of the facility, if the value of the trust fund is greater than the total amount of the current post-closure cost estimate, the owner or operator may submit a written request to the Regional Administrator for release of the amount in excess of the current post-closure cost estimate.

(8) If an owner or operator substitutes other financial assurance as specified in this section for all or part of the trust fund, he may submit a written request to the Regional Administrator for release of the amount in excess of the current post-closure cost estimate covered by the trust fund.

(9) Within 60 days after receiving a request from the owner or operator for release of funds as specified in paragraph (a) (7) or (8) of this section, the Regional Administrator will instruct the trustee to release to the

owner or operator such funds as the Regional Administrator specifies in writing.

(10) During the period of post-closure care, the Regional Administrator may approve a release of funds if the owner or operator demonstrates to the Regional Administrator that the value of the trust fund exceeds the remaining cost of post-closure care.

(11) An owner or operator or any other person authorized to perform post-closure care may request reimbursement for post-closure expenditures by submitting itemized bills to the Regional Administrator. Within 60 days after receiving bills for post-closure activities, the Regional Administrator will determine whether the post-closure expenditures are in accordance with the post-closure plan or otherwise justified, and if so, he will instruct the trustee to make reimbursement in such amounts as the Regional Administrator specifies in writing.

(12) The Regional Administrator will agree to termination of the trust when:

(i) An owner or operator substitutes alternate financial assurance as specified in this section; or

(ii) The Regional Administrator releases the owner or operator from the requirements of this section in accordance with § 264.145(i).

(b) *Surety bond guaranteeing payment into a post-closure trust fund.* (1) An owner or operator may satisfy the requirements of this section by obtaining a surety bond which conforms to the requirements of this paragraph and submitting the bond to the Regional Administrator. An owner or operator of a new facility must submit the bond to the Regional Administrator at least 60 days before the date on which hazardous waste is first received for disposal. The bond must be effective before this initial receipt of hazardous waste. The surety company issuing the bond must, at a minimum, be among those listed as acceptable sureties on Federal bonds in Circular 570 of the U.S. Department of the Treasury.

(2) The wording of the surety bond must be identical to the wording specified in § 264.151(b).

(3) The owner or operator who uses a surety bond to satisfy the requirements of this section must also establish a standby trust fund. Under the terms of the bond, all payments made thereunder will be deposited by the surety directly into the standby trust fund in accordance with instructions from the Regional Administrator. This standby trust fund must meet the requirements specified in § 264.145(a), except that:

(i) An originally signed duplicate of the trust agreement must be submitted to the Regional Administrator with the surety bond; and

(ii) Until the standby trust fund is funded pursuant to the requirements of this section, the following are not required by these regulations:

(A) Payments into the trust fund as specified in § 264.145(a);

(B) Updating of Schedule A of the trust agreement (see § 264.151(a)) to show current post-closure cost estimates;

(C) Annual valuations as required by the trust agreement; and

(D) Notices of nonpayment as required by the trust agreement.

(4) The bond must guarantee that the owner or operator will:

(i) Fund the standby trust fund in an amount equal to the penal sum of the bond before the beginning of final closure of the facility; or

(ii) Fund the standby trust fund in an amount equal to the penal sum within 15 days after an order to begin closure is issued by the Regional Administrator or a U.S. district court or other court of competent jurisdiction; or

(iii) Provide alternate financial assurance as specified in this section, and obtain the Regional Administrator's written approval of the assurance provided, within 90 days after receipt by both the owner or operator and the Regional Administrator of a notice of cancellation of the bond from the surety.

(5) Under the terms of the bond, the surety will become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond.

(6) The penal sum of the bond must be in an amount at least equal to the

current post-closure cost estimate, except as provided in § 264.145(g).

(7) Whenever the current post-closure cost estimate increases to an amount greater than the penal sum, the owner or operator, within 60 days after the increase, must either cause the penal sum to be increased to an amount at least equal to the current post-closure cost estimate and submit evidence of such increase to the Regional Administrator, or obtain other financial assurance as specified in this section to cover the increase. Whenever the current post-closure cost estimate decreases, the penal sum may be reduced to the amount of the current post-closure cost estimate following written approval by the Regional Administrator.

(8) Under the terms of the bond, the surety may cancel the bond by sending notice of cancellation by certified mail to the owner or operator and to the Regional Administrator. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the Regional Administrator, as evidenced by the return receipts.

(9) The owner or operator may cancel the bond if the Regional Administrator has given prior written consent based on his receipt of evidence of alternate financial assurance as specified in this section.

(c) *Surety bond guaranteeing performance of post-closure care.* (1) An owner or operator may satisfy the requirements of this section by obtaining a surety bond which conforms to the requirements of this paragraph and submitting the bond to the Regional Administrator. An owner or operator of a new facility must submit the bond to the Regional Administrator at least 60 days before the date on which hazardous waste is first received for disposal. The bond must be effective before this initial receipt of hazardous waste. The surety company issuing the bond must, at a minimum, be among those listed as acceptable sureties on Federal bonds in Circular 570 of the U.S. Department of the Treasury.

(2) The wording of the surety bond must be identical to the wording specified in § 264.151(c).

(3) The owner or operator who uses a surety bond to satisfy the requirements of this section must also establish a standby trust fund. Under the terms of the bond, all payments made thereunder will be deposited by the surety directly into the standby trust fund in accordance with instructions from the Regional Administrator. This standby trust fund must meet the requirements specified in § 264.145(a), except that:

(i) An originally signed duplicate of the trust agreement must be submitted to the Regional Administrator with the surety bond; and

(ii) Unless the standby trust fund is funded pursuant to the requirements of this section, the following are not required by these regulations:

(A) Payments into the trust fund as specified in § 264.145(a);

(B) Updating of Schedule A of the trust agreement (see § 264.151(a)) to show current post-closure cost estimates;

(C) Annual valuations as required by the trust agreement; and

(D) Notices of nonpayment as required by the trust agreement.

(4) The bond must guarantee that the owner or operator will:

(i) Perform post-closure care in accordance with the post-closure plan and other requirements of the permit for the facility; or

(ii) Provide alternate financial assurance as specified in this section, and obtain the Regional Administrator's written approval of the assurance provided, within 90 days of receipt by both the owner or operator and the Regional Administrator of a notice of cancellation of the bond from the surety.

(5) Under the terms of the bond, the surety will become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond. Following a determination pursuant to Section 3008 of RCRA that the owner or operator has failed to perform post-closure care in accordance with the post-closure plan and other permit requirements, under the terms of the bond the surety will perform post-closure care in accordance with the post-closure plan and other permit requirements or will deposit the amount of the penal sum into the standby trust fund.

(6) The penal sum of the bond must be in an amount at least equal to the current post-closure cost estimate.

(7) Whenever the current post-closure cost estimate increases to an amount greater than the penal sum during the operating life of the facility, the owner or operator, within 60 days after the increase, must either cause the penal sum to be increased to an amount at least equal to the current post-closure cost estimate and submit evidence of such increase to the Regional Administrator, or obtain other financial assurance as specified in this section. Whenever the current post-closure cost estimate decreases during the operating life of the facility, the penal sum may be reduced to the amount of the current post-closure cost estimate following written approval by the Regional Administrator.

(8) During the period of post-closure care, the Regional Administrator may approve a decrease in the penal sum if the owner or operator demonstrates to the Regional Administrator that the amount exceeds the remaining cost of post-closure care.

(9) Under the terms of the bond, the surety may cancel the bond by sending notice of cancellation by certified mail to the owner or operator and to the Regional Administrator. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the Regional Administrator, as evidenced by the return receipts.

(10) The owner or operator may cancel the bond if the Regional Administrator has given prior written consent. The Regional Administrator will provide such written consent when:

(i) An owner or operator substitutes alternate financial assurance as specified in this section; or

(ii) The Regional Administrator releases the owner or operator from the requirements of this section in accordance with § 264.145(i).

(11) The surety will not be liable for deficiencies in the performance of post-closure care by the owner or operator after the Regional Administrator releases the owner or operator from the requirements of this section in accordance with §264.145(i).

(d) *Post-closure letter of credit.* (1) An owner or operator may satisfy the requirements of this section by obtaining an irrevocable standby letter of credit which conforms to the requirements of this paragraph and submitting the letter to the Regional Administrator. An owner or operator of a new facility must submit the letter of credit to the Regional Administrator at least 60 days before the date on which hazardous waste is first received for disposal. The letter of credit must be effective before this initial receipt of hazardous waste. The issuing institution must be an entity which has the authority to issue letters of credit and whose letter-of-credit operations are regulated and examined by a Federal or State agency.

(2) The wording of the letter of credit must be identical to the wording specified in § 264.151(d).

(3) An owner or operator who uses a letter of credit to satisfy the requirements of this section must also establish a standby trust fund. Under the terms of the letter of credit, all amounts paid pursuant to a draft by the Regional Administrator will be deposited by the issuing institution directly into the standby trust fund in accordance with instructions from the Regional Administrator. This standby trust fund must meet the requirements of the trust fund specified in § 264.145(a), except that:

(i) An originally signed duplicate of the trust agreement must be submitted to the Regional Administrator with the letter of credit; and

(ii) Unless the standby trust fund is funded pursuant to the requirements of this section, the following are not required by these regulations:

(A) Payments into the trust fund as specified in § 264.145(a);

(B) Updating of Schedule A of the trust agreement (see § 264.151(a)) to show current post-closure cost estimates;

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(C) Annual valuations as required by the trust agreement; and

(D) Notices of nonpayment as required by the trust agreement.

(4) The letter of credit must be accompanied by a letter from the owner or operator referring to the letter of credit by number, issuing institution, and date, and providing the following information: the EPA Identification Number, name, and address of the facility, and the amount of funds assured for post-closure care of the facility by the letter of credit.

(5) The letter of credit must be irrevocable and issued for a period of at least 1 year. The letter of credit must provide that the expiration date will be automatically extended for a period of at least 1 year unless, at least 120 days before the current expiration date, the issuing institution notifies both the owner or operator and the Regional Administrator by certified mail of a decision not to extend the expiration date. Under the terms of the letter of credit, the 120 days will begin on the date when both the owner or operator and the Regional Administrator have received the notice, as evidenced by the return receipts.

(6) The letter of credit must be issued in a amount at least equal to the current post-closure cost estimate, except as provided in § 264.145(g).

(7) Whenever the current post-closure cost estimate increases to an amount greater than the amount of the credit during the operating life of the facility, the owner or operator, within 60 days after the increase, must either cause the amount of the credit to be increased so that it at least equals the current post-closure cost estimate and submit evidence of such increase to the Regional Administrator, or obtain other financial assurance as specified in this section to cover the increase. Whenever the current post-closure cost estimate decreases during the operating life of the facility, the amount of the credit may be reduced to the amount of the current post-closure cost estimate following written approval by the Regional Administrator.

(8) During the period of post-closure care, the Regional Administrator may approve a decrease in the amount of the letter of credit if the owner or operator demonstrates to the Regional Administrator that the amount exceeds the remaining cost of post-closure care.

(9) Following a determination pursuant to Section 3008 of RCRA that the owner or operator has failed to perform post-closure care in accordance with the post-closure plan and other permit requirements, the Regional Adminstrator may draw on the letter of credit.

(10) If the owner or operator does not establish alternate financial assurance as specified in this section and obtain written approval of such alternate assurance from the Regional Administrator within 90 days after receipt by both the owner or operator and the Regional Administrator of a notice from the issuing institution that it has decided not to extend the letter of credit beyond the current expiration date, the Regional Administrator will draw on the letter of credit. The Regional Administrator may delay the drawing if the issuing institution grants an extension of the term of the credit. During the last 30 days of any such extension the Regional Administrator will draw on the letter of credit if the owner or operator has failed to provide alternate financial assurance as specified in this section and obtain written approval of such assurance from the Regional Administrator.

(11) The Regional Administrator will return the letter of credit to the issuing institution for termination when:

(i) An owner or operator substitutes alternate financial assurance as specified in this section; or

(ii) The Regional Administrator releases the owner or operator from the requirements of this section in accordance with § 264.145(i).

(e) *Post-closure insurance.* (1) An owner or operator may satisfy the requirements of this section by obtaining post-closure insurance which conforms to the requirements of this paragraph and submitting a certificate of such insurance to the Regional Administrator. An owner or operator of a new facility must submit the certificate of insurance to the Regional Administrator at least 60 days before the

date on which hazardous waste is first received for disposal. The insurance must be effective before this initial receipt of hazardous waste. At a minimum, the insurer must be licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more States.

(2) The wording of the certificate of insurance must be identical to the wording specified in § 264.151(e).

(3) The post-closure insurance policy must be issued for a face amount at least equal to the current post-closure cost estimate, except as provided in § 264.145(g). The term "face amount" means the total amount the insurer is obligated to pay under the policy. Actual payments by the insurer will not change the face amount, although the insurer's future liability will be lowered by the amount of the payments.

(4) The post-closure insurance policy must guarantee that funds will be available to provide post-closure care of the facility whenever the post-closure period begins. The policy must also guarantee that once post-closure care begins, the insurer will be responsible for paying out funds, up to an amount equal to the face amount of the policy, upon the direction of the Regional Administrator, to such party or parties as the Regional Administrator specifies.

(5) An owner or operator or any other person authorized to perform post-closure care may request reimbursement for post-closure expenditures by submitting itemized bills to the Regional Administrator. Within 60 days after receiving bills for post-closure activities, the Regional Administrator will determine whether the post-closure expenditures are in accordance with the post-closure plan or otherwise justified, and if so, he will instruct the insurer to make reimbursement in such amounts as the Regional Administrator specifies in writing.

(6) The owner or operator must maintain the policy in full force and effect until the Regional Administrator consents to termination of the policy by the owner or operator as specified in paragraph (e)(11) of this section. Failure to pay the premium, without substitution of alternate financial assurance as specified in this section, will constitute a significant violation of these regulations, warranting such remedy as the Regional Administrator deems necessary. Such violation will be deemed to begin upon receipt by the Regional Administrator of a notice of future cancellation, termination, or failure to renew due to nonpayment of the premium, rather than upon the date of expiration.

(7) Each policy must contain a provision allowing assignment of the policy to a successor owner or operator. Such assignment may be conditional upon consent of the insurer, provided such consent is not unreasonably refused.

(8) The policy must provide that the insurer may not cancel, terminate, or fail to renew the policy except for failure to pay the premium. The automatic renewal of the policy must, at a minimum, provide the insured with the option of renewal at the face amount of the expiring policy. If there is a failure to pay the premium, the insurer may elect to cancel, terminate, or fail to renew the policy by sending notice by certified mail to the owner or operator and the Regional Administrator. Cancellation, termination, or failure to renew may not occur, however, during the 120 days beginning with the date of receipt of the notice by both the Regional Administrator and the owner or operator, as evidenced by the return receipts. Cancellation, termination, or failure to renew may not occur and the policy will remain in full force and effect in the event that on or before the date of expiration:

(i) The Regional Administrator deems the facility abandoned; or

(ii) The permit is terminated or revoked or a new permit is denied; or

(iii) Closure is ordered by the Regional Administrator or a U.S. district court or other court of competent jurisdiction; or

(iv) The owner or operator is named as debtor in a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code; or

(v) The premium due is paid.

(9) Whenever the current post-closure cost estimate increases to an amount greater than the face amount

of the policy during the operating life of the facility, the owner or operator, within 60 days after the increase, must either cause the face amount to be increased to an amount at least equal to the current post-closure cost estimate and submit evidence of such increase to the Regional Administrator, or obtain other financial assurance as specified in this section to cover the increase. Whenever the current post-closure cost estimate decreases during the operating life of the facility, the face amount may be reduced to the amount of the current post-closure cost estimate following written approval by the Regional Administrator.

(10) Commencing on the date that liability to make payments pursuant to the policy accrues, the insurer will thereafter annually increase the face amount of the policy. Such increase must be equivalent to the face amount of the policy, less any payments made, multiplied by an amount equivalent to 85 percent of the most recent investment rate or of the equivalent coupon-issue yield announced by the U.S. Treasury for 26-week Treasury securities.

(11) The Regional Administrator will give written consent to the owner or operator that he may terminate the insurance policy when:

(i) An owner or operator substitutes alternate financial assurance as specified in this section; or

(ii) The Regional Administrator releases the owner or operator from the requirements of this section in accordance with § 264.145(i)

(f) *Financial test and corporate guarantee for post-closure care.* (1) An owner or operator may satisfy the requirements of this section by demonstrating that he passes a financial test as specified in this paragraph. To pass this test the owner or operator must meet the criteria of either paragraph (f)(1)(i) or (f)(1)(ii) of this section:

(i) The owner or operator must have:

(A) Two of the following three ratios: a ratio of total liabilities to net worth less than 2.0; a ratio of the sum of net income plus depreciation, depletion, and amortization to total liabilities greater than 0.1; and a ratio of current assets to current liabilities greater than 1.5; and

(B) Net working capital and tangible net worth each at least six times the sum of the current closure and post-closure cost estimates; and

(C) Tangible net worth of at least $10 million; and

(D) Assets in the United States amounting to at least 90 percent of his total assets or at least six times the sum of the current closure and post-closure cost estimates.

(ii) The owner or operator must have:

(A) A current rating for his most recent bond issuance of AAA, AA, A, or BBB as issued by Standard and Poor's or Aaa, Aa, A or Baa as issued by Moody's; and

(B) Tangible net worth at least six times the sum of the current closure and post-closure cost estimates; and

(C) Tangible net worth of at least $10 million; and

(D) Assets located in the United States amounting to at least 90 percent of his total assets or at least six times the sum of the current closure and post-closure cost estimates.

(2) The phrase "current closure and post-closure cost estimates" as used in paragraph (f)(1) of this section refers to the cost estimates required to be shown in paragraphs 1-4 of the letter from the owner's or operator's chief financial officer (§ 264.151(f)).

(3) To demonstrate that he meets this test, the owner or operator must submit the following items to the Regional Administrator:

(i) A letter signed by the owner's or operator's chief financial officer and worded as specified in § 264.151(f); and

(ii) A copy of the independent certified public accountant's report on examination of the owner's or operator's financial statements for the latest completed fiscal year; and

(iii) A special report from the owner's or operator's independent certified public accountant to the owner or operator stating that:

(A) He has compared the data which the letter from the chief financial officer specifies as having been derived from the independently audited, year-end financial statements for the latest fiscal year with the amounts in such financial statements; and

(B) In connection with that procedure, no matters came to his attention which caused him to believe that the specified data should be adjusted.

(4) An owner or operator of a new facility must submit the items specified in paragraph (f)(3) of this section to the Regional Administrator at least 60 days before the date on which hazardous waste is first received for disposal.

(5) After the initial submission of items specified in paragraph (f)(3) of this section, the owner or operator must send updated information to the Regional Administrator within 90 days after the close of each succeeding fiscal year. This information must consist of all three items specified in paragraph (f)(3) of this section.

(6) If the owner or operator no longer meets the requirements of paragraph (f)(1) of this section, he must send notice to the Regional Administrator of intent to establish alternate financial assurance as specified in this section. The notice must be sent by certified mail within 90 days after the end of the fiscal year for which the year-end financial data show that the owner or operator no longer meets the requirements. The owner or operator must provide the alternate financial assurance within 120 days after the end of such fiscal year.

(7) The Regional Administrator may, based on a reasonable belief that the owner or operator may no longer meet the requirements of paragraph (f)(1) of this section, require reports of financial condition at any time from the owner or operator in addition to those specified in paragraph (f)(3) of this section. If the Regional Administrator finds, on the basis of such reports or other information, that the owner or operator no longer meets the requirements of paragraph (f)(1) of this section, the owner or operator must provide alternate financial assurance as specified in this section within 30 days after notification of such a finding.

(8) The Regional Administrator may disallow use of this test on the basis of qualifications in the opinion expressed by the independent certified public accountant in his report on examination of the owner's or operator's financial statements (see paragraph (f)(3)(ii) of this section). An adverse opinion or a disclaimer of opinion will be cause for disallowance. The Regional Administrator will evaluate other qualifications on an individual basis. The owner or operator must provide alternate financial assurance as specified in this section within 30 days after notification of the disallowance.

(9) During the period of post-closure care, the Regional Administrator may approve a decrease in the current post-closure cost estimate for which this test demonstrates financial assurance if the owner or operator demonstrates to the Regional Administrator that the amount of the cost estimate exceeds the remaining cost of post-closure care.

(10) The owner or operator is no longer required to submit the items specified in paragraph (f)(3) of this section when:

(i) An owner or operator substitutes alternate financial assurance as specified in this section; or

(ii) The Regional Administrator releases the owner or operator from the requirements of this section in accordance with § 264.145(i).

(11) An owner or operator may meet the requirements of this section by obtaining a written guarantee, hereafter referred to as "corporate guarantee." The guarantor must be the parent corporation of the owner or operator. The guarantor must meet the requirements for owners or operators in paragraphs (f)(1) through (9) of this section and must comply with the terms of the corporate guarantee. The wording of the corporate guarantee must be identical to the wording specified in § 264.151(h). The corporate guarantee must accompany the items sent to the Regional Administrator as specified in paragraph (f)(3) of this section. The terms of the corporate guarantee must provide that:

(i) If the owner or operator fails to perform post-closure care of a facility covered by the corporate guarantee in accordance with the post-closure plan and other permit requirements whenever required to do so, the guarantor will do so or establish a trust fund as specified in § 264.145(a) in the name of the owner or operator.

(ii) The corporate guarantee will remain in force unless the guarantor sends notice of cancellation by certified mail to the owner or operator and to the Regional Administrator. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the Regional Administrator, as evidenced by the return receipts.

(iii) If the owner or operator fails to provide alternate financial assurance as specified in this section and obtain the written approval of such alternate assurance from the Regional Administrator within 90 days after receipt by both the owner or operator and the Regional Administrator of a notice of cancellation of the corporate guarantee from the guarantor, the guarantor will provide such alternate financial assurance in the name of the owner or operator.

(g) *Use of multiple financial mechanisms.* An owner or operator may satisfy the requirements of this section by establishing more than one financial mechanism per facility. These mechanisms are limited to trust funds, surety bonds guaranteeing payment into a trust fund, letters of credit, and insurance. The mechanisms must be as specified in paragraphs (a), (b), (d), and (e), respectively, of this section, except that it is the combination of mechanisms, rather than the single mechanism, which must provide financial assurance for an amount at least equal to the current post-closure cost estimate. If an owner or operator uses a trust fund in combination with a surety bond or a letter of credit, he may use the trust fund as the standby trust fund for the other mechanisms. A single standby trust fund may be established for two or more mechanisms. The Regional Administrator may use any or all of the mechanisms to provide for post-closure care of the facility.

(h) *Use of a financial mechanism for multiple facilities.* An owner or operator may use a financial assurance mechanism specified in this section to meet the requirements of this section for more than one facility. Evidence of financial assurance submitted to the Regional Administrator must include a list showing, for each facility, the EPA Identification Number, name, address, and the amount of funds for post-closure care assured by the mechanism. If the facilities covered by the mechanism are in more than one Region, identical evidence of financial assurance must be submitted to and maintained with the Regional Administrators of all such Regions. The amount of funds available through the mechanism must be no less than the sum of funds that would be available if a separate mechanism had been established and maintained for each facility. In directing funds available through the mechanism for post-closure care of any of the facilities covered by the mechanism, the Regional Administrator may direct only the amount of funds designated for that facility, unless the owner or operator agrees to the use of additional funds available under the mechanism.

(i) *Release of the owner or operator from the requirements of this section.* When an owner or operator has completed, to the satisfaction of the Regional Administrator, all post-closure care requirements in accordance with the post-closure plan, the Regional Administrator will, at the request of the owner or operator, notify him in writing that he is no longer required by this section to maintain financial assurance for post-closure care of the particular facility.

[47 FR 15047, Apr. 7, 1982, as amended at 47 FR 32357, July 26, 1982]

§ 264.146 Use of a mechanism for financial assurance of both closure and post-closure care.

An owner or operator may satisfy the requirements for financial assurance for both closure and post-closure care for one or more facilities by using a trust fund, surety bond, letter of credit, insurance, financial test, or corporate guarantee that meets the specifications for the mechanism in both §§ 264.143 and 264.145. The amount of funds available through the mechanism must be no less than the sum of funds that would be available if a separate mechanism had been established and maintained for financial assurance of closure and of post-closure care.

§ 264.147 Liability requirements.

(a) *Coverage for sudden accidental occurrences.* An owner or operator of a hazardous waste treatment, storage, or disposal facility, or a group of such facilities, must demonstrate financial responsibility for bodily injury and property damage to third parties caused by sudden accidental occurrences arising from operations of the facility or group of facilities. The owner or operator must have and maintain liability coverage for sudden accidental occurrences in the amount of at least $1 million per occurrence with an annual aggregate of at least $2 million, exclusive of legal defense costs. This liability coverage may be demonstrated in one of three ways, as specified in paragraphs (a)(1), (a)(2), and (a)(3) of this section:

(1) An owner or operator may demonstrate the required liability coverage by having liability insurance as specified in this paragraph.

(i) Each insurance policy must be amended by attachment of the Hazardous Waste Facility Liability Endorsement or evidenced by a Certificate of Liability Insurance. The wording of the endorsement must be identical to the wording specified in § 264.151(i). The wording of the certificate of insurance must be identical to the wording specified in § 264.151(j). The owner or operator must submit a signed duplicate original of the endorsement or the certificate of insurance to the Regional Administrator, or Regional Administrators if the facilities are located in more than one Region. If requested by a Regional Administrator, the owner or operator must provide a signed duplicate original of the insurance policy. An owner or operator of a new facility must submit the signed duplicate original of the Hazardous Waste Facility Liability Endorsement or the Certificate of Liability Insurance to the Regional Administrator at least 60 days before the date on which hazardous waste is first received for treatment, storage, or disposal. The insurance must be effective before this initial receipt of hazardous waste.

(ii) Each insurance policy must be issued by an insurer which, at a minimum, is licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more States.

(2) An owner or operator may meet the requirements of this section by passing a financial test for liability coverage as specified in paragraph (f) of this section.

(3) An owner or operator may demonstrate the required liability coverage through use of both the financial test and insurance as these mechanisms are specified in this section. The amounts of coverage demonstrated must total at least the minimum amounts required by this paragraph.

(b) *Coverage for nonsudden accidental occurrences.* An owner or operator of a surface impoundment, landfill, or land treatment facility which is used to manage hazardous waste, or a group of such facilities, must demonstrate financial responsibility for bodily injury and property damage to third parties caused by nonsudden accidental occurrences arising from operations of the facility or group of facilities. The owner or operator must have and maintain liability coverage for nonsudden accidental occurrences in the amount of at least $3 million per occurrence with an annual aggregate of at least $6 million, exclusive of legal defense costs. This liability coverage may be demonstrated in one of three ways, as specified in paragraphs (b)(1), (b)(2), and (b)(3) of this section:

(1) An owner or operator may demonstrate the required liability coverage by having liability insurance as specified in this paragraph.

(i) Each insurance policy must be amended by attachment of the Hazardous Waste Facility Liability Endorsement or evidenced by a Certificate of Liability Insurance. The wording of the endorsement must be identical to the wording specified in § 264.151(i). The wording of the certificate of insurance must be identical to the wording specified in § 264.151(j). The owner or operator must submit a signed duplicate original of the endorsement or the certificate of insurance to the Regional Administrator, or Regional Administrators if the facili-

ties are located in more than one Region. If requested by a Regional Administrator, the owner or operator must provide a signed duplicate original of the insurance policy. An owner or operator of a new facility must submit the signed duplicate original of the Hazardous Waste Facility Liability Endorsement or the Certificate of Liability Insurance to the Regional Administrator at least 60 days before the date on which hazardous waste is first received for treatment, storage, or disposal. The insurance must be effective before this initial receipt of hazardous waste.

(ii) Each insurance policy must be issued by an insurer which, at a minimum, is licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more States.

(2) An owner or operator may meet the requirements of this section by passing a financial test for liability coverage as specified in paragraph (f) of this section.

(3) An owner or operator may demonstrate the required liability coverage through use of both the financial test and insurance as these mechanisms are specified in this section. The amounts of coverage must total at least the minimum amounts required by this paragraph.

(4) For existing facilities, the required liability coverage for nonsudden accidental occurrences must be demonstrated by the dates listed below. The total sales or revenues of the owner or operator in all lines of business, in the fiscal year preceding the effective date of these regulations, will determine which of the dates applies. If the owner and operator of a facility are two different parties, or if there is more than one owner or operator, the sales or revenues of the owner or operator with the largest sales or revenues will determine the date by which the coverage must be demonstrated. The dates are as follows:

(i) For an owner or operator with sales or revenues totalling $10 million or more, 6 months after the effective date of these regulations.

(ii) For an owner or operator with sales or revenues greater than $5 million but less than $10 million, 18 months after the effective date of these regulations.

(iii) All other owners or operators, 30 months after the effective date of these regulations.

(c) *Request for variance.* If an owner or operator can demonstrate to the satisfaction of the Regional Administrator that the levels of financial responsibility required by paragraph (a) or (b) of this section are not consistent with the degree and duration of risk associated with treatment, storage, or disposal at the facility or group of facilities, the owner or operator may obtain a variance from the Regional Administrator. The request for a variance must be submitted to the Regional Administrator as part of the application under § 270.14 of this chapter for a facility that does not have a permit, or pursuant to the procedures for permit modification under § 124.5 of this chapter for a facility that has a permit. If granted, the variance will take the form of an adjusted level of required liability coverage, such level to be based on the Regional Administrator's assessment of the degree and duration of risk associated with the ownership or operation of the facility or group of facilities. The Regional Administrator may require an owner or operator who requests a variance to provide such technical and engineering information as is deemed necessary by the Regional Administrator to determine a level of financial responsibility other than that required by paragraph (a) or (b) of this section. Any request for a variance for a permitted facility will be treated as a request for a permit modification under §§ 270.41(a)(5) and 124.5 of this chapter.

(d) *Adjustments by the Regional Administrator.* If the Regional Administrator determines that the levels of financial responsibility required by paragraph (a) or (b) of this section are not consistent with the degree and duration of risk associated with treatment, storage, or disposal at the facility or group of facilities, the Regional Administrator may adjust the level of financial responsibility required under paragraph (a) or (b) of this section as may be necessary to protect human

health and the environment. This adjusted level will be based on the Regional Administrator's assessment of the degree and duration of risk associated with the ownership or operation of the facility or group of facilities. In addition, if the Regional Administrator determines that there is a significant risk to human health and the environment from nonsudden accidental occurrences resulting from the operations of a facility that is not a surface impoundment, landfill, or land treatment facility, he may require that an owner or operator of the facility comply with paragraph (b) of this section. An owner or operator must furnish to the Regional Administrator, within a reasonable time, any information which the Regional Administrator requests to determine whether cause exists for such adjustments of level or type of coverage. Any adjustment of the level or type of coverage for a facility that has a permit will be treated as a permit modification under §§ 270.41(a)(5) and 124.5 of this chapter.

(e) *Period of coverage.* An owner or operator must continuously provide liability coverage for a facility as required by this section until certifications of closure of the facility, as specified in § 264.115, are received by the Regional Administrator.

(f) *Financial test for liability coverage.* (1) An owner or operator may satisfy the requirements of this section by demonstrating that he passes a financial test as specified in this paragraph. To pass this test the owner or operator must meet the criteria of paragraph (f)(1)(i) or (f)(1)(ii):

(i) The owner or operator must have:

(A) Net working capital and tangible net worth each at least six times the amount of liability coverage to be demonstrated by this test; and

(B) Tangible net worth of at least $10 million; and

(C) Assets in the United States amounting to either: (*1*) at least 90 percent of his total assets; or (*2*) at least six times the amount of liability coverage to be demonstrated by this test.

(ii) The owner or operator must have:

(A) A current rating for his most recent bond issuance of AAA, AA, A, or BBB as issued by Standard and Poor's, or Aaa, Aa, A, or Baa as issued by Moody's; and

(B) Tangible net worth of at least $10 million; and

(C) Tangible net worth at least six times the amount of liability coverage to be demonstrated by this test; and

(D) Assets in the United States amounting to either: (*1*) at least 90 percent of his total assets; or (*2*) at least six times the amount of liability coverage to be demonstrated by this test.

(2) The phrase "amount of liability coverage" as used in paragraph (f)(1) of this section refers to the annual aggregate amounts for which coverage is required under paragraphs (a) and (b) of this section.

(3) To demonstrate that he meets this test, the owner or operator must submit the following three items to the Regional Administrator:

(i) A letter signed by the owner's or operator's chief financial officer and worded as specified in § 264.151(g). If an owner or operator is using the financial test to demonstrate both assurance for closure or post-closure care, as specified by §§ 264.143(f), 264.145(f), 265.143(e), and 265.145(e), and liability coverage, he must submit the letter specified in § 264.151(g) to cover both forms of financial responsibility; a separate letter as specified in § 264.151(f) is not required.

(ii) A copy of the independent certified public accountant's report on examination of the owner's or operator's financial statements for the latest completed fiscal year.

(iii) A special report from the owner's or operator's independent certified public accountant to the owner or operator stating that:

(A) He has compared the data which the letter from the chief financial officer specifies as having been derived from the independently audited, year-end financial statements for the latest fiscal year with the amounts in such financial statements; and

(B) In connection with that procedure, no matters came to his attention which caused him to believe that the specified data should be adjusted.

(4) An owner or operator of a new facility must submit the items specified in paragraph (f)(3) of this section to the Regional Administrator at least 60 days before the date on which hazardous waste is first received for treatment, storage, or disposal.

(5) After the initial submission of items specified in paragraph (f)(3) of this section, the owner or operator must send updated information to the Regional Administrator within 90 days after the close of each succeeding fiscal year. This information must consist of all three items specified in paragraph (f)(3) of this section.

(6) If the owner or operator no longer meets the requirements of paragraph (f)(1) of this section, he must obtain insurance for the entire amount of required liability coverage as specified in this section. Evidence of insurance must be submitted to the Regional Administrator within 90 days after the end of the fiscal year for which the year-end financial data show that the owner or operator no longer meets the test requirements.

(7) The Regional Administrator may disallow use of this test on the basis of qualifications in the opinion expressed by the independent certified public accountant in his report on examination of the owner's or operator's financial statements (see paragraph (f)(3)(ii) of this section). An adverse opinion or a disclaimer of opinion will be cause for disallowance. The Regional Administrator will evaluate other qualifications on an individual basis. The owner or operator must provide evidence of insurance for the entire amount of required liability coverage as specified in this section within 30 days after notification of disallowance.

(g) Notwithstanding any other provision of this part, an owner or operator using liability insurance to satisfy the requirements of this section may use, until October 16, 1982, a Hazardous Waste Facility Liability Endorsement or Certificate of Liability Insurance that does not certify that the insurer is licensed to transact the business of insurance, or eligible as an excess or surplus lines insurer, in one or more States.

(Approved by the Office of Management and Budget under control number 2000-0445, for paragraphs (a)(1)(i), (b)(1)(i), (c), (d), and (f)(3) through (6).)

[47 FR 16554, Apr. 16, 1982, as amended at 47 FR 28627, July 1, 1982; 47 FR 36447, July 13, 1982; 48 FR 30115, June 30, 1983]

§ 264.148 Incapacity of owners or operators, guarantors, or financial institutions.

(a) An owner or operator must notify the Regional Administrator by certified mail of the commencement of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code, naming the owner or operator as debtor, within 10 days after commencement of the proceeding. A guarantor of a corporate guarantee as specified in §§ 264.143(f) and 264.145(f) must make such a notification if he is named as debtor, as required under the terms of the corporate guarantee (§ 264.151(h)).

(b) An owner or operator who fulfills the requirements of § 264.143, § 264.145, or § 264.147 by obtaining a trust fund, surety bond, letter of credit, or insurance policy will be deemed to be without the required financial assurance or liability coverage in the event of bankruptcy of the trustee or issuing institution, or a suspension or revocation of the authority of the trustee institution to act as trustee or of the institution issuing the surety bond, letter of credit, or insurance policy to issue such instruments. The owner or operator must establish other financial assurance or liability coverage within 60 days after such an event.

§ 264.149 Use of State-required mechanisms.

(a) For a facility located in a State where EPA is administering the requirements of this Subpart but where the State has hazardous waste regulations that include requirements for financial assurance of closure or post-closure care or liability coverage, an owner or operator may use State-required financial mechanisms to meet the requirements of § 264.143, § 264.145, or § 264.147, if the Regional Administrator determines that the State mechanisms are at least equivalent to the financial mechanism specified in this Subpart. The Regional Administrator will evaluate the equivalency of the mechanisms principally in terms of (1) certainty of the availability of funds for the required closure or post-closure care activities or liability coverage and (2) the amount of funds that will be made available. The Regional Administrator may also consider other factors as he deems appropriate. The owner or operator must submit to the Regional Administrator evidence of the establishment of the mechanism together with a letter requesting that the State-required mechanism be considered acceptable for meeting the requirements of this Subpart. The submission must include the following information: The facility's EPA Identification Number, name, and address, and the amount of funds for closure or post-closure care or liability coverage assured by the mechanism. The Regional Administrator will notify the owner or operator of his determination regarding the mechanism's acceptability in lieu of financial mechanisms specified in this Subpart. The Regional Administrator may require the owner or operator to submit additional information as is deemed necessary to make this determination. Pending this determination, the owner or operator will be deemed to be in compliance with the requirements of § 264.143, § 264.145, or § 264.147, as applicable.

(b) If a State-required mechanism is found acceptable as specified in paragraph (a) of this section except for the amount of funds available, the owner or operator may satisfy the requirements of this Subpart by increasing the funds available through the State-required mechanism or using additional financial mechanisms as specified in this Subpart. The amount of funds available through the State and Federal mechanisms must at least equal the amount required by this Subpart.

§ 264.150 State assumption of responsibility.

(a) If a State either assumes legal responsibility for an owner's or operator's compliance with the closure, post-closure care, or liability requirements of this Part or assures that funds will be available from State sources to cover those requirements, the owner or operator will be in compliance with the requirements of § 264.143, § 264.145, or § 264.147 if the Regional Administrator determines that the State's assumption of responsibility is at least equivalent to the financial mechanisms specified in this Subpart. The Regional Administrator will evaluate the equivalency of State guarantees principally in terms of (1) certainty of the availability of funds for the required closure or post-closure care activities or liability coverage and (2) the amount of funds that will be made available. The Regional Administrator may also consider other factors as he deems appropriate. The owner or operator must submit to the Regional Administrator a letter from the State describing the nature of the State's assumption of responsibility together with a letter from the owner or operator requesting that the State's assumption of responsibility be considered acceptable for meeting the requirements of this Subpart. The letter from the State must include, or have attached to it, the following information: the facility's EPA Identification Number, name, and address, and the amount of funds for closure or post-closure care or liability coverage that are guaranteed by the State. The Regional Administrator will notify the owner or operator of his determination regarding the acceptability of the State's guarantee in lieu of financial mechanisms specified in this Subpart. The Regional Administrator may require the owner or operator to submit additional information as is deemed necessary to make this determination. Pending this determination, the owner or operator will be deemed to be in compliance with the requirements of § 264.143, § 264.145, or § 264.147, as applicable.

(b) If a State's assumption of responsibility is found acceptable as specified in paragraph (a) of this section except for the amount of funds available, the owner or operator may satisfy the requirements of this Subpart by use of both the State's assurance *and* additional financial mechanisms as specified in this Subpart. The amount of funds available through the State and Federal mechanisms must at least

equal the amount required by this Subpart.

§ 264.151 Wording of the instruments.

(a)(1) A trust agreement for a trust fund, as specified in § 264.143(a) or § 264.145(a) or § 265.143(a) or § 265.145(a) of this chapter, must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

TRUST AGREEMENT

Trust Agreement, the "Agreement," entered into as of [date] by and between [name of the owner or operator], a [name of State] [insert "corporation," "partnership," "association," or "proprietorship"], the "Grantor," and [name of corporate trustee], [insert "incorporated in the State of ——" or "a national bank"], the "Trustee."

Whereas, the United States Environmental Protection Agency, "EPA," an agency of the United States Government, has established certain regulations applicable to the Grantor, requiring that an owner or operator of a hazardous waste management facility shall provide assurance that funds will be available when needed for closure and/or post-closure care of the facility,

Whereas, the Grantor has elected to establish a trust to provide all or part of such financial assurance for the facilities identified herein,

Whereas, the Grantor, acting through its duly authorized officers, has selected the Trustee to be the trustee under this agreement, and the Trustee is willing to act as trustee,

Now, Therefore, the Grantor and the Trustee agree as follows:

Section 1. Definitions. As used in this Agreement:

(a) The term "Grantor" means the owner or operator who enters into this Agreement and any successors or assigns of the Grantor.

(b) The term "Trustee" means the Trustee who enters into this Agreement and any successor Trustee.

Section 2. Identification of Facilities and Cost Estimates. This Agreement pertains to the facilities and cost estimates identified on attached Schedule A [on Schedule A, for each facility list the EPA Identification Number, name, address, and the current closure and/or post-closure cost estimates, or portions thereof, for which financial assurance is demonstrated by this Agreement].

Section 3. Establishment of Fund. The Grantor and the Trustee hereby establish a trust fund, the "Fund," for the benefit of EPA. The Grantor and the Trustee intend that no third party have access to the Fund except as herein provided. The Fund is established initially as consisting of the property, which is acceptable to the Trustee, described in Schedule B attached hereto. Such property and any other property subsequently transferred to the Trustee is referred to as the Fund, together with all earnings and profits thereon, less any payments or distributions made by the Trustee pursuant to this Agreement. The Fund shall be held by the Trustee, IN TRUST, as hereinafter provided. The Trustee shall not be responsible nor shall it undertake any responsibility for the amount or adequacy of, nor any duty to collect from the Grantor, any payments necessary to discharge any liabilities of the Grantor established by EPA.

Section 4. Payment for Closure and Post-Closure Care. The Trustee shall make payments from the Fund as the EPA Regional Administrator shall direct, in writing, to provide for the payment of the costs of closure and/or post-closure care of the facilities covered by this Agreement. The Trustee shall reimburse the Grantor or other persons as specified by the EPA Regional Administrator from the Fund for closure and post-closure expenditures in such amounts as the EPA Regional Administrator shall direct in writing. In addition, the Trustee shall refund to the Grantor such amounts as the EPA Regional Administrator specifies in writing. Upon refund, such funds shall no longer constitute part of the Fund as defined herein.

Section 5. Payments Comprising the Fund. Payments made to the Trustee for the Fund shall consist of cash or securities acceptable to the Trustee.

Section 6. Trustee Management. The Trustee shall invest and reinvest the principal and income of the Fund and keep the Fund invested as a single fund, without distinction between principal and income, in accordance with general investment policies and guidelines which the Grantor may communicate in writing to the Trustee from time to time, subject, however, to the provisions of this Section. In investing, reinvesting, exchanging, selling, and managing the Fund, the Trustee shall discharge his duties with respect to the trust fund solely in the interest of the beneficiary and with the care, skill, prudence, and diligence under the circumstances then prevailing which persons of prudence, acting in a like capacity and familiar with such matters, would use in the conduct of an enterprise of a like character and with like aims; *except that:*

(i) Securities or other obligations of the Grantor, or any other owner or operator of the facilities, or any of their affiliates as defined in the Investment Company Act of 1940, as amended, 15 U.S.C. 80a-2.(a), shall not be acquired or held, unless they are securities or other obligations of the Federal or a State government;

(ii) The Trustee is authorized to invest the Fund in time or demand deposits of the Trustee, to the extent insured by an agency of the Federal or State government; and

(iii) The Trustee is authorized to hold cash awaiting investment or distribution uninvested for a reasonable time and without liability for the payment of interest thereon.

Section 7. Commingling and Investment. The Trustee is expressly authorized in its discretion:

(a) To tranfer from time to time any or all of the assets of the Fund to any common, commingled, or collective trust fund created by the Trustee in which the Fund is eligible to participate, subject to all of the provisions thereof, to be commingled with the assets of other trusts participating therein; and

(b) To purchase shares in any investment company registered under the Investment Company Act of 1940, 15 U.S.C. 80a-1 et seq., including one which may be created, managed, underwritten, or to which investment advice is rendered or the shares of which are sold by the Trustee. The Trustee may vote such shares in its discretion.

Section 8. Express Powers of Trustee. Without in any way limiting the powers and discretions conferred upon the Trustee by the other provisions of this Agreement or by law, the Trustee is expressly authorized and empowered:

(a) To sell, exchange, convey, transfer, or otherwise dispose of any property held by it, by public or private sale. No person dealing with the Trustee shall be bound to see to the application of the purchase money or to inquire into the validity or expediency of any such sale or other disposition;

(b) To make, execute, acknowledge, and deliver any and all documents of transfer and conveyance and any and all other instruments that may be necessary or appropriate to carry out the powers herein granted;

(c) To register any securities held in the Fund in its own name or in the name of a nominee and to hold any security in bearer form or in book entry, or to combine certificates representing such securities with certificates of the same issue held by the Trustee in other fiduciary capacities, or to deposit or arrange for the deposit of such securities in a qualified central depositary even though, when so deposited, such securities may be merged and held in bulk in the name of the nominee of such depositary with other securities deposited therein by another person, or to deposit or arrange for the deposit of any securities issued by the United States Government, or any agency or instrumentality thereof, with a Federal Reserve bank, but the books and records of the Trustee shall at all times show that all such securities are part of the Fund;

(d) To deposit any cash in the Fund in interest-bearing accounts maintained or savings certificates issued by the Trustee, in its separate corporate capacity, or in any other banking institution affiliated with the Trustee, to the extent insured by an agency of the Federal or State government; and

(e) To compromise or otherwise adjust all claims in favor of or against the Fund.

Section 9. Taxes and Expenses. All taxes of any kind that may be assessed or levied against or in respect of the Fund and all brokerage commissions incurred by the Fund shall be paid from the Fund. All other expenses incurred by the Trustee in connection with the administration of this Trust, including fees for legal services rendered to the Trustee, the compensation of the Trustee to the extent not paid directly by the Grantor, and all other proper charges and disbursements of the Trustee shall be paid from the Fund.

Section 10. Annual Valuation. The Trustee shall annually, at least 30 days prior to the anniversary date of establishment of the Fund, furnish to the Grantor and to the appropriate EPA Regional Administrator a statement confirming the value of the Trust. Any securities in the Fund shall be valued at market value as of no more than 60 days prior to the anniversary date of establishment of the Fund. The failure of the Grantor to object in writing to the Trustee within 90 days after the statement has been furnished to the Grantor and the EPA Regional Administrator shall constitute a conclusively binding assent by the Grantor, barring the Grantor from asserting any claim or liability against the Trustee with respect to matters disclosed in the statement.

Section 11. Advice of Counsel. The Trustee may from time to time consult with counsel, who may be counsel to the Grantor, with respect to any question arising as to the construction of this Agreement or any action to be taken hereunder. The Trustee shall be fully protected, to the extent permitted by law, in acting upon the advice of counsel.

Section 12. Trustee Compensation. The Trustee shall be entitled to reasonable compensation for its services as agreed upon in writing from time to time with the Grantor.

Section 13. Successor Trustee. The Trustee may resign or the Grantor may replace the Trustee, but such resignation or replacement shall not be effective until the Grantor has appointed a successor trustee and this successor accepts the appointment. The successor trustee shall have the same powers and duties as those conferred upon the Trustee hereunder. Upon the successor trustee's acceptance of the appointment,

the Trustee shall assign, transfer, and pay over to the successor trustee the funds and properties then constituting the Fund. If for any reason the Grantor cannot or does not act in the event of the resignation of the Trustee, the Trustee may apply to a court of competent jurisdiction for the appointment of a successor trustee or for instructions. The successor trustee shall specify the date on which it assumes administration of the trust in a writing sent to the Grantor, the EPA Regional Administrator, and the present Trustee by certified mail 10 days before such change becomes effective. Any expenses incurred by the Trustee as a result of any of the acts contemplated by this Section shall be paid as provided in Section 9.

Section 14. Instructions to the Trustee. All orders, requests, and instructions by the Grantor to the Trustee shall be in writing, signed by such persons as are designated in the attached Exhibit A or such other designees as the Grantor may designate by amendment to Exhibit A. The Trustee shall be fully protected in acting without inquiry in accordance with the Grantor's orders, requests, and instructions. All orders, requests, and instructions by the EPA Regional Administrator to the Trustee shall be in writing, signed by the EPA Regional Administrators of the Regions in which the facilities are located, or their designees, and the Trustee shall act and shall be fully protected in acting in accordance with such orders, requests, and instructions. The Trustee shall have the right to assume, in the absence of written notice to the contrary, that no event constituting a change or a termination of the authority of any person to act on behalf of the Grantor or EPA hereunder has occurred. The Trustee shall have no duty to act in the absence of such orders, requests, and instructions from the Grantor and/or EPA, except as provided for herein.

Section 15. Notice of Nonpayment. The Trustee shall notify the Grantor and the appropriate EPA Regional Administrator, by certified mail within 10 days following the expiration of the 30-day period after the anniversary of the establishment of the Trust, if no payment is received from the Grantor during that period. After the payin period is completed, the Trustee shall not be required to send a notice of nonpayment.

Section 16. Amendment of Agreement. This Agreement may be amended by an instrument in writing executed by the Grantor, the Trustee, and the appropriate EPA Regional Administrator, or by the Trustee and the appropriate EPA Regional Administrator if the Grantor ceases to exist.

Section 17. Irrevocability and Termination. Subject to the right of the parties to amend this Agreement as provided in Section 16, this Trust shall be irrevocable and shall continue until terminated at the written agreement of the Grantor, the Trustee, and the EPA Regional Administrator, or by the Trustee and the EPA Regional Administrator, if the Grantor ceases to exist. Upon termination of the Trust, all remaining trust property, less final trust administration expenses, shall be delivered to the Grantor.

Section 18. Immunity and Indemnification. The Trustee shall not incur personal liability of any nature in connection with any act or omission, made in good faith, in the administration of this Trust, or in carrying out any directions by the Grantor or the EPA Regional Administrator issued in accordance with this Agreement. The Trustee shall be indemnified and saved harmless by the Grantor or from the Trust Fund, or both, from and against any personal liability to which the Trustee may be subjected by reason of any act or conduct in its official capacity, including all expenses reasonably incurred in its defense in the event the Grantor fails to provide such defense.

Section 19. Choice of Law. This Agreement shall be administered, construed, and enforced according to the laws of the State of [insert name of State].

Section 20. Interpretation. As used in this Agreement, words in the singular include the plural and words in the plural include the singular. The descriptive headings for each Section of this Agreement shall not affect the interpretation or the legal efficacy of this Agreement.

In Witness Whereof the parties have caused this Agreement to be executed by their respective officers duly authorized and their corporate seals to be hereunto affixed and attested as of the date first above written: The parties below certify that the wording of this Agreement is identical to the wording specified in 40 CFR 264.151(a)(1) as such regulations were constituted on the date first above written.

[Signature of Grantor]
[Title]

Attest:
[Title]
[Seal]

[Signature of Trustee]

Attest:
[Title]
[Seal]

(2) The following is an example of the certification of acknowledgment which must accompany the trust agreement for a trust fund as specified in §§ 264.143(a) and 264.145(a) or §§ 265.143(a) or 265.145(a) of this chapter. State requirements may differ on the proper content of this acknowledgment.

State of ———
County of ———

On this [date], before me personally came [owner or operator] to me known, who, being by me duly sworn, did depose and say that she/he resides at [address], that she/he is [title] of [corporation], the corporation described in and which executed the above instrument; that she/he knows the seal of said corporation; that the seal affixed to such instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation, and that she/he signed her/his name thereto by like order.

[Signature of Notary Public]

(b) A surety bond guaranteeing payment into a trust fund, as specified in § 264.143(b) or § 264.145(b) or § 265.143(b) or § 265.145(b) of this chapter, must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

FINANCIAL GUARANTEE BOND

Date bond executed: ———
Effective date: ———
Principal: [legal name and business address of owner or operator]
Type of organization: [insert "individual," "joint venture," "partnership," or "corporation"]
State of incorporation: ———
Surety(ies): [name(s) and business address(es)]
EPA Identification Number, name, address, and closure and/or post-closure amount(s) for each facility guaranteed by this bond [indicate closure and post-closure amounts separately]: ———
Total penal sum of bond: $ ———
Surety's bond number: ———

Know All Persons By These Presents, That we, the Principal and Surety(ies) hereto are firmly bound to the U.S. Environmental Protection Agency (hereinafter called EPA), in the above penal sum for the payment of which we bind ourselves, our heirs, executors, administrators, successors, and assigns jointly and severally; provided that, where the Surety(ies) are corporations acting as co-sureties, we, the Sureties, bind ourselves in such sum "jointly and severally" only for the purpose of allowing a joint action or actions against any or all of us, and for all other purposes each Surety binds itself, jointly and severally with the Principal, for the payment of such sum only as is set forth opposite the name of such Surety, but if no limit of liability is indicated, the limit of liability shall be the full amount of the penal sum.

Whereas said Principal is required under the Resource Conservation and Recovery Act as amended (RCRA), to have a permit or interim status in order to own or operate each hazardous waste management facility identified above, and

Whereas said principal is required to provide financial assurance for closure, or closure and post-closure care, as a condition of the permit or interim status, and

Whereas said Principal shall establish a standby trust fund as is required when a surety bond is used to provide such financial assurance;

Now, Therefore, the conditions of the obligation are such that if the Principal shall faithfully, before the beginning of final closure of each facility identified above, fund the standby trust fund in the amount(s) identified above for the facility,

Or, if the Principal shall fund the standby trust fund in such amount(s) within 15 days after an order to begin closure is issued by an EPA Regional Administrator or a U.S. district court or other court of competent jurisdiction,

Or, if the Principal shall provide alternate financial assurance, as specified in Subpart H of 40 CFR Parts 264 or 265, as applicable, and obtain the EPA Regional Administrator's written approval of such assurance, within 90 days after the date notice of cancellation is received by both the Principal and the EPA Regional Administrator(s) from the Surety(ies), then this obligation shall be null and void, otherwise it is to remain in full force and effect.

The Surety(ies) shall become liable on this bond obligation only when the Principal has failed to fulfill the conditions described above. Upon notification by an EPA Regional Administrator that the Principal has failed to perform as guaranteed by this bond, the Surety(ies) shall place funds in the amount guaranteed for the facility(ies) into the standby trust fund as directed by the EPA Regional Administrator.

The liability of the Surety(ies) shall not be discharged by any payment or succession of payments hereunder, unless and until such payment or payments shall amount in the aggregate to the penal sum of the bond, but in no event shall the obligation of the Surety(ies) hereunder exceed the amount of said penal sum.

The Surety(ies) may cancel the bond by sending notice of cancellation by certified mail to the Principal and to the EPA Regional Administrator(s) for the Region(s) in which the facility(ies) is (are) located, provided, however, that cancellation shall not occur during the 120 days beginning on the date of receipt of the notice of cancellation by both the Principal and the EPA Regional Administrator(s), as evidenced by the return receipts.

The Principal may terminate this bond by sending written notice to the Surety(ies), provided, however, that no such notice shall become effective until the Surety(ies) receive(s) written authorization for termination of the bond by the EPA Regional Administrator(s) of the EPA Region(s) in which the bonded facility(ies) is (are) located.

[The following paragraph is an *optional* rider that may be included but is not required.]

Principal and Surety(ies) hereby agree to adjust the penal sum of the bond yearly so that it guarantees a new closure and/or post-closure amount, provided that the penal sum does not increase by more than 20 percent in any one year, and no decrease in the penal sum takes place without the written permission of the EPA Regional Administrator(s).

In Witness Whereof, the Principal and Surety(ies) have executed this Financial Guarantee Bond and have affixed their seals on the date set forth above.

The persons whose signatures appear below hereby certify that they are authorized to execute this surety bond on behalf of the Principal and Surety(ies) and that the wording of this surety bond is identical to the wording specified in 40 CFR 264.151(b) as such regulations were constituted on the date this bond was executed.

Principal

[Signature(s)]

[Name(s)]

[Title(s)]

[Corporate seal]

Corporate Surety(ies)

[Name and address]

State of incorporation: ———————

Liability limit: $ ———————

[Signature(s)]

[Name(s) and title(s)]

[Corporate seal]

[For every co-surety, provide signature(s), corporate seal, and other information in the same manner as for Surety above.]

Bond premium: $ ———————

(c) A surety bond guaranteeing performance of closure and/or post-closure care, as specified in § 264.143(c) or § 264.145(c), must be worded as follows, except that the instructions in brackets are to be replaced with the relevant information and the brackets deleted:

PERFORMANCE BOND

Date bond executed: ———————

Effective date: ———————

Principal: [legal name and business address of owner or operator]

Type of organization: [insert "individual," "joint venture," "partnership," or "corporation"]

State of incorporation: ———————

Surety(ies): [name(s) and business address(es)] ———————

EPA Identification Number, name, address, and closure and/or post-closure amount(s) for each facility guaranteed by this bond [indicate closure and post-closure amounts separately]:———

Total penal sum of bond: $ ———————

Surety's bond number: ———————

Know All Persons By These Presents, That we, the Principal and Surety(ies) hereto are firmly bound to the U.S. Environmental Protection Agency (hereinafter called EPA), in the above penal sum for the payment of which we bind ourselves, our heirs, executors, administrators, successors, and assigns jointly and severally; provided that, where the Surety(ies) are corporations acting as co-sureties, we, the Sureties, bind ourselves in such sum "jointly and severally" only for the purpose of allowing a joint action or actions against any or all of us, and for all other purposes each Surety binds itself, jointly and severally with the Principal, for the payment of such sum only as is set forth opposite the name of such Surety, but if no limit of liability is indicated, the limit of liability shall be the full amount of the penal sum.

Whereas said Principal is required, under the Resource Conservation and Recovery Act as amended (RCRA), to have a permit in order to own or operate each hazardous waste management facility indentified above, and

Whereas said Principal is required to provide financial assurance for closure, or closure and post-closure care, as a condition of the permit, and

Whereas said Principal shall establish a standby trust fund as is required when a surety bond is used to provide such financial assurance;

Now, Therefore, the conditions of this obligation are such that if the Principal shall faithfully perform closure, whenever required to do so, of each facility for which this bond guarantees closure, in accordance with the closure plan and other requirements of the permit as such plan and permit may be amended, pursuant to all applicable laws, statutes, rules, and regulations, as such laws, statutes, rules, and regulations may be amended,

And, if the Principal shall faithfully perform post-closure care of each facility for which this bond guarantees post-closure

care, in accordance with the post closure plan and other requirements of the permit, as such plan and permit may be amended, pursuant to all applicable laws, statutes, rules, and regulations, as such laws, statutes, rules, and regulations may be amended,

Or, if the Principal shall provide alternate financial assurance as specified in Subpart H of 40 CFR Part 264, and obtain the EPA Regional Administrator's written approval of such assurance, within 90 days after the date notice of cancellation is received by both the Principal and the EPA Regional Administrator(s) from the Surety(ies), then this obligation shall be null and void, otherwise it is to remain in full force and effect.

The Surety(ies) shall become liable on this bond obligation only when the Principal has failed to fulfill the conditions described above.

Upon notification by an EPA Regional Administrator that the Principal has been found in violation of the closure requirements of 40 CFR Part 264, for a facility for which this bond guarantees performance of closure, the Surety(ies) shall either perform closure in accordance with the closure plan and other permit requirements or place the closure amount guaranteed for the facility into the standby trust fund as directed by the EPA Regional Administrator.

Upon notification by an EPA Regional Administrator that the Principal has been found in violation of the post-closure requirements of 40 CFR Part 264 for a facility for which this bond guarantees performance of post-closure care, the Surety(ies) shall either perform post-closure care in accordance with the post-closure plan and other permit requirements or place the post-closure amount guaranteed for the facility into the standby trust fund as directed by the EPA Regional Administrator.

Upon notification by an EPA Regional Administrator that the Principal has failed to provide alternate financial assurance as specified in Subpart H of 40 CFR Part 264, and obtain written approval of such assurance from the EPA Regional Administrator(s) during the 90 days following receipt by both the Principal and the EPA Regional Administrator(s) of a notice of cancellation of the bond, the Surety(ies) shall place funds in the amount guaranteed for the facility(ies) into the standby trust fund as directed by the EPA Regional Administrator.

The surety(ies) hereby waive(s) notification of amendments to closure plans, permits, applicable laws, statutes, rules, and regulations and agrees that no such amendment shall in any way alleviate its (their) obligation on this bond.

The liability of the Surety(ies) shall not be discharged by any payment or succession of payments hereunder, unless and until such payment or payments shall amount in the aggregate to the penal sum of the bond, but in no event shall the obligation of the Surety(ies) hereunder exceed the amount of said penal sum.

The Surety(ies) may cancel the bond by sending notice of cancellation by certified mail to the owner or operator and to the EPA Regional Administrator(s) for the Region(s) in which the facility(ies) is (are) located, provided, however, that cancellation shall not occur during the 120 days beginning on the date of receipt of the notice of cancellation by both the Principal and the EPA Regional Administrator(s), as evidenced by the return receipts.

The principal may terminate this bond by sending written notice to the Surety(ies), provided, however, that no such notice shall become effective until the Surety(ies) receive(s) written authorization for termination of the bond by the EPA Regional Administrator(s) of the EPA Region(s) in which the bonded facility(ies) is (are) located.

[The following paragraph is an *optional* rider that may be included but is not required.]

Principal and Surety(ies) hereby agree to adjust the penal sum of the bond yearly so that it guarantees a new closure and/or post-closure amount, provided that the penal sum does not increase by more than 20 percent in any one year, and no decrease in the penal sum takes place without the written permission of the EPA Regional Administrator(s).

In Witness Whereof, The Principal and Surety(ies) have executed this Performance Bond and have affixed their seals on the date set forth above.

The persons whose signatures appear below hereby certify that they are authorized to execute this surety bond on behalf of the Principal and Surety(ies) and that the wording of this surety bond is identical to the wording specified in 40 CFR 264.151(c) as such regulation was constituted on the date this bond was executed.

Principal

[Signature(s)]

[Name(s)]

[Title(s)]

[Corporate seal]

Corporate Surety(ies)

[Name and address]

State of incorporation: ———————

Liability limit: $ ———————

[Signature(s)]

[Name(s) and title(s)]

[Corporate seal]

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[For every co surety, provide signature(s), corporate seal, and other information in the same manner as for Surety above.]

Bond premium: $ ———— ———— ————

(d) A letter of credit, as specified in § 264.143(d) or § 264.145(d) or § 265.143(c) or § 265.145(c) of this chapter, must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

IRREVOCABLE STANDBY LETTER OF CREDIT

Regional Administrator(s)
Region(s) ————————————
U.S. Environmental Protection Agency

Dear Sir or Madam: We hereby establish our Irrevocable Standby Letter of Credit No.—— in your favor, at the request and for the account of [owner's or operator's name and address] up to the aggregate amount of [in words] U.S. dollars $——, available upon presentation [insert, if more than one Regional Administrator is a beneficiary, "by any one of you"] of

(1) your sight draft, bearing reference to this letter of credit No.——, and

(2) your signed statement reading as follows: "I certify that the amount of the draft is payable pursuant to regulations issued under authority of the Resource Conservation and Recovery Act of 1976 as amended."

This letter of credit is effective as of [date] and shall expire on [date at least 1 year later], but such expiration date shall be automatically extended for a period of [at least 1 year] on [date] and on each successive expiration date, unless, at least 120 days before the current expiration date, we notify both you and [owner's or operator's name] by certified mail that we have decided not to extend this letter of credit beyond the current expiration date. In the event you are so notified, any unused portion of the credit shall be available upon presentation of your sight draft for 120 days after the date of receipt by both you and [owner's or operator's name], as shown on the signed return receipts.

Whenever this letter of credit is drawn on under and in compliance with the terms of this credit, we shall duly honor such draft upon presentation to us, and we shall deposit the amount of the draft directly into the standby trust fund of [owner's or operator's name] in accordance with your instructions.

We certify that the wording of this letter of credit is identical to the wording specified in 40 CFR 264.151(d) as such regulations were constituted on the date shown immediately below.

[Signature(s) and title(s) of official(s) of issuing institution] [Date]

This credit is subject to [insert "the most recent edition of the Uniform Customs and Practice for Documentary Credits, published by the International Chamber of Commerce," or "the Uniform Commercial Code"].

(e) A certificate of insurance, as specified in § 264.143(e) or § 264.145(e) or § 265.143(d) or § 265.145(d) of this chapter, must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

CERTIFICATE OF INSURANCE FOR CLOSURE OR POST-CLOSURE CARE

Name and Address of Insurer (herein called the "Insurer"): ————————
Name and Address of Insured (herein called the "Insured"): ————————
Facilities Covered: [List for each facility: The EPA Identification Number, name, address, and the amount of insurance for closure and/or the amount for post-closure care (these amounts for all facilities covered must total the face amount shown below).]
Face Amount: ————————
Policy Number: ————————
Effective Date: ————————

The Insurer hereby certifies that it has issued to the Insured the policy of insurance identified above to provide financial assurance for [insert "closure" or "closure and post-closure care" or "post-closure care"] for the facilities identified above. The Insurer further warrants that such policy conforms in all respects with the requirements of 40 CFR 264.143(e), 264.145(e), 265.143(d), and 265.145(d), as applicable and as such regulations were constituted on the date shown immediately below. It is agreed that any provision of the policy inconsistent with such regulations is hereby amended to eliminate such inconsistency.

Whenever requested by the EPA Regional Administrator(s) of the U.S. Environmental Protection Agency, the Insurer agrees to furnish to the EPA Regional Administrator(s) a duplicate original of the policy listed above, including all endorsements thereon.

I hereby certify that the wording of this certificate is identical to the wording specified in 40 CFR 264.151(e) as such regulations were constituted on the date shown immediately below.

[Authorized signature for Insurer]
[Name of person signing]
[Title of person signing]
Signature of witness or notary: ————————
[Date]

(f) A letter from the chief financial officer, as specified in § 264.143(f) or § 264.145(f) or § 265.143(e) or § 265.145(e) of this chapter, must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

LETTER FROM CHIEF FINANCIAL OFFICER

[Address to Regional Administrator of every Region in which facilities for which financial responsibility is to be demonstrated through the financial test are located.]

I am the chief financial officer of [name and address of firm]. This letter is in support of this firm's use of the financial test to demonstrate financial assurance, as specified in Subpart H of 40 CFR Parts 264 and 265.

[Fill out the following four paragraphs regarding facilities and associated cost estimates. If your firm has no facilities that belong in a particular paragraph, write "None" in the space indicated. For each facility, include its EPA Identification Number, name, address, and current closure and/or post-closure cost estimates. Identify each cost estimate as to whether it is for closure or post-closure care.]

1. This firm is the owner or operator of the following facilities for which financial assurance for closure or post-closure care is demonstrated through the financial test specified in Subpart H of 40 CFR Parts 264 and 265. The current closure and/or post-closure cost estimates covered by the test are shown for each facility: ————.

2. This firm guarantees, through the corporate guarantee specified in Subpart H of 40 CFR Parts 264 and 265, the closure or post-closure care of the following facilities owned or operated by subsidiaries of this firm. The current cost estimates for the closure or post-closure care so guaranteed are shown for each facility: ————.

3. In States where EPA is not administering the financial requirements of Subpart H of 40 CFR Parts 264 or 265, this firm, as owner or operator or guarantor, is demonstrating financial assurance for the closure or post-closure care of the following facilities through the use of a test equivalent or substantially equivalent to the financial test specified in Subpart H of 40 CFR Parts 264 and 265. The current closure and/or post-closure cost estimates covered by such a test are shown for each facility: ————.

4. This firm is the owner or operator of the following hazardous waste management facilities for which financial assurance for closure or, if a disposal facility, post-closure care, is *not* demonstrated either to EPA or a State through the financial test or any other financial assurance mechanism specified in Subpart H of 40 CFR Parts 264 and 265 or equivalent or substantially equivalent State mechanisms. The current closure and/or post-closure cost estimates not covered by such financial assurance are shown for each facility: ————.

This firm [insert "is required" or "is not required"] to file a Form 10K with the Securities and Exchange Commission (SEC) for the latest fiscal year.

The fiscal year of this firm ends on [month, day]. The figures for the following items marked with an asterisk are derived from this firm's independently audited, year-end financial statements for the latest completed fiscal year, ended [date].

[Fill in Alternative I if the criteria of paragraph (f)(1)(i) of § 264.143 or § 264.145, or of paragraph (e)(1)(i) of § 265.143 or § 265.145 of this chapter are used. Fill in Alternative II if the criteria of paragraph (f)(1)(ii) of § 264.143 or § 264.145, or of paragraph (e)(1)(ii) of § 265.143 or § 265.145 of this chapter are used.]

ALTERNATIVE I

1. Sum of current closure and post-closure cost estimates [total of *all* cost estimates shown in the four paragraphs above]	$.....
*2. Total liabilities [if any portion of the closure or post-closure cost estimates is included in total liabilities, you may deduct the amount of that portion from this line and add that amount to lines 3 and 4]	.....
*3. Tangible net worth	.....
*4. Net worth	.....
*5. Current assets	.....
*6. Current liabilities	.....
7. Net working capital [line 5 minus line 6]	.....
*8. The sum of net income plus depreciation, depletion, and amortization	.....
*9. Total assets in U.S. (required only if less than 90% of firm's assets are located in the U.S.)	.....

	Yes	No
10. Is line 3 at least $10 million?	.....	.....
11. Is line 3 at least 6 times line 1?	.....	.....
12. Is line 7 at least 6 times line 1?	.....	.....
*13. Are at least 90% of firm's assets located in the U.S.? If not, complete line 14.	.....	.....
14. Is line 9 at least 6 times line 1?	.....	.....
15. Is line 2 divided by line 4 less than 2.0?	.....	.....
16. Is line 8 divided by line 2 greater than 0.1?	.....	.....
17. Is line 5 divided by line 6 greater than 1.5?	.....	.....

ALTERNATIVE II

1. Sum of current closure and post-closure cost estimates [total of *all* cost estimates shown in the four paragraphs above]	$————
2. Current bond rating of most recent issuance of this firm and name of rating service	————
3. Date of issuance of bond	————
4. Date of maturity of bond	————

ALTERNATIVE II—Continued

*5. Tangible net worth (if any portion of the closure and post-closure cost estimates is included in "total liabilities" on your firm's financial statements, you may add the amount of that portion to this line)	$
*6. Total assets in U.S. (required only if less than 90% of firm's assets are located in the U.S.)	$

	Yes	No
7. Is line 5 at least $10 million?		
8. Is line 5 at least 6 times line 1?		
*9. Are at least 90% of firm's assets located in the U.S.? If not, complete line 10.		
10. Is line 6 at least 6 times line 1?		

I hereby certify that the wording of this letter is identical to the wording specified in 40 CFR 264.151(f) as such regulations were constituted on the date shown immediately below.

[Signature]
[Name]
[Title]
[Date]

(g) A letter from the chief financial officer, as specified in § 264.147(f) or § 265.147(f) of this chapter, must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

Letter from Chief Financial Officer (to demonstrate liability coverage or to demonstrate both liability coverage and assurance of closure or post-closure care).

[Address to Regional Administrator of every Region in which facilities for which financial responsibility is to be demonstrated through the financial test are located.]

I am the chief financial officer of [owner's or operator's name and address]. This letter is in support of the use of the financial test to demonstrate financial responsibility for liability coverage [insert "and closure and/or post-closure care" if applicable] as specified in Subpart H of 40 CFR Parts 264 and 265.

[Fill out the following paragraph regarding facilities and liability coverage. For each facility, include its EPA Identification Number, name, and address.]

The owner or operator identified above is the owner or operator of the following facilities for which liability coverage is being demonstrated through the financial test specified in Subpart H of 40 CFR Parts 264 and 265: ————.

[If you are using the financial test to demonstrate coverage of both liability and closure and post-closure care, fill in the following four paragraphs regarding facilities and associated closure and post-closure cost estimates. If there are no facilities that belong in a particular paragraph, write "None" in the space indicated. For each facility, include its EPA Identification Number, name, address, and current closure and/or post-closure cost estimates. Identify each cost estimate as to whether it is for closure or post-closure care.]

1. The owner or operator identified above owns or operates the following facilities for which financial assurance for closure or post-closure care is demonstrated through the financial test specified in Subpart H of 40 CFR Parts 264 and 265. The current closure and/or post-closure cost estimates covered by the test are shown for each facility: ————.

2. The owner or operator identified above guarantees, through the corporate guarantee specified in Subpart H of 40 CFR Parts 264 and 265, the closure and post-closure care of the following facilities owned or operated by its subsidiaries. The current cost estimates for the closure or post-closure care so guaranteed are shown for each facility: ————.

3. In States where EPA is not administering the financial requirements of Subpart H of 40 CFR Parts 264 and 265, this owner or operator is demonstrating financial assurance for the closure or post-closure care of the following facilities through the use of a test equivalent or substantially equivalent to the financial test specified in Subpart H of 40 CFR Parts 264 and 265. The current closure and/or post-closure cost estimates covered by such a test are shown for each facility: ————.

4. The owner or operator identified above owns or operates the following hazardous waste management facilities for which financial assurance for closure or, if a disposal facility, post-closure care, is *not* demonstrated either to EPA or a State through the financial test or any other financial assurance mechanism specified in Subpart H of 40 CFR Parts 264 and 265 or equivalent or substantially equivalent State mechanisms. The current closure and/or post-closure cost estimates not covered by such financial assurance are shown for each facility: ————.

This owner or operator [insert "is required" or "is not required"] to file a Form 10K with the Securities and Exchange Commission (SEC) for the latest fiscal year.

The fiscal year of this owner or operator ends on [month, day]. The figures for the following items marked with an asterisk are derived from this owner's or operator's independently audited, year-end financial statements for the latest completed fiscal year, ended [date].

[Fill in part A if you are using the financial test to demonstrate coverage *only* for the liability requirements.]

Part A. Liability Coverage for Accidental Occurrences

[Fill in Alternative I if the criteria of paragraph (f)(1)(i) of § 264.147 or § 265.147 are used. Fill in Alternative II if the criteria of paragraph (f)(1)(ii) of § 264.147 or § 265.147 are used.]

ALTERNATIVE I

1. Amount of annual aggregate liability coverage to be demonstrated	$
*2. Current assets	$
*3. Current liabilities	$
4. Net working capital (line 2 minus line 3)	$
*5. Tangible net worth	$
*6. If less than 90% of assets are located in the U.S., give total U.S. assets	$

	YES	NO
7. Is line 5 at least $10 million?		
8. Is line 4 at least 6 times line 1?		
9. Is line 5 at least 6 times line 1?		
*10. Are at least 90% of assets located in the U.S.? If not, complete line 11.		
11. Is line 6 at least 6 times line 1?		

ALTERNATIVE II

1. Amount of annual aggregate liability coverage to be demonstrated	$
2. Current bond rating of most recent issuance and name of rating service	
3. Date of issuance of bond	
4. Date of maturity of bond	
*5. Tangible net worth	$
*6. Total assets in U.S. (required only if less than 90% of assets are located in the U.S.)	$

	YES	NO
7. Is line 5 at least $10 million?		
8. Is line 5 at least 6 times line 1?		
*9. Are at least 90% of assets located in the U.S.? If not, complete line 10.		
10. Is line 6 at least 6 times line 1?		

[Fill in part B if you are using the financial test to demonstrate assurance of both liability coverage *and* closure or post-closure care.]

Part B. Closure or Post-Closure Care and Liability Coverage

[Fill in Alternative I if the criteria of paragraphs (f)(1)(i) of § 264.143 or § 264.145 and (f)(1)(i) of § 264.147 are used or if the criteria of paragraphs (e)(1)(i) of § 265.143 or § 265.145 and (f)(1)(i) of § 265.147 are used. Fill in Alternative II if the criteria of paragraphs (f)(1)(ii) of § 264.143 or § 264.145 and (f)(1)(ii) of § 264.147 are used or if the criteria of paragraphs (e)(1)(ii) of § 265.143 or § 265.145 and (f)(1)(ii) of § 265.147 are used.]

ALTERNATIVE I

1. Sum of current closure and post-closure cost estimates (total of *all* cost estimates listed above)	$
2. Amount of annual aggregate liability coverage to be demonstrated	$
3. Sum of lines 1 and 2	$
*4. Total liabilities (if any portion of your closure or post-closure cost estimates is included in your total liabilities, you may deduct that portion from this line and add that amount to lines 5 and 6)	$
*5. Tangible net worth	$
*6. Net worth	$
*7. Current assets	$
*8. Current liabilities	$
9. Net working capital (line 7 minus line 8)	$
*10. The sum of net income plus depreciation, depletion, and amortization	$
*11. Total assets in U.S. (required only if less than 90% of assets are located in the U.S.)	$

	YES	NO
12. Is line 5 at least $10 million?		
13. Is line 5 at least 6 times line 3?		
14. Is line 9 at least 6 times line 3?		
*15. Are at least 90% of assets located in the U.S.? If not, complete line 16		
16. Is line 11 at least 6 times line 3?		
17. Is line 4 divided by line 6 less than 2.0?		
18. Is line 10 divided by line 4 greater than 0.1?		
19. Is line 7 divided by line 8 greater than 1.5?		

ALTERNATIVE II

1. Sum or current closure and post-closure cost estimates (total of *all* cost estimates listed above)	$
2. Amount of annual aggregate liability coverage to be demonstrated	$
3. Sum of lines 1 and 2	$
4. Current bond rating of most recent issuance and name of rating service	
5. Date of issuance of bond	
6. Date of maturity of bond	
*7. Tangible net worth (if any portion of the closure or post-closure cost estimates is included in "total liabilities" on your financial statements you may add that portion to this line)	$
*8 Total assets in the U.S. (required only if less than 90% of assets are located in the U.S.)	$

ALTERNATIVE II—Continued

	YES	NO
9. Is line 7 at least $10 million?	___	___
10. Is line 7 at least 6 times line 3?	___	___
*11. Are at least 90% of assets located in the U.S.? If not, complete line 12	___	___
12. Is line 8 at least 6 times line 3?	___	___

I hereby certify that the wording of this letter is identical to the wording specified in 40 CFR 264.151(g) as such regulations were constituted on the date shown immediately below.

[Signature]

[Name]

[Title]

[Date]

(h) A corporate guarantee, as specified in § 264.143(f) or § 264.145(f) or § 265.143(e) or § 265.145(e) of this chapter, must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

CORPORATE GUARANTEE FOR CLOSURE OR POST-CLOSURE CARE

Guarantee made this [date] by [name of guaranteeing entity], a business corporation organized under the laws of the State of [insert name of State], herein referred to as guarantor, to the United States Environmental Protection Agency (EPA), obligee, on behalf of our subsidiary [owner or operator] of [business address].

Recitals

1. Guarantor meets or exceeds the financial test criteria and agrees to comply with the reporting requirements for guarantors as specified in 40 CFR 264.143(f), 264.145(f), 265.143(e), and 265.145(e).

2. [Owner or operator] owns or operates the following hazardous waste management facility(ies) covered by this guarantee: [List for each facility: EPA Identification Number, name, and address. Indicate for each whether guarantee is for closure, post-closure care, or both.]

3. "Closure plans" and "post-closure plans" as used below refer to the plans maintained as required by Subpart G of 40 CFR Parts 264 and 265 for the closure and post-closure care of facilities as identified above.

4. For value received from [owner or operator], guarantor guarantees to EPA that in the event that [owner or operator] fails to perform [insert "closure," "post-closure care" or "closure and post-closure care"] of the above facility(ies) in accordance with the closure or post-closure plans and other permit or interim status requirements whenever required to do so, the guarantor shall do so or establish a trust fund as specified in Subpart H of 40 CFR Parts 264 or 265, as applicable, in the name of [owner or operator] in the amount of the current closure or post-closure cost estimates as specified in Subpart H of 40 CFR Parts 264 and 265.

5. Guarantor agrees that if, at the end of any fiscal year before termination of this guarantee, the guarantor fails to meet the financial test criteria, guarantor shall send within 90 days, by certified mail, notice to the EPA Regional Administrator(s) for the Region(s) in which the facility(ies) is (are) located and to [owner or operator] that he intends to provide alternate financial assurance as specified in Subpart H of 40 CFR Parts 264 or 265, as applicable, in the name of [owner or operator]. Within 120 days after the end of such fiscal year, the guarantor shall establish such financial assurance unless [owner or operator] has done so.

6. The guarantor agrees to notify the EPA Regional Administrator by certified mail, of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code, naming guarantor as debtor, within 10 days after commencement of the proceeding.

7. Guarantor agrees that within 30 days after being notified by an EPA Regional Administrator of a determination that guarantor no longer meets the financial test criteria or that he is disallowed from continuing as a guarantor of closure or post-closure care, he shall establish alternate financial assurance as specified in Subpart H of 40 CFR Parts 264 or 265, as applicable, in the name of [owner or operator] unless [owner or operator] has done so.

8. Guarantor agrees to remain bound under this guarantee notwithstanding any or all of the following: amendment or modification of the closure or post-closure plan, amendment or modification of the permit, the extension or reduction of the time of performance of closure or post-closure, or any other modification or alteration of an obligation of the owner or operator pursuant to 40 CFR Parts 264 or 265.

9. Guarantor agrees to remain bound under this guarantee for so long as [owner or operator] must comply with the applicable financial assurance requirements of Subpart H of 40 CFR Parts 264 and 265 for the above-listed facilities, except that guarantor may cancel this guarantee by sending notice by certified mail to the EPA Regional Administrator(s) for the Region(s) in which the facility(ies) is (are) located and to [owner or operator], such cancellation to become effective no earlier than 120 days after receipt of such notice by both EPA and [owner or operator], as evidenced by the return receipts.

10. Guarantor agrees that if [owner or operator] fails to provide alternate financial assurance as specified in Subpart H of 40 CFR Parts 264 or 265, as applicable, and obtain written approval of such assurance from the EPA Regional Administrator(s) within 90 days after a notice of cancellation by the guarantor is received by an EPA Regional Administrator from guarantor, guarantor shall provide such alternate financial assurance in the name of [owner or operator].

11. Guarantor expressly waives notice of acceptance of this guarantee by the EPA or by [owner or operator]. Guarantor also expressly waives notice of amendments or modifications of the closure and/or post-closure plan and of amendments or modifications of the facility permit(s).

I hereby certify that the wording of this guarantee is identical to the wording specified in 40 CFR 264.151(h) as such regulations were constitituted on the date first above written.

Effective date: _____

[Name of guarantor]

[Authorized signature for guarantor]

[Name of person signing]

[Title of person signing]

Signature of witness or notary: _____

(i) A hazardous waste facility liability endorsement as required in § 264.147 or § 265.147 must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

HAZARDOUS WASTE FACILITY LIABILITY ENDORSEMENT

1. This endorsement certifies that the policy to which the endorsement is attached provides liability insurance covering bodily injury and property damage in connection with the insured's obligation to demonstrate financial responsibility under 40 CFR 264.147 or 265.147. The coverage applies at [list EPA Identification Number, name, and address for each facility] for [insert "sudden accidental occurrences," "nonsudden accidental occurrences," or "sudden and nonsudden accidental occurrences"; if coverage is for multiple facilities and the coverage is different for different facilities, indicate which facilities are insured for sudden accidental occurrences, which are insured for nonsudden accidental occurrences, and which are insured for both]. The limits of liability are [insert the dollar amount of the "each occurrence" and "annual aggregate" limits of the Insurer's liability], exclusive of legal defense costs.

2. The insurance afforded with respect to such occurrences is subject to all of the terms and conditions of the policy; provided, however, that any provisions of the policy inconsistent with subsections (a) through (e) of this Paragraph 2 are hereby amended to conform with subsections (a) through (e):

(a) Bankruptcy or insolvency of the insured shall not relieve the Insurer of its obligations under the policy to which this endorsement is attached.

(b) The Insurer is liable for the payment of amounts within any deductible applicable to the policy, with a right of reimbursement by the insured for any such payment made by the Insurer. This provision does not apply with respect to that amount of any deductible for which coverage is demonstrated as specified in 40 CFR 264.147(f) or 265.147(f).

(c) Whenever requested by a Regional Administrator of the U.S. Environmental Protection Agency (EPA), the Insurer agrees to furnish to the Regional Administrator a signed duplicate original of the policy and all endorsements.

(d) Cancellation of this endorsement, whether by the Insurer or the insured, will be effective only upon written notice and only after the expiration of sixty (60) days after a copy of such written notice is received by the Regional Administrator(s) of the EPA Region(s) in which the facility(ies) is (are) located.

(e) Any other termination of this endorsement will be effective only upon written notice and only after the expiration of thirty (30) days after a copy of such written notice is received by the Regional Administrator(s) of the EPA Region(s) in which the facility(ies) is (are) located.

Attached to and forming part of policy No. ——— issued by [name of Insurer], herein called the Insurer, of [address of Insurer] to [name of insured] of [address] this — day of ———, 19—. The effective date of said policy is — day of ———, 19—.

I hereby certify that the wording of this endorsement is identical to the wording specified in 40 CFR 264.151(i) as such regulation was constituted on the date first above written, and that the Insurer is licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more States.

[Signature of Authorized Representative of Insurer]

[Type name]

[Title], Authorized Representive of [name of Insurer]

[Address of Representative]

(j) A certificate of liability insurance as required in § 264.147 or § 265.147 must be worded as follows, except that

the instructions in brackets are to be replaced with the relevant information and the brackets deleted:

HAZARDOUS WASTE FACILITY CERTIFICATE OF LIABILITY INSURANCE

1. [Name of Insurer], (the "Insurer"), of [address of Insurer] hereby certifies that it has issued liability insurance covering bodily injury and property damage to [name of insured], (the "insured"), of [address of insured] in connection with the insured's obligation to demonstrate financial responsibility under 40 CFR 264.147 or 265.147. The coverage applies at [list EPA Identification Number, name, and address for each facility] for [insert "sudden accidental occurrences," "nonsudden accidental occurrences," or "sudden and nonsudden accidental occurrences"; if coverage is for multiple facilities and the coverage is different for different facilities, indicate which facilities are insured for sudden accidental occurrences, which are insured for nonsudden accidental occurrences, and which are insured for both]. The limits of liability are [insert the dollar amount of the "each occurrence" and "annual aggregate" limits of the Insurer's liability], exclusive of legal defense costs. The coverage is provided under policy number ——, issued on [date]. The effective date of said policy is [date].

2. The Insurer further certifies the following with respect to the insurance described in Paragraph 1:

(a) Bankruptcy or insolvency of the insured shall not relieve the Insurer of its obligations under the policy.

(b) The Insurer is liable for the payment of amounts within any deductible applicable to the policy, with a right of reimbursement by the insured for any such payment made by the Insurer. This provision does not apply with respect to that amount of any deductible for which coverage is demonstrated as specified in 40 CFR 264.147(f) or 265.147(f).

(c) Whenever requested by a Regional Administrator of the U.S. Environmental Protection Agency (EPA), the Insurer agrees to furnish to the Regional Administrator a signed duplicate original of the policy and all endorsements.

(d) Cancellation of the insurance, whether by the Insurer or the insured, will be effective only upon written notice and only after the expiration of sixty (60) days after a copy of such written notice is received by the Regional Administrator(s) of the EPA Region(s) in which the facility(ies) is (are) located.

(e) Any other termination of the insurance will be effective only upon written notice and only after the expiration of thirty (30) days after a copy of such written notice is received by the Regional Administrator(s) of the EPA Region(s) in which the facility(ies) is (are) located.

I hereby certify that the wording of this instrument is identical to the wording specified in 40 CFR 264.151(j) as such regulation was constituted on the date first above written, and that the Insurer is licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more States.

[Signature of authorized representative of Insurer]

[Type name]

[Title], Authorized Representative of [name of Insurer]

[Address of Representative]

(Approved by the Office of Management and Budget under control number 2000-0445, for paragraphs (g), (i), and (j).)

[47 FR 15059, Apr. 7, 1982, as amended at 47 FR 16556, Apr. 16, 1982; 47 FR 17989, Apr. 27, 1982; 47 FR 19995, May 10, 1982; 47 FR 28627, July 1, 1982]

Subpart I—Use and Management of Containers

SOURCE: 46 FR 2866, Jan. 12, 1981, unless otherwise noted.

§ 264.170 Applicability.

The regulations in this Subpart apply to owners and operators of all hazardous waste facilities that store containers of hazardous waste, except as § 264.1 provides otherwise.

[*Comment:* Under § 261.7 and § 261.33(c), if a hazardous waste is emptied from a container the residue remaining in the container is not considered a hazardous waste if the container is "empty" as defined in § 261.7. In that event, management of the container is exempt from the requirements of this Subpart.]

§ 264.171 Condition of containers.

If a container holding hazardous waste is not in good condition (e.g., severe rusting, apparent structural defects) or if it begins to leak, the owner or operator must transfer the hazardous waste from this container to a container that is in good condition or manage the waste in some other way that complies with the requirements of this part.

§ 264.172 Compatibility of waste with containers.

The owner or operator must use a container made of or lined with materials which will not react with, and are otherwise compatible with, the hazardous waste to be stored, so that the ability of the container to contain the waste is not impaired.

§ 264.173 Management of containers.

(a) A container holding hazardous waste must always be closed during storage, except when it is necessary to add or remove waste.

(b) A container holding hazardous waste must not be opened, handled, or stored in a manner which may rupture the container or cause it to leak.

[*Comment:* Reuse of containers in transportation is governed by U.S. Department of Transportation regulations including those set forth in 49 CFR 173.28.]

§ 264.174 Inspections.

At least weekly, the owner or operator must inspect areas where containers are stored, looking for leaking containers and for deterioration of containers and the containment system caused by corrosion or other factors.

[*Comment:* See §§ 264.15(c) and 264.171 for remedial action required if deterioration or leaks are detected.]

§ 264.175 Containment.

(a) Container storage areas must have a containment system that is designed and operated in accordance with paragraph (b) of this section, except as otherwise provided by paragraph (c) of this section.

(b) A containment system must be designed and operated as follows:

(1) A base must underly the containers which is free of cracks or gaps and is sufficiently impervious to contain leaks, spills, and accumulated precipitation until the collected material is detected and removed;

(2) The base must be sloped or the containment system must be otherwise designed and operated to drain and remove liquids resulting from leaks, spills, or precipitation, unless the containers are elevated or are otherwise protected from contact with accumulated liquids;

(3) The containment system must have sufficient capacity to contain 10% of the volume of containers or the volume of the largest container, whichever is greater. Containers that do not contain free liquids need not be considered in this determination;

(4) Run-on into the containment system must be prevented unless the collection system has sufficient excess capacity in addition to that required in paragraph (b)(3) of this section to contain any run-on which might enter the system; and

(5) Spilled or leaked waste and accumulated precipitation must be removed from the sump or collection area in as timely a manner as is necessary to prevent overflow of the collection system.

[*Comment:* If the collected material is a hazardous waste under Part 261 of this Chapter, it must be managed as a hazardous waste in accordance with all applicable requirements of Parts 262—266 of this chapter. If the collected material is discharged through a point source to waters of the United States, it is subject to the requirements of Section 402 of the Clean Water Act, as amended.]

(c) Storage areas that store containers holding only wastes that do not contain free liquids need not have a containment system defined by paragraph (b) of this section, provided that:

(1) The storage area is sloped or is otherwise designed and operated to drain and remove liquid resulting from precipitation, or

(2) The containers are elevated or are otherwise protected from contact with accumulated liquid.

[46 FR 55112, Nov. 6, 1981]

§ 264.176 Special requirements for ignitable or reactive waste.

Containers holding ignitable or reactive waste must be located at least 15 meters (50 feet) from the facility's property line.

[*Comment:* See § 264.17(a) for additional requirements.]

§ 264.177 Special requirements for incompatible wastes.

(a) Incompatible wastes, or incompatible wastes and materials (see Ap-

pendix V for examples), must not be placed in the same container, unless § 264.17(b) is complied with.

(b) Hazardous waste must not be placed in an unwashed container that previously held an incompatible waste or material.

[*Comment:* As required by § 264.13, the waste analysis plan must include analyses needed to comply with § 264.177. Also, § 264.17(c) requires wastes analyses, trial tests or other documentation to assure compliance with § 264.17(b). As required by § 264.73, the owner or operator must place the results of each waste analysis and trial test, and any documented information, in the operating record of the facility.]

(c) A storage container holding a hazardous waste that is incompatible with any waste or other materials stored nearby in other containers, piles, open tanks, or surface impoundments must be separated from the other materials or protected from them by means of a dike, berm, wall, or other device.

[*Comment:* The purpose of this section is to prevent fires, explosions, gaseous emission, leaching, or other discharge of hazardous waste or hazardous waste constituents which could result from the mixing of incompatible wastes or materials if containers break or leak.]

§ 264.178 Closure.

At closure, all hazardous waste and hazardous waste residues must be removed from the containment system. Remaining containers, liners, bases, and soil containing or contaminated with hazardous waste or hazardous waste residues must be decontaminated or removed.

[*Comment:* At closure, as throughout the operating period, unless the owner or operator can demonstrate in accordance with § 261.3(d) of this chapter that the solid waste removed from the containment system is not a hazardous waste, the owner or operator becomes a generator of hazardous waste and must manage it in accordance with all applicable requirements of Parts 262—266 of this chapter].

Subpart J—Tanks

SOURCE: 46 FR 2867, Jan. 12, 1981, unless otherwise noted.

§ 264.190 Applicability.

(a) The regulations in this subpart apply to owners and operators of facilities that use tanks to treat or store hazardous waste, except as § 264.1 and paragraph (b) of this section provide otherwise;

(b) The regulations in this Subpart do not apply to facilities that treat or store hazardous waste in covered underground tanks that cannot be entered for inspection.

§ 264.191 Design of tanks.

(a) Tanks must have sufficient shell strength and, for closed tanks, pressure controls (e.g., vents) to assure that they do not collapse or rupture. The Regional Administrator will review the design of the tanks, including the foundation, structural support, seams and pressure controls. The Regional Administrator shall require that a minimum shell thickness be maintained at all times to ensure sufficient shell strength. Factors to be considered in establishing minimum thickness include the width, height, and materials of construction of the tank, and the specific gravity of the waste which will be placed in the tank. In reviewing the design of the tank and establishing a minimum thickness, the Regional Administrator shall rely upon appropriate industrial design standards and other available information.

[46 FR 2867, Jan. 12, 1981, as amended at 46 FR 35249, July 7, 1981]

§ 264.192 General operating requirements.

(a) Wastes and other materials (e.g., treatment reagents) which are incompatible with the material of construction of the tank must not be placed in the tank unless the tank is protected from accelerated corrosion, erosion or abrasion through the use of:

(1) An inner liner or coating which is compatible with the waste or material and which is free of leaks, cracks, holes or other deterioration; or

(2) Alternative means of protection (e.g., cathodic protection or corrosion inhibitors).

(b) The owner or operator must use appropriate controls and practices to

prevent overfilling. These must include:

(1) Controls to prevent overfilling (e.g., waste feed cutoff system or bypass system to a standby tank); and

(2) For uncovered tanks, maintenance of sufficient freeboard to prevent overtopping by wave or wind action or by precipitation.

§ 264.193 [Reserved]

§ 264.194 Inspections.

(a) The owner or operator must inspect:

(1) Overfilling control equipment (e.g., waste feed cut-off systems and by-pass systems) at least once each operating day to ensure that it is in good working order;

(2) Data gathered from monitoring equipment (e.g., pressure and temperature gauges) where present, at least once each operating day to ensure that the tank is being operated according to its design;

(3) For uncovered tanks, the level of waste in the tank, at least once each operating day, to ensure compliance with § 264.192(b)(2);

(4) The construction materials of the above-ground portions of the tank, at least weekly to detect corrosion or erosion and leaking of fixtures and seams; and

(5) The area immediately surrounding the tank, at least weekly, to detect obvious signs of leakage (e.g., wet spots or dead vegetation).

(b) As part of the inspection schedule required in § 264.15(b) and in addition to the specific requirements of paragraph (a) of this section, the owner or operator must develop a schedule and procedure for assessing the condition of the tank. The schedule and procedure must be adequate to detect cracks, leaks, corrosion or erosion which may lead to cracks or leaks, or wall thinning to less that the thickness required under § 264.191. Procedures for emptying a tank to allow entry and inspection of the interior must be established when necessary to detect corrosion or erosion of the tank sides and bottom. The frequency of these assessments must be based on the material of construction of the tank, type of corrosion or erosion protection used, rate of corrosion or erosion observed during previous inspections, and the characteristics of the waste being treated or stored.

(c) As part of the contingency plan required under Subpart D of Part 264, the owner or operator must specify the procedures he intends to use to respond to tank spills or leakage, including procedures and timing for expeditious removal of leaked or spilled waste and repair of the tank.

[*Comment:* As required in § 264.15(c), the owner or operator must remedy any leak, crack, or wall thinning in violation of § 264.191, or equipment or process malfunction in violation of § 264.192, which he discovers during inspection. See 29 CFR § 1910.94(d)(11) for Occupational Safety and Health Administration requirements relating to entry of tanks for inspection.]

§§ 264.195—264.196 [Reserved]

§ 264.197 Closure.

At closure, all hazardous waste and hazardous waste residues must be removed from tanks, discharge control equipment, and discharge confinement structures.

[*Comment:* At closure, as throughout the operating period, unless the owner or operator can demonstrate in accordance with § 261.3(d) of this chapter that the solid waste removed from his tank is not a hazardous waste, the owner or operator becomes a generator of hazardous waste and must manage it in accordance with all applicable requirements of Parts 262—266 of this chapter.]

§ 264.198 Special requirements for ignitable or reactive wastes.

(a) Ignitable or reactive waste must not be placed in a tank unless:

(1) The waste is treated, rendered, or mixed before or immediately after placement in the tank so that (i) the resulting waste, mixture, or dissolution of material no longer meets the definition of ignitable or reactive waste under §§ 261.21 or 261.23 of this chapter, and (ii) § 264.17(b) is complied with; or

(2) The waste is stored or treated in such a way that it is protected from any material or conditions which may cause the waste to ignite or react; or

(3) The tank is used solely for emergencies.

(b) The owner or operator of a facility which treats or stores ignitable or reactive waste in covered tanks must comply with the buffer zone requirements for tanks contained in Tables 2-1 through 2-6 of the National Fire Protection Association's "Flammable and Combustible Liquids Code" (1977 or 1981), (incorporated by reference, see § 260.11).

[46 FR 2867, Jan. 12, 1981, as amended at 46 FR 35249, July 7, 1981]

§ 264.199 Special requirements for incompatible wastes.

(a) Incompatible wastes, or incompatible wastes and materials, must not be placed in the same tank, unless § 264.17(b) is complied with.

(b) Hazardous waste must not be placed in an unwashed tank which previously held an incompatible waste or material, unless § 264.17(b) is complied with.

[*Comment:* As required by § 264.13, the waste analysis plan must include analyses needed to comply with § 264.199. Also, § 264.17(c) requires waste analyses, trial tests, or other documentation to ensure compliance with § 264.17(b). As required by § 264.73, the owner or operator must place the results of each waste analysis and trial test, and any documented information, in the operating record of the facility.]

Subpart K—Surface Impoundments

SOURCE: 47 FR 32357, July 26, 1982, unless otherwise noted.

§ 264.220 Applicability.

The regulations in this subpart apply to owners and operators of facilities that use surface impoundments to treat, store, or dispose of hazardous waste except as § 264.1 provides otherwise.

§ 264.221 Design and operating requirements.

(a) A surface impoundment (except for an existing portion of a surface impoundment) must have a liner that is designed, constructed, and installed to prevent any migration of wastes out of the impoundment to the adjacent subsurface soil or ground water or surface water at any time during the active life (including the closure period) of the impoundment. The liner may be constructed of materials that may allow wastes to migrate into the liner (but not into the adjacent subsurface soil or ground water or surface water) during the active life of the facility, provided that the impoundment is closed in accordance with § 264.228(a)(1). For impoundments that will be closed in accordance with § 264.228(a)(2), the liner must be constructed of materials that can prevent wastes from migrating into the liner during the active life of the facility. The liner must be:

(1) Constructed of materials that have appropriate chemical properties and sufficient strength and thickness to prevent failure due to pressure gradients (including static head and external hydrogeologic forces), physical contact with the waste or leachate to which they are exposed, climatic conditions, the stress of installation, and the stress of daily operation;

(2) Placed upon a foundation or base capable of providing support to the liner and resistance to pressure gradients above and below the liner to prevent failure of the liner due to settlement, compression, or uplift; and

(3) Installed to cover all surrounding earth likely to be in contact with the waste or leachate.

(b) The owner or operator will be exempted from the requirements of paragraph (a) of this section if the Regional Administrator finds, based on a demonstration by the owner or operator, that alternate design and operating practices, together with location characteristics, will prevent the migration of any hazardous constituents (see § 264.93) into the ground water or surface water at any future time. In deciding whether to grant an exemption, the Regional Administrator will consider:

(1) The nature and quantity of the wastes;

(2) The proposed alternate design and operation;

(3) The hydrogeologic setting of the facility, including the attenuative capacity and thickness of the liners and soils present between the impoundment and ground water or surface water; and

(4) All other factors which would influence the quality and mobility of the leachate produced and the potential for it to migrate to ground water or surface water.

(c) A surface impoundment must be designed, constructed, maintained, and operated to prevent overtopping resulting from normal or abnormal operations; overfilling; wind and wave action; rainfall; run-on; malfunctions of level controllers, alarms, and other equipment; and human error.

(d) A surface impoundment must have dikes that are designed, constructed, and maintained with sufficient structural integrity to prevent massive failure of the dikes. In ensuring structural integrity, it must not be presumed that the liner system will function without leakage during the active life of the unit.

(e) The Regional Administrator will specify in the permit all design and operating practices that are necessary to ensure that the requirements of this section are satisfied.

§ 264.222 Double-lined surface impoundments: Exemption from Subpart F ground-water protection requirements.

(a) The owner or operator of a double-lined surface impoundment is not subject to regulation under Subpart F of this part if the following conditions are met:

(1) The impoundment (including its underlying liners) must be located entirely above the seasonal high water table.

(2) The impoundment must be underlain by two liners which are designed and constructed in a manner that prevents the migration of liquids into or out of the space between the liners. Both liners must meet all the specifications of § 264.221(a).

(3) A leak detection system must be designed, constructed, maintained, and operated between the liners to detect any migration of liquids into the space between the liners.

(b) If liquid leaks into the leak detection system, the owner or operator must:

(1) Notify the Regional Administrator of the leak in writing within seven days after detecting the leak; and

(2)(i) Within a period of time specified in the permit, remove accumulated liquid, repair or replace the liner which is leaking to prevent the migration of liquids through the liner, and obtain a certification from a qualified engineer that, to the best of his knowledge and opinion, the leak has been stopped; or

(ii) If a detection monitoring program pursuant to § 264.98 has already been established in the permit (to be complied with only if a leak occurs), begin to comply with that program and any other applicable requirements of Subpart F of this part within a period of time specified in the permit.

(c) The Regional Administrator will specify in the permit all design and operating practices that are necessary to ensure that the requirements of this section are satisfied.

§§ 264.223—264.225 [Reserved]

§ 264.226 Monitoring and inspection.

(a) During construction and installation, liners (except in the case of existing portions of surface impoundments exempt from § 264.221(a)) and cover systems (e.g., membranes, sheets, or coatings) must be inspected for uniformity, damage, and imperfections (e.g., holes, cracks, thin spots, or foreign materials). Immediately after construction or installation:

(1) Synthetic liners and covers must be inspected to ensure tight seams and joints and the absence of tears, punctures, or blisters; and

(2) Soil-based and admixed liners and covers must be inspected for imperfections including lenses, cracks, channels, root holes, or other structural non-uniformities that may cause an increase in the permeability of the liner or cover.

(b) While a surface impoundment is in operation, it must be inspected weekly and after storms to detect evidence of any of the following:

(1) Deterioration, malfunctions, or improper operation of overtopping control systems;

(2) Sudden drops in the level of the impoundment's contents; and

(3) The presence of liquids in leak detection systems, where installed to comply with § 264.222; and

(4) Severe erosion or other signs of deterioration in dikes or other containment devices.

(c) Prior to the issuance of a permit, and after any extended period of time (at least six months) during which the impoundment was not in service, the owner or operator must obtain a certification from a qualified engineer that the impoundment's dike, including that portion of any dike which provides freeboard, has structural integrity. The certification must establish, in particular, that the dike:

(1) Will withstand the stress of the pressure exerted by the types and amounts of wastes to be placed in the impoundment; and

(2) Will not fail due to scouring or piping, without dependence on any liner system included in the surface impoundment construction.

§ 264.227 Emergency repairs; contingency plans.

(a) A surface impoundment must be removed from service in accordance with paragraph (b) of this section when:

(1) The level of liquids in the impoundment suddenly drops and the drop is not known to be caused by changes in the flows into or out of the impoundment; or

(2) The dike leaks.

(b) When a surface impoundment must be removed from service as required by paragraph (a) of this section, the owner or operator must:

(1) Immediately shut off the flow or stop the addition of wastes into the impoundment;

(2) Immediately contain any surface leakage which has occurred or is occurring;

(3) Immediately stop the leak;

(4) Take any other necessary steps to stop or prevent catastrophic failure;

(5) If a leak cannot be stopped by any other means, empty the impoundment; and

(6) Notify the Regional Administrator of the problem in writing within seven days after detecting the problem.

(c) As part of the contingency plan required in Subpart D of this part, the owner or operator must specify a procedure for complying with the requirements of paragraph (b) of this section.

(d) No surface impoundment that has been removed from service in accordance with the requirements of this section may be restored to service unless the portion of the impoundment which was failing is repaired and the following steps are taken:

(1) If the impoundment was removed from service as the result of actual or imminent dike failure, the dike's structural integrity must be recertified in accordance with § 264.226(c).

(2) If the impoundment was removed from service as the result of a sudden drop in the liquid level, then:

(i) For any existing portion of the impoundment, a liner must be installed in compliance with § 264.221(a) or § 264.222; and

(ii) For any other portion of the impoundment, the repaired liner system must be certified by a qualified engineer as meeting the design specifications approved in the permit.

(e) A surface impoundment that has been removed from service in accordance with the requirements of this section and that is not being repaired must be closed in accordance with the provisions of § 264.228.

§ 264.228 Closure and post-closure care.

(a) At closure, the owner or operator must:

(1) Remove or decontaminate all waste residues, contaminated containment system components (liners, etc.), contaminated subsoils, and structures and equipment contaminated with waste and leachate, and manage them as hazardous waste unless § 261.3(d) of this chapter applies; or

(2)(i) Eliminate free liquids by removing liquid wastes or solidifying the remaining wastes and waste residues;

(ii) Stabilize remaining wastes to a bearing capacity sufficient to support final cover; and

(iii) Cover the surface impoundment with a final cover designed and constructed to:

(A) Provide long-term minimization of the migration of liquids through the closed impoundment;

(B) Function with minimum maintenance;

(C) Promote drainage and minimize erosion or abrasion of the final cover;

(D) Accommodate settling and subsidence so that the cover's integrity is maintained; and

(E) Have a permeability less than or equal to the permeability of any bottom liner system or natural subsoils present.

(b) If some waste residues or contaminated materials are left in place at final closure, the owner or operator must comply with all post-closure requirements contained in §§ 264.117—264.120, including maintenance and monitoring throughout the post-closure care period (specified in the permit under § 264.117). The owner or operator must:

(1) Maintain the integrity and effectiveness of the final cover, including making repairs to the cap as necessary to correct the effects of settling, subsidence, erosion, or other events;

(2) Maintain and monitor the leak detection system in accordance with § 264.222, where such a system is present between double liner systems;

(3) Maintain and monitor the ground-water monitoring system and comply with all other applicable requirements of Subpart F of this part; and

(4) Prevent run-on and run-off from eroding or otherwise damaging the final cover.

(c)(1) If an owner or operator plans to close a surface impoundment in accordance with paragraph (a)(1) of this section, and the impoundment does not comply with the liner requirements of § 264.221(a) and is not exempt from them in accordance with § 264.221(b), then:

(i) The closure plan for the impoundment under § 264.112 must include both a plan for complying with paragraph (a)(1) of this section and a contingent plan for complying with paragraph (a)(2) of this section in case not all contaminated subsoils can be practicably removed at closure; and

(ii) The owner or operator must prepare a contingent post-closure plan under § 264.118 for complying with paragraph (b) of this section in case not all contaminated subsoils can be practicably removed at closure.

(2) The cost estimates calculated under §§ 264.142 and 264.144 for closure and post-closure care of an impoundment subject to this paragraph must include the cost of complying with the contingent closure plan and the contingent post-closure plan, but are not required to include the cost of expected closure under paragraph (a)(1) of this section.

(d) During the post-closure care period, if liquids leak into a leak detection system installed under § 264.222, the owner or operator must notify the Regional Administrator of the leak in writing within seven days after detecting the leak. The Regional Administrator will modify the permit to require compliance with the requirements of Subpart F of this part.

§ 264.229 Special requirements for ignitable or reactive waste.

Ignitable or reactive waste must not be placed in a surface impoundment, unless:

(a) The waste is treated, rendered, or mixed before or immediately after placement in the impoundment so that:

(1) The resulting waste, mixture, or dissolution of material no longer meets the definition of ignitable or reactive waste under § 261.21 or § 261.23 of this chapter; and

(2) Section 264.17(b) is complied with; or

(b) The waste is managed in such a way that it is protected from any material or conditions which may cause it to ignite or react; or

(c) The surface impoundment is used solely for emergencies.

§ 264.230 Special requirements for incompatible wastes.

Incompatible wastes, or incompatible wastes and materials, (see Appendix V of this part for examples) must not be placed in the same surface impoundment, unless § 264.17(b) is complied with.

§§ 264.231—264.249 [Reserved]

Subpart L—Waste Piles

SOURCE: 47 FR 32359, July 26, 1982, unless otherwise noted.

§ 264.250 Applicability.

(a) The regulations in this subpart apply to owners and operators of facilities that store or treat hazardous waste in piles, except as § 264.1 provides otherwise.

(b) The regulations in this subpart do not apply to owners or operators of waste piles that are closed with wastes left in place. Such waste piles are subject to regulation under Subpart N of this part (Landfills).

(c) The owner or operator of any waste pile that is inside or under a structure that provides protection from precipitation so that neither run-off nor leachate is generated is not subject to regulation under § 264.251 or under Subpart F of this part, provided that:

(1) Liquids or materials containing free liquids are not placed in the pile;

(2) The pile is protected from surface water run-on by the structure or in some other manner;

(3) The pile is designed and operated to control dispersal of the waste by wind, where necessary, by means other than wetting; and

(4) The pile will not generate leachate through decomposition or other reactions.

§ 264.251 Design and operating requirements.

(a) A waste pile (except for an existing portion of a waste pile) must have:

(1) A liner that is designed, constructed, and installed to prevent any migration of wastes out of the pile into the adjacent subsurface soil or ground water or surface water at any time during the active life (including the closure period) of the waste pile. The liner may be constructed of materials that may allow waste to migrate into the liner itself (but not into the adjacent subsurface soil or ground water or surface water) during the active life of the facility. The liner must be:

(i) Constructed of materials that have appropriate chemical properties and sufficient strength and thickness to prevent failure due to pressure gradients (including static head and external hydrogeologic forces), physical contact with the waste or leachate to which they are exposed, climatic conditions, the stress of installation, and the stress of daily operation;

(ii) Placed upon a foundation or base capable of providing support to the liner and resistance to pressure gradients above and below the liner to prevent failure of the liner due to settlement, compression, or uplift; and

(iii) Installed to cover all surrounding earth likely to be in contact with the waste or leachate; and

(2) A leachate collection and removal system immediately above the liner that is designed, constructed, maintained, and operated to collect and remove leachate from the pile. The Regional Administrator will specify design and operating conditions in the permit to ensure that the leachate depth over the liner does not exceed 30 cm (one foot). The leachate collection and removal system must be:

(i) Constructed of materials that are:

(A) Chemically resistent to the waste managed in the pile and the leachate expected to be generated; and

(B) Of sufficient strength and thickness to prevent collapse under the pressures exerted by overlaying wastes, waste cover materials, and by any equipment used at the pile; and

(ii) Designed and operated to function without clogging through the scheduled closure of the waste pile.

(b) The owner or operator will be exempted from the requirements of paragraph (a) of this section if the Regional Administrator finds, based on a demonstration by the owner or operator, that alternate design and operating practices, together with location characteristics, will prevent the migration of any hazardous constituents (see § 264.93) into the ground water or surface water at any future time. In deciding whether to grant an exemption, the Regional Administrator will consider:

(1) The nature and quantity of the wastes;

(2) The proposed alternate design and operation;

(3) The hydrogeologic setting of the facility, including attenuative capacity and thickness of the liners and soils present between the pile and ground water or surface water; and

(4) All other factors which would influence the quality and mobility of the leachate produced and the potential for it to migrate to ground water or surface water.

(c) The owner or operator must design, construct, operate, and maintain a run-on control system capable of preventing flow onto the active portion of the pile during peak discharge from at least a 25-year storm.

(d) The owner or operator must design, construct, operate, and maintain a run-off management system to collect and control at least the water volume resulting from a 24-hour, 25-year storm.

(e) Collection and holding facilities (e.g., tanks or basins) associated with run-on and run-off control systems must be emptied or otherwise managed expeditiously after storms to maintain design capacity of the system.

(f) If the pile contains any particulate matter which may be subject to wind dispersal, the owner or operator must cover or otherwise manage the pile to control wind dispersal.

(g) The Regional Administrator will specify in the permit all design and operating practices that are necessary to ensure that the requirements of this section are satisfied.

§ 264.252 Double-lined piles: Exemption from Subpart F ground-water protection requirements.

(a) The owner or operator of a double-lined waste pile is not subject to regulation under Subpart F of this part if the following conditions are met:

(1) The pile (including its underlying liners) must be located entirely above the seasonal high water table.

(2) The pile must be underlain by two liners which are designed and constructed in a manner that prevents the migration of liquids into or out of the space between the liners. Both liners must meet all the specifications of § 264.251(a)(1).

(3) A leak detection system must be designed, constructed, maintained, and operated between the liners to detect any migration of liquids into the space between the liners.

(4) The pile must have a leachate collection and removal system above the top liner that is designed, constructed, maintained, and operated in accordance with § 264.251(a)(2).

(b) If liquid leaks into the leak detection system, the owner or operator must:

(1) Notify the Regional Administrator of the leak in writing within seven days after detecting the leak; and

(2)(i) Within a period of time specified in the permit, remove accumulated liquid, repair or replace the liner which is leaking to prevent the migration of liquids through the liner, and obtain a certificaton from a qualified engineer that, to the best of his knowledge and opinion, the leak has been stopped; or

(ii) If a detection monitoring program pursuant to § 264.98 has already been established in the permit (to be complied with only if a leak occurs), begin to comply with that program and any other applicable requirements of Subpart F of this part within a period of time specified in the permit.

(c) The Regional Administrator will specify in the permit all design and operating practices that are necessary to ensure that the requirements of this section are satisfied.

§ 264.253 Inspection of liners: Exemption from Subpart F ground-water protection requirements.

(a) The owner or operator of a pile is not subject to regulation under Subpart F of this part if the following conditions are met:

(1) The pile (including its underlying liner) must be located entirely above the seasonal high water table.

(2) The pile must be underlain by a liner (base) that meets all the specifications of § 264.251(a)(1).

(3) The wastes in the pile must be removed periodically, and the liner must be inspected for deterioration, cracks, or other conditions that may

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result in leaks. The frequency of inspection will be specified in the inspection plan required in § 264.15 and must be based on the potential for the liner (base) to crack or otherwise deteriorate under the conditions of operation (*e.g.*, waste type, rainfall, loading rates, and subsurface stability).

(4) The liner must be of sufficient strength and thickness to prevent failure due to puncture, cracking, tearing, or other physical damage from equipment used to place waste in or on the pile or to clean and expose the liner surface for inspection.

(5) The pile must have a leachate collection and removal system above the liner that is designed, constructed, maintained, and operated in accordance with § 264.251(a)(2).

(b) If deterioration, a crack, or other condition is identified that is causing or could cause a leak, the owner or operator must:

(1) Notify the Regional Administrator of the condition in writing within seven days after detecting the condition; and

(2)(i) Repair or replace the liner (base) and obtain a certification from a qualified engineer that, to the best of his knowledge and opinion, the liner (base) has been repaired and leakage will not occur; or

(ii) If a detection monitoring program pursuant to § 264.98 has already been established in the permit (to be complied with only if a leak occurs), begin to comply with that program and any other applicable requirements of Subpart F of this part within a period of time specified in the permit.

(c) The Regional Administrator will specify in the permit all design and operating practices that are necessary to ensure that the requirements of this section are satisfied.

§ 264.254 Monitoring and inspection.

(a) During construction or installation, liners (except in the case of existing portions of piles exempt from § 264.251(a)) and cover systems (*e.g.*, membranes, sheets, or coatings) must be inspected for uniformity, damage, and imperfections (*e.g.*, holes, cracks, thin spots, or foreign materials). Immediately after construction or installation:

(1) Synthetic liners and covers must be inspected to ensure tight seams and joints and the absence of tears, punctures, or blisters; and

(2) Soil-based and admixed liners and covers must be inspected for imperfections including lenses, cracks, channels, root holes, or other structural non-uniformities that may cause an increase in the permeability of the liner or cover.

(b) While a waste pile is in operation, it must be inspected weekly and after storms to detect evidence of any of the following:

(1) Deterioration, malfunctions, or improper operation of run-on and run-off control systems;

(2) The presence of liquids in leak detection systems, where installed to comply with § 264.252;

(3) Proper functioning of wind dispersal control systems, where present; and

(4) The presence of leachate in and proper functioning of leachate collection and removal systems, where present.

§ 264.255 [Reserved]

§ 264.256 Special requirements for ignitable or reactive waste.

Ignitable or reactive waste must not be placed in a waste pile unless:

(a) The waste is treated, rendered, or mixed before or immediately after placement in the pile so that:

(1) The resulting waste, mixture, or dissolution of material no longer meets the definition of ignitable or reactive waste under § 261.21 or § 261.23 of this chapter; and

(2) Section 264.17(b) is complied with; or

(b) The waste is managed in such a way that it is protected from any material or conditions which may cause it to ignite or react.

§ 264.257 Special requirements for incompatible wastes.

(a) Incompatible wastes, or incompatible wastes and materials, (see Appendix V of this part for examples) must not be placed in the same pile, unless § 264.17(b) is complied with.

(b) A pile of hazardous waste that is incompatible with any waste or other material stored nearby in containers, other piles, open tanks, or surface impoundments must be separated from the other materials, or protected from them by means of a dike, berm, wall, or other device.

(c) Hazardous waste must not be piled on the same base where incompatible wastes or materials were previously piled, unless the base has been decontaminated sufficiently to ensure compliance with § 264.17(b).

§ 264.258 Closure and post-closure care.

(a) At closure, the owner or operator must remove or decontaminate all waste residues, contaminated containment system components (liners, etc.), contaminated subsoils, and structures and equipment contaminated with waste and leachate, and manage them as hazardous waste unless § 261.3(d) of this chapter applies.

(b) If, after removing or decontaminating all residues and making all reasonable efforts to effect removal or decontamination of contaminated components, subsoils, structures, and equipment as required in paragraph (a) of this section, the owner or operator finds that not all contaminated subsoils can be practicably removed or decontaminated, he must close the facility and perform post-closure care in accordance with the closure and post-closure care requirements that apply to landfills (§ 264.310).

(c)(1) The owner or operator of a waste pile that does not comply with the liner requirements of § 264.251(a)(1) and is not exempt from them in accordance with §§ 264.250(c) or 264.251(b), must:

(i) Include in the closure plan for the pile under § 264.112 both a plan for complying with paragraph (a) of this section and a contingent plan for complying with paragraph (b) of this section in case not all contaminated subsoils can be practicably removed at closure; and

(ii) Prepare a contingent post-closure plan under § 264.118 for complying with paragraph (b) of this section in case not all contaminated subsoils can be practicably removed at closure.

(2) The cost estimates calculated under §§ 264.142 and 264.144 for closure and post-closure care of a pile subject to this paragraph must include the cost of complying with the contingent closure plan and the contingent post-closure plan, but are not required to include the cost of expected closure under paragraph (a) of this section.

§§ 264.259—264.269 [Reserved]

Subpart M—Land Treatment

SOURCE: 47 FR 32361, July 26, 1982, unless otherwise noted.

§ 264.270 Applicability.

The regulations in this subpart apply to owners and operators of facilities that treat or dispose of hazardous waste in land treatment units, except as § 264.1 provides otherwise.

§ 264.271 Treatment program.

(a) An owner or operator subject to this subpart must establish a land treatment program that is designed to ensure that hazardous constituents placed in or on the treatment zone are degraded, transformed, or immobilized within the treatment zone. The Regional Administrator will specify in the facility permit the elements of the treatment program, including:

(1) The wastes that are capable of being treated at the unit based on a demonstration under § 264.272;

(2) Design measures and operating practices necessary to maximize the success of degradation, transformation, and immobilization processes in the treatment zone in accordance with § 264.273(a); and

(3) Unsaturated zone monitoring provisions meeting the requirements of § 264.278.

(b) The Regional Administrator will specify in the facility permit the hazardous constituents that must be degraded, transformed, or immobilized under this subpart. Hazardous constituents are constituents identified in Appendix VIII of Part 261 of this chapter that are reasonably expected to be in, or derived from, waste placed in or on the treatment zone.

(c) The Regional Administrator will specify the vertical and horizontal dimensions of the treatment zone in the facility permit. The treatment zone is

the portion of the unsaturated zone below and including the land surface in which the owner or operator intends to maintain the conditions necessary for effective degradation, transformation, or immobilization of hazardous constituents. The maximum depth of the treatment zone must be:

(1) No more than 1.5 meters (5 feet) from the initial soil surface; and

(2) More than 1 meter (3 feet) above the seasonal high water table.

§ 264.272 Treatment demonstration.

(a) For each waste that will be applied to the treatment zone, the owner or operator must demonstrate, prior to application of the waste, that hazardous constituents in the waste can be completely degraded, transformed, or immobilized in the treatment zone.

(b) In making this demonstration, the owner or operator may use field tests, laboratory analyses, available data, or, in the case of existing units, operating data. If the owner or operator intends to conduct field tests or laboratory analyses in order to make the demonstration required under paragraph (a) of this section, he must obtain a treatment or disposal permit under § 270.63. The Regional Administrator will specify in this permit the testing, analytical, design, and operating requirements (including the duration of the tests and analyses, and, in the case of field tests, the horizontal and vertical dimensions of the treatment zone, monitoring procedures, closure and clean-up activities) necessary to meet the requirements in paragraph (c) of this section.

(c) Any field test or laboratory analysis conducted in order to make a demonstration under paragraph (a) of this section must:

(1) Accurately simulate the characteristics and operating conditions for the proposed land treatment unit including:

(i) The characteristics of the waste (including the presence of Appendix VIII of Part 261 of this chapter constituents);

(ii) The climate in the area;

(iii) The topography of the surrounding area;

(iv) The characteristics of the soil in the treatment zone (including depth); and

(v) The operating practices to be used at the unit.

(2) Be likely to show that hazardous constituents in the waste to be tested will be completely degraded, transformed, or immobilized in the treatment zone of the proposed land treatment unit; and

(3) Be conducted in a manner that protects human health and the environment considering:

(i) The characteristics of the waste to be tested;

(ii) The operating and monitoring measures taken during the course of the test;

(iii) The duration of the test;

(iv) The volume of waste used in the test;

(v) In the case of field tests, the potential for migration of hazardous constituents to ground water or surface water.

[47 FR 32361, July 26, 1982, as amended at 48 FR 14294, Apr. 1, 1983]

§ 264.273 Design and operating requirements.

The Regional Administrator will specify in the facility permit how the owner or operator will design, construct, operate, and maintain the land treatment unit in compliance with this section.

(a) The owner or operator must design, construct, operate, and maintain the unit to maximize the degradation, transformation, and immobilization of hazardous constituents in the treatment zone. The owner or operator must design, construct, operate, and maintain the unit in accord with all design and operating conditions that were used in the treatment demonstration under § 264.272. At a minimum, the Regional Administrator will specify the following in the facility permit:

(1) The rate and method of waste application to the treatment zone;

(2) Measures to control soil pH;

(3) Measures to enhance microbial or chemical reactions (*e.g.*, fertilization, tilling); and

(4) Measures to control the moisture content of the treatment zone.

(b) The owner or operator must design, construct, operate, and maintain the treatment zone to minimize run-off of hazardous constituents during the active life of the land treatment unit.

(c) The owner or operator must design, construct, operate, and maintain a run-on control system capable of preventing flow onto the treatment zone during peak discharge from at least a 25-year storm.

(d) The owner or operator must design, construct, operate, and maintain a run-off management system to collect and control at least the water volume resulting from a 24-hour, 25-year storm.

(e) Collection and holding facilities (*e.g.*, tanks or basins) associated with run-on and run-off control systems must be emptied or otherwise managed expeditiously after storms to maintain the design capacity of the system.

(f) If the treatment zone contains particulate matter which may be subject to wind dispersal, the owner or operator must manage the unit to control wind dispersal.

(g) The owner or operator must inspect the unit weekly and after storms to detect evidence of:

(1) Deterioration, malfunctions, or improper operation of run-on and run-off control systems; and

(2) Improper functioning of wind dispersal control measures.

§§ 264.274—264.275 [Reserved]

§ 264.276 Food-chain crops.

The Regional Administrator may allow the growth of food-chain crops in or on the treatment zone only if the owner or operator satisfies the conditions of this section. The Regional Administrator will specify in the facility permit the specific food-chain crops which may be grown.

(a)(1) The owner or operator must demonstrate that there is no substantial risk to human health caused by the growth of such crops in or on the treatment zone by demonstrating, prior to the planting of such crops, that hazardous constituents other than cadmium:

(i) Will not be transferred to the food or feed portions of the crop by plant uptake or direct contact, and will not otherwise be ingested by food-chain animals (*e.g.*, by grazing); or

(ii) Will not occur in greater concentrations in or on the food or feed portions of crops grown on the treatment zone than in or on identical portions of the same crops grown on untreated soils under similar conditions in the same region.

(2) The owner or operator must make the demonstration required under this paragraph prior to the planting of crops at the facility for all constituents identified in Appendix VIII of Part 261 of this chapter that are reasonably expected to be in, or derived from, waste placed in or on the treatment zone.

(3) In making a demonstration under this paragraph, the owner or operator may use field tests, greenhouse studies, available data, or, in the case of existing units, operating data, and must:

(i) Base the demonstration on conditions similar to those present in the treatment zone, including soil characteristics (*e.g.*, pH, cation exchange capacity), specific wastes, application rates, application methods, and crops to be grown; and

(ii) Describe the procedures used in conducting any tests, including the sample selection criteria, sample size, analytical methods, and statistical procedures.

(4) If the owner or operator intends to conduct field tests or greenhouse studies in order to make the demonstration required under this paragraph, he must obtain a permit for conducting such activities.

(b) The owner or operator must comply with the following conditions if cadmium is contained in wastes applied to the treatment zone:

(1)(i) The pH of the waste and soil mixture must be 6.5 or greater at the time of each waste application, except for waste containing cadmium at concentrations of 2 mg/kg (dry weight) or less;

(ii) The annual application of cadmium from waste must not exceed 0.5

kilograms per hectare (kg/ha) on land used for production of tobacco, leafy vegetables, or root crops grown for human consumption. For other food-chain crops, the annual cadmium application rate must not exceed:

Time period	Annual Cd application rate (kilograms per hectare)
Present to June 30, 1984	2.0
July 1, 1984 to Dec. 31, 1986	1.25
Beginning Jan. 1, 1987	0.5

(iii) The cumulative application of cadmium from waste must not exceed 5 kg/ha if the waste and soil mixture has a pH of less than 6.5; and

(iv) If the waste and soil mixture has a pH of 6.5 or greater or is maintained at a pH of 6.5 or greater during crop growth, the cumulative application of cadmium from waste must not exceed: 5 kg/ha if soil cation exchange capacity (CEC) is less than 5 meq/100g; 10 kg/ha if soil CEC is 5–15 meq/100g; and 20 kg/ha if soil CEC is greater than 15 meq/100g; or

(2)(i) Animal feed must be the only food-chain crop produced;

(ii) The pH of the waste and soil mixture must be 6.5 or greater at the time of waste application or at the time the crop is planted, whichever occurs later, and this pH level must be maintained whenever food-chain crops are grown;

(iii) There must be an operating plan which demonstrates how the animal feed will be distributed to preclude ingestion by humans. The operating plan must describe the measures to be taken to safeguard against possible health hazards from cadmium entering the food chain, which may result from alternative land uses; and

(iv) Future property owners must be notified by a stipulation in the land record or property deed which states that the property has received waste at high cadmium application rates and that food-chain crops must not be grown except in compliance with paragraph (b)(2) of this section.

§ 264.277 [Reserved]

§ 264.278 Unsaturated zone monitoring.

An owner or operator subject to this subpart must establish an unsaturated zone monitoring program to discharge the following responsibilities:

(a) The owner or operator must monitor the soil and soil-pore liquid to determine whether hazardous constituents migrate out of the treatment zone.

(1) The Regional Administrator will specify the hazardous constituents to be monitored in the facility permit. The hazardous constituents to be monitored are those specified under § 264.271(b).

(2) The Regional Administrator may require monitoring for principal hazardous constituents (PHCs) in lieu of the constituents specified under § 264.271(b). PHCs are hazardous constituents contained in the wastes to be applied at the unit that are the most difficult to treat, considering the combined effects of degradation, transformation, and immobilization. The Regional Administrator will establish PHCs if he finds, based on waste analyses, treatment demonstrations, or other data, that effective degradation, transformation, or immobilization of the PHCs will assure treatment at at least equivalent levels for the other hazardous constituents in the wastes.

(b) The owner or operator must install an unsaturated zone monitoring system that includes soil monitoring using soil cores and soil-pore liquid monitoring using devices such as lysimeters. The unsaturated zone monitoring system must consist of a sufficient number of sampling points at appropriate locations and depths to yield samples that:

(1) Represent the quality of background soil-pore liquid quality and the chemical make-up of soil that has not been affected by leakage from the treatment zone; and

(2) Indicate the quality of soil-pore liquid and the chemical make-up of the soil below the treatment zone.

(c) The owner or operator must establish a background value for each

hazardous constituent to be monitored under paragraph (a) of this section. The permit will specify the background values for each constituent or specify the procedures to be used to calculate the background values.

(1) Background soil values may be based on a one-time sampling at a background plot having characteristics similar to those of the treatment zone.

(2) Background soil-pore liquid values must be based on at least quarterly sampling for one year at a background plot having characteristics similar to those of the treatment zone.

(3) The owner or operator must express all background values in a form necessary for the determination of statistically significant increases under paragraph (f) of this section.

(4) In taking samples used in the determination of all background values, the owner or operator must use an unsaturated zone monitoring system that complies with paragraph (b)(1) of this section.

(d) The owner or operator must conduct soil monitoring and soil-pore liquid monitoring immediately below the treatment zone. The Regional Administrator will specify the frequency and timing of soil and soil-pore liquid monitoring in the facility permit after considering the frequency, timing, and rate of waste application, and the soil permeability. The owner or operator must express the results of soil and soil-pore liquid monitoring in a form necessary for the determination of statistically significant increases under paragraph (f) of this section.

(e) The owner or operator must use consistent sampling and analysis procedures that are designed to ensure sampling results that provide a reliable indication of soil-pore liquid quality and the chemical make-up of the soil below the treatment zone. At a minimum, the owner or operator must implement procedures and techniques for:

(1) Sample collection;

(2) Sample preservation and shipment;

(3) Analytical procedures; and

(4) Chain of custody control.

(f) The owner or operator must determine whether there is a statistically significant change over background values for any hazardous constituent to be monitored under paragraph (a) of this section below the treatment zone each time he conducts soil monitoring and soil-pore liquid monitoring under paragraph (d) of this section.

(1) In determining whether a statistically significant increase has occurred, the owner or operator must compare the value of each constituent, as determined under paragraph (d) of this section, to the background value for that constituent according to the statistical procedure specified in the facility permit under this paragraph.

(2) The owner or operator must determine whether there has been a statistically significant increase below the treatment zone within a reasonable time period after completion of sampling. The Regional Administrator will specify that time period in the facility permit after considering the complexity of the statistical test and the availability of laboratory facilities to perform the analysis of soil and soil-pore liquid samples.

(3) The owner or operator must determine whether there is a statistically significant increase below the treatment zone using a statistical procedure that provides reasonable confidence that migration from the treatment zone will be identified. The Regional Administrator will specify a statistical procedure in the facility permit that he finds:

(i) Is appropriate for the distribution of the data used to establish background values; and

(ii) Provides a reasonable balance between the probability of falsely identifying migration from the treatment zone and the probability of failing to identify real migration from the treatment zone.

(g) If the owner or operator determines, pursuant to paragraph (f) of this section, that there is a statistically significant increase of hazardous constituents below the treatment zone, he must:

(1) Notify the Regional Administrator of this finding in writing within seven days. The notification must indicate what constituents have shown statistically significant increases.

(2) Within 90 days, submit to the Regional Administrator an application

for a permit modification to modify the operating practices at the facility in order to maximize the success of degradation, transformation, or immobilization processes in the treatment zone.

(h) If the owner or operator determines, pursuant to paragraph (f) of this section, that there is a statistically significant increase of hazardous constituents below the treatment zone, he may demonstrate that a source other than regulated units caused the increase or that the increase resulted from an error in sampling, analysis, or evaluation. While the owner or operator may make a demonstration under this paragraph in addition to, or in lieu of, submitting a permit modification application under paragraph (g)(2) of this section, he is not relieved of the requirement to submit a permit modification application within the time specified in paragraph (g)(2) of this section unless the demonstration made under this paragraph successfully shows that a source other than regulated units caused the increase or that the increase resulted from an error in sampling, analysis, or evaluation. In making a demonstration under this paragraph, the owner or operator must:

(1) Notify the Regional Administrator in writing within seven days of determining a statistically significant increase below the treatment zone that he intends to make a determination under this paragraph;

(2) Within 90 days, submit a report to the Regional Administrator demonstrating that a source other than the regulated units caused the increase or that the increase resulted from error in sampling, analysis, or evaluation;

(3) Within 90 days, submit to the Regional Administrator an application for a permit modification to make any appropriate changes to the unsaturated zone monitoring program at the facility; and

(4) Continue to monitor in accordance with the unsaturated zone monitoring program established under this section.

§ 264.279 Recordkeeping.

The owner or operator must include hazardous waste application dates and rates in the operating record required under § 264.73.

§ 264.280 Closure and post-closure care.

(a) During the closure period the owner or operator must:

(1) Continue all operations (including pH control) necessary to maximize degradation, transformation, or immobilization of hazardous constituents within the treatment zone as required under § 264.273(a), except to the extent such measures are inconsistent with paragraph (a)(8) of this section.

(2) Continue all operations in the treatment zone to minimize run-off of hazardous constituents as required under § 264.273(b);

(3) Maintain the run-on control system required under § 264.273(c);

(4) Maintain the run-off management system required under § 264.273(d);

(5) Control wind dispersal of hazardous waste if required under § 264.273(f);

(6) Continue to comply with any prohibitions or conditions concerning growth of food-chain crops under § 264.276;

(7) Continue unsaturated zone monitoring in compliance with § 264.278, except that soil-pore liquid monitoring may be terminated 90 days after the last application of waste to the treatment zone; and

(8) Establish a vegetative cover on the portion of the facility being closed at such time that the cover will not substantially impede degradation, transformation, or immobilization of hazardous constituents in the treatment zone. The vegetative cover must be capable of maintaining growth without extensive maintenance.

(b) For the purpose of complying with § 264.115, when closure is completed the owner or operator may submit to the Regional Administrator certification by an independent qualified soil scientist, in lieu of an independent registered professional engineer, that the facility has been closed in accordance with the specifications in the approved closure plan.

(c) During the post-closure care period the owner or operator must:

(1) Continue all operations (including pH control) necessary to enhance degradation and transformation and sustain immobilization of hazardous constituents in the treatment zone to the extent that such measures are consistent with other post-closure care activities;

(2) Maintain a vegetative cover over closed portions of the facility;

(3) Maintain the run-on control system required under § 264.273(c);

(4) Maintain the run-off management system required under § 264.273(d);

(5) Control wind dispersal of hazardous waste if required under § 264.273(f);

(6) Continue to comply with any prohibitions or conditions concerning growth of food-chain crops under § 264.276; and

(7) Continue unsaturated zone monitoring in compliance with § 264.278, except that soil-pore liquid monitoring may be terminated 90 days after the last application of waste to the treatment zone.

(d) The owner or operator is not subject to regulation under paragraphs (a)(8) and (c) of this section if the Regional Administrator finds that the level of hazardous constituents in the treatment zone soil does not exceed the background value of those constituents by an amount that is statistically significant when using the test specified in paragraph (d)(3) of this section. The owner or operator may submit such a demonstration to the Regional Administrator at any time during the closure of post-closure care periods. For the purposes of this paragraph:

(1) The owner or operator must establish background soil values and determine whether there is a statistically significant increase over those values for all hazardous constituents specified in the facility permit under § 264.271 (b).

(i) Background soil values may be based on a one-time sampling of a background plot having characteristics similar to those of the treatment zone.

(ii) The owner or operator must express background values and values for hazardous constituents in the treatment zone in a form necessary for the determination of statistically significant increases under paragraph (d)(3) of this section.

(2) In taking samples used in the determination of background and treatment zone values, the owner or operator must take samples at a sufficient number of sampling points and at appropriate locations and depths to yield samples that represent the chemical make-up of soil that has not been affected by leakage from the treatment zone and the soil within the treatment zone, respectively.

(3) In determining whether a statistically significant increase has occurred, the owner or operator must compare the value of each constituent in the treatment zone to the background value for that constituent using a statistical procedure that provides reasonable confidence that constituent presence in the treatment zone will be identified. The owner or operator must use a statistical procedure that:

(i) Is appropriate for the distribution of the data used to establish background values; and

(ii) Provides a reasonable balance between the probability of falsely identifying hazardous constituent presence in the treatment zone and the probability of failing to identify real presence in the treatment zone.

(e) The owner or operator is not subject to regulation under Subpart F of this chapter if the Regional Administrator finds that the owner or operator satisfies paragraph (d) of this section and if unsaturated zone monitoring under § 264.278 indicates that hazardous constituents have not migrated beyond the treatment zone during the active life of the land treatment unit.

§ 264.281 Special requirements for ignitable or reactive waste.

The owner or operator must not apply ignitable or reactive waste to the treatment zone unless:

(a) The waste is immediately incorporated into the soil so that:

(1) The resulting waste, mixture, or dissolution of material no longer meets the definition of ignitable or reactive waste under § 261.21 or § 261.23 of this chapter; and

(2) Section 264.17(b) is complied with; or

(b) The waste is managed in such a way that it is protected from any material or conditions which may cause it to ignite or react.

§ 264.282 Special requirements for incompatible wastes.

The owner or operator must not place incompatible wastes, or incompatible wastes and materials (see Appendix V of this part for examples), in or on the same treatment zone, unless § 264.17(b) is complied with.

§§ 264.283—264.299 [Reserved]

Subpart N—Landfills

SOURCE: 47 FR 32365, July 26, 1982, unless otherwise noted.

§ 264.300 Applicability.

The regulations in this subpart apply to owners and operators of facilities that dispose of hazardous waste in landfills, except as § 264.1 provides otherwise.

§ 264.301 Design and operating requirements.

(a) A landfill (except for an existing portion of a landfill) must have:

(1) A liner that is designed, constructed, and installed to prevent any migration of wastes out of the landfill to the adjacent subsurface soil or ground water or surface water at any time during the active life (including the closure period) of the landfill. The liner must be constructed of materials that prevent wastes from passing into the liner during the active life of the facility. The liner must be:

(i) Constructed of materials that have appropriate chemical properties and sufficient strength and thickness to prevent failure due to pressure gradients (including static head and external hydrogeologic forces), physical contact with the waste or leachate to which they are exposed, climatic conditions, the stress of installation, and the stress of daily operation;

(ii) Placed upon a foundation or base capable of providing support to the liner and resistance to pressure gradients above and below the liner to prevent failure of the liner due to settlement, compression, or uplift; and

(iii) Installed to cover all surrounding earth likely to be in contact with the waste or leachate; and

(2) A leachate collection and removal system immediately above the liner that is designed, constructed, maintained, and operated to collect and remove leachate from the landfill. The Regional Administrator will specify design and operating conditions in the permit to ensure that the leachate depth over the liner does not exceed 30 cm (one foot). The leachate collection and removal system must be:

(i) Constructed of materials that are:

(A) Chemically resistant to the waste managed in the landfill and the leachate expected to be generated; and

(B) Of sufficient strength and thickness to prevent collapse under the pressures exerted by overlying wastes, waste cover materials, and by any equipment used at the landfill; and

(ii) Designed and operated to function without clogging through the scheduled closure of the landfill.

(b) The owner or operator will be exempted from the requirements of paragraph (a) of this section if the Regional Administrator finds, based on a demonstration by the owner or operator, that alternative design and operating practices, together with location characteristics, will prevent the migration of any hazardous constituents (see § 264.93) into the ground water or surface water at any future time. In deciding whether to grant an exemption, the Regional Administrator will consider:

(1) The nature and quantity of the wastes;

(2) The proposed alternate design and operation;

(3) The hydrogeologic setting of the facility, including the attenuative capacity and thickness of the liners and soils present between the landfill and ground water or surface water; and

(4) All other factors which would influence the quality and mobility of the leachate produced and the potential for it to migrate to ground water or surface water.

(c) The owner or operator must design, construct, operate, and maintain a run-on control system capable

of preventing flow onto the active portion of the landfill during peak discharge from at least a 25-year storm.

(d) The owner or operator must design, construct, operate, and maintain a run-off management system to collect and control at least the water volume resulting from a 24-hour, 25-year storm.

(e) Collection and holding facilities (e.g., tanks or basins) associated with run-on and run-off control systems must be emptied or otherwise managed expeditiously after storms to maintain design capacity of the system.

(f) If the landfill contains any particulate matter which may be subject to wind dispersal, the owner or operator must cover or otherwise manage the landfill to control wind dispersal.

(g) The Regional Administrator will specify in the permit all design and operating practices that are necessary to ensure that the requirements of this section are satisfied.

§ 264.302 Double-lined landfills: Exemption from Subpart F ground-water protection requirements.

(a) The owner or operator of a double-lined landfill is not subject to regulation under Subpart F of this part if the following conditions are met:

(1) The landfill (including its underlying liners) must be located entirely above the seasonal high water table.

(2) The landfill must be underlain by two liners which are designed and constructed in a manner to prevent the migration of liquids into or out of the space between the liners. Both liners must meet all the specifications of § 264.301(a)(1).

(3) A leak detection system must be designed, constructed, maintained, and operated between the liners to detect any migration of liquid into the space between the liners.

(4) The landfill must have a leachate collection and removal system above the top liner that is designed, constructed, maintained, and operated in accordance with § 264.301(a)(2).

(b) If liquid leaks into the leak detection system, the owner or operator must:

(1) Notify the Regional Administrator of the leak in writing within seven days after detecting the leak; and

(2)(i) Within a period of time specified in the permit, remove accumulated liquid, repair or replace the liner which is leaking to prevent the migration of liquids through the liner, and obtain a certification from a qualified engineer that, to the best of his knowledge and opinion, the leak has been stopped; or

(ii) If a detection monitoring program pursuant to § 264.98 has already been established in the permit (to be complied with only if a leak occurs), begin to comply with that program and any other applicable requirements of Subpart F of this part within a period of time specified in the permit.

(c) The Regional Administrator will specify in the permit all design and operating practices that are necessary to ensure that the requirements of this section are satisfied.

§ 264.303 Monitoring and inspection.

(a) During construction or installation, liners (except in the case of existing portions of landfills exempt from § 264.301(a)) and cover systems (e.g., membranes, sheets, or coatings) must be inspected for uniformity, damage, and imperfections (*e.g.*, holes, cracks, thin spots, or foreign materials). Immediately after construction or installation:

(1) Synthetic liners and covers must be inspected to ensure tight seams and joints and the absence of tears, punctures, or blisters; and

(2) Soil-based and admixed liners and covers must be inspected for imperfections including lenses, cracks, channels, root holes, or other structural non-uniformities that may cause an increase in the permeability of the liner or cover.

(b) While a landfill is in operation, it must be inspected weekly and after storms to detect evidence of any of the following:

(1) Deterioration, malfunctions, or improper operation of run-on and run-off control systems;

(2) The presence of liquids in leak detection systems, where installed to comply with § 264.302;

(3) Proper functioning of wind dispersal control systems, where present; and

(4) The presence of leachate in and proper functioning of leachate collection and removal systems, where present.

§§ 264.304—264.308 [Reserved]

§ 264.309 Surveying and recordkeeping.

The owner or operator of a landfill must maintain the following items in the operating record required under § 264.73:

(a) On a map, the exact location and dimensions, including depth, of each cell with respect to permanently surveyed benchmarks; and

(b) The contents of each cell and the approximate location of each hazardous waste type within each cell.

§ 264.310 Closure and post-closure care.

(a) At final closure of the landfill or upon closure of any cell, the owner or operator must cover the landfill or cell with a final cover designed and constructed to:

(1) Provide long-term minimization of migration of liquids through the closed landfill;

(2) Function with minimum maintenance;

(3) Promote drainage and minimize erosion or abrasion of the cover;

(4) Accommodate settling and subsidence so that the cover's integrity is maintained; and

(5) Have a permeability less than or equal to the permeability of any bottom liner system or natural subsoils present.

(b) After final closure, the owner or operator must comply with all post-closure requirements contained in §§ 264.117 through 264.120, including maintenance and monitoring throughout the post-closure care period (specified in the permit under § 264.117). The owner or operator must:

(1) Maintain the integrity and effectiveness of the final cover, including making repairs to the cap as necessary to correct the effects of settling, subsidence, erosion, or other events;

(2) Maintain and monitor the leak detection system in accordance with § 264.302, where such a system is present between double liner systems;

(3) Continue to operate the leachate collection and removal system until leachate is no longer detected;

(4) Maintain and monitor the ground-water monitoring system and comply with all other applicable requirements of Subpart F of this part;

(5) Prevent run-on and run-off from eroding or otherwise damaging the final cover; and

(6) Protect and maintain surveyed benchmarks used in complying with § 264.309.

(c) During the post-closure care period, if liquid leaks into a leak detection system installed under § 264.302, the owner or operator must notify the Regional Administrator of the leak in writing within seven days after detecting the leak. The Regional Administrator will modify the permit to require compliance with the requirements of Subpart F of this part.

§ 264.311 [Reserved]

§ 264.312 Special requirements for ignitable or reactive waste.

(a) Except as provided in paragraph (b) of this section, and in § 264.316, ignitable or reactive waste must not be placed in a landfill, unless the waste is treated, rendered, or mixed before or immediately after placement in a landfill so that:

(1) The resulting waste, mixture, or dissolution of material no longer meets the definition of ignitable or reactive waste under § 261.21 or § 261.23 of this chapter; and

(2) Section 264.17(b) is complied with.

(b) Ignitable wastes in containers may be landfilled without meeting the requirements of paragraph (a) of this section, provided that the wastes are disposed of in such a way that they are protected from any material or conditions which may cause them to ignite. At a minimum, ignitable wastes must be disposed of in non-leaking containers which are carefully handled and placed so as to avoid heat, sparks, rupture, or any other condition that might cause ignition of the wastes; must be covered daily with soil or other non-combustible material to

minimize the potential for ignition of the wastes; and must not be disposed of in cells that contain or will contain other wastes which may generate heat sufficient to cause ignition of the waste.

§ 264.313 Special requirements for incompatible wastes.

Incompatible wastes, or incompatible wastes and materials, (see Appendix V of this part for examples) must not be placed in the same landfill cell, unless § 264.17(b) is complied with.

§ 264.314 Special requirements for liquid waste.

(a) Bulk or non-containerized liquid waste or waste containing free liquids must not be placed in a landfill unless:

(1) The landfill has a liner and leachate collection and removal system that meet the requirements of § 264.301(a); or

(2) Before disposal, the liquid waste or waste containing free liquids is treated or stabilized, chemically or physically (e.g., by mixing with an absorbent solid), so that free liquids are no longer present.

(b) Containers holding free liquids must not be placed in a landfill unless:

(1) All free-standing liquid: (i) has been removed by decanting, or other methods; (ii) has been mixed with absorbent or solidified so that free-standing liquid is no longer observed; or (iii) has been otherwise eliminated; or

(2) The container is very small, such as an ampule; or

(3) The container is designed to hold free liquids for use other than storage, such as a battery or capacitor; or

(4) The container is a lab pack as defined in § 264.316 and is disposed of in accordance with § 264.316.

§ 264.315 Special requirements for containers.

Unless they are very small, such as an ampule, containers must be either:

(a) At least 90 percent full when placed in the landfill; or

(b) Crushed, shredded, or similarly reduced in volume to the maximum practical extent before burial in the landfill.

§ 264.316 Disposal of small containers of hazardous waste in overpacked drums (lab packs).

Small containers of hazardous waste in overpacked drums (lab packs) may be placed in a landfill if the following requirements are met:

(a) Hazardous waste must be packaged in non-leaking inside containers. The inside containers must be of a design and constructed of a material that will not react dangerously with, be decomposed by, or be ignited by the contained waste. Inside containers must be tightly and securely sealed. The inside containers must be of the size and type specified in the Department of Transportation (DOT) hazardous materials regulations (49 CFR Parts 173, 178, and 179), if those regulations specify a particular inside container for the waste.

(b) The inside containers must be overpacked in an open head DOT-specification metal shipping container (49 CFR Parts 178 and 179) of no more than 416-liter (110 gallon) capacity and surrounded by, at a minimum, a sufficient quantity of absorbent material to completely absorb all of the liquid contents of the inside containers. The metal outer container must be full after packing with inside containers and absorbent material.

(c) The absorbent material used must not be capable of reacting dangerously with, being decomposed by, or being ignited by the contents of the inside containers in accordance with § 264.17(b).

(d) Incompatible wastes, as defined in § 260.10 of this chapter, must not be placed in the same outside container.

(e) Reactive wastes, other than cyanide- or sulfide-bearing waste as defined in § 261.23(a)(5) of this chapter, must be treated or rendered non-reactive prior to packaging in accordance with paragraphs (a) through (d) of this section. Cyanide- and sulfide-bearing reactive waste may be packed in accordance with paragraphs (a) through (d) of this section without first being treated or rendered non-reactive.

§§ 264.317—264.339 [Reserved]

Subpart O—Incinerators

SOURCE: 46 FR 7678, Jan. 23, 1981, unless otherwise noted.

§ 264.340 Applicability.

(a) The regulations in this Subpart apply to owners and operators of facilities that incinerate hazardous waste, except as § 264.1 provides otherwise.

(b) After consideration of the waste analysis included with Part B of the permit application, the Regional Administrator, in establishing the permit conditions, must exempt the applicant from all requirements of this Subpart except § 264.341 (Waste analysis) and § 264.351 (Closure),

(1) If the Regional Administrator finds that the waste to be burned is:

(i) Listed as a hazardous waste in Part 261, Subpart D, of this chapter solely because it is ignitable (Hazard Code I), corrosive (Hazard Code C), or both; or

(ii) Listed as a hazardous waste in Part 261, Subpart D, of this chapter solely because it is reactive (Hazard Code R) for characteristics other than those listed in § 261.23(a) (4) and (5), and will not be burned when other hazardous wastes are present in the combustion zone; or

(iii) A hazardous waste solely because it possesses the characteristic of ignitability, corrosivity, or both, as determined by the test for characteristics of hazardous wastes under Part 261, Subpart C, of this chapter; or

(iv) A hazardous waste solely because it possesses any of the reactivity characteristics described by § 261.23(a) (1), (2), (3), (6), (7), and (8) of this chapter, and will not be burned when other hazardous wastes are present in the combustion zone; and

(2) If the waste analysis shows that the waste contains none of the hazardous constituents listed in Part 261, Appendix VIII, of this chapter, which would reasonably be expected to be in the waste.

(c) If the waste to be burned is one which is described by paragraphs (b)(1)(i), (b)(1)(ii), (b)(1)(iii), or (b)(1)(iv) of this section and contains insignificant concentrations of the hazardous constituents listed in Part 261, Appendix VIII, of this chapter, then the Regional Administrator may, in establishing permit conditions, exempt the applicant from all requirements of this Subpart, except § 264.341 (Waste analysis) and § 264.351 (Closure), after consideration of the waste analysis included with Part B of the permit application, unless the Regional Administrator finds that the waste will pose a threat to human health and the environment when burned in an incinerator.

(d) The owner or operator of an incinerator may conduct trial burns subject only to the requirements of § 270.62 of this chapter (Short term and incinerator permits).

[46 FR 7678, Jan. 23, 1981, as amended at 47 FR 27532, June 24, 1982; 48 FR 14295, Apr. 1, 1983]

§ 264.341 Waste analysis.

(a) As a portion of the trial burn plan required by § 270.62 of this chapter, or with Part B of the permit application, the owner or operator must have included an analysis of the waste feed sufficient to provide all information required by § 270.62(b) or § 270.19 of this chapter. Owners or operators of new hazardous waste incinerators must provide the information required by § 270.62(c) or § 270.19 of this chapter to the greatest extent possible.

(b) Throughout normal operation the owner or operator must conduct sufficient waste analysis to verify that waste feed to the incinerator is within the physical and chemical composition limits specified in his permit (under § 264.345(b)).

[46 FR 7678, Jan. 23, 1981, as amended at 47 FR 27532, June 24, 1982; 48 FR 14295, Apr. 1, 1983; 48 FR 30115, June 30, 1983]

§ 264.342 Principal organic hazardous constituents (POHCs).

(a) Principal Organic Hazardous Constituents (POHCs) in the waste feed must be treated to the extent required by the performance standard of § 264.343.

(b)(1) One or more POHCs will be specified in the facility's permit, from among those constituents listed in

Part 261, Appendix VIII of this chapter, for each waste feed to be burned. This specification will be based on the degree of difficulty of incineration of the organic constituents in the waste and on their concentration or mass in the waste feed, considering the results of waste analyses and trial burns or alternative data submitted with Part B of the facility's permit application. Organic constituents which represent the greatest degree of difficulty of incineration will be those most likely to be designated as POHCs. Constituents are more likely to be designated as POHCs if they are present in large quantities or concentrations in the waste.

(2) Trial POHCs will be designated for performance of trial burns in accordance with the procedure specified in § 270.62 of this chapter for obtaining trial burn permits.

[46 FR 7678, Jan. 23, 1981, as amended at 48 FR 14295, Apr. 1, 1983]

§ 264.343 Performance standards.

An incinerator burning hazardous waste must be designed, constructed, and maintained so that, when operated in accordance with operating requirements specified under § 264.345, it will meet the following performance standards:

(a) An incinerator burning hazardous waste must achieve a destruction and removal efficiency (DRE) of 99.99% for each principal organic hazardous constituent (POHC) designated (under § 264.342) in its permit for each waste feed. DRE is determined for each POHC from the following equation:

$$DRE = \frac{(W_{in} - W_{out})}{W_{in}} \times 100\%$$

Where:

W_{in} = Mass feed rate of one principal organic hazardous constituent (POHC) in the waste stream feeding the incinerator, and

W_{out} = Mass emission rate of the same POHC present in exhaust emissions prior to release to the atmosphere.

(b) An incinerator burning hazardous waste and producing stack emissions of more than 1.8 kilograms per hour (4 pounds per hour) of hydrogen chloride (HCl) must control HCl emissions such that the rate of emission is no greater than the larger of either 1.8 kilograms per hour or 1% of the HCl in the stack gas prior to entering any pollution control equipment.

(c) An incinerator burning hazardous waste must not emit particulate matter in excess of 180 milligrams per dry standard cubic meter (0.08 grains per dry standard cubic foot) when corrected for the amount of oxygen in the stack gas according to the formula:

$$P_c = P_m \times \frac{14}{21-Y}$$

Where P_c is the corrected concentration of particulate matter, P_m is the measured concentration of particulate matter, and Y is the measured concentration of oxygen in the stack gas, using the Orsat method for oxygen analysis of dry flue gas, presented in Part 60, Appendix A (Method 3), of this Chapter. This correction procedure is to be used by all hazardous waste incinerators except those operating under conditions of oxygen enrichment. For these facilities, the Regional Administrator will select an appropriate correction procedure, to be specified in the facility permit.

(d) For purposes of permit enforcement, compliance with the operating requirements specified in the permit (under § 264.345) will be regarded as compliance with this section. However, evidence that compliance with those permit conditions is insufficient to ensure compliance with the performance requirements of this section may be "information" justifying modification, revocation, or reissuance of a permit under § 270.41 of this chapter.

[46 FR 7678, Jan. 23, 1981, as amended at 47 FR 27532, June 24, 1982; 48 FR 14295, Apr. 1, 1983]

§ 264.344 Hazardous waste incinerator permits.

(a) The owner or operator of a hazardous waste incinerator may burn only wastes specified in his permit and only under operating conditions speci-

fied for those wastes under § 264.345, except:

(1) In approved trial burns under § 270.62 of this chapter; or

(2) Under exemptions created by § 264.340.

(b) Other hazardous wastes may be burned only after operating conditions have been specified in a new permit or a permit modification as applicable. Operating requirements for new wastes may be be based on either trial burn results or alternative data included with Part B of a permit application under § 270.19 of this chapter.

(c) The permit for a new hazardous waste incinerator must establish appropriate conditions for each of the applicable requirements of this Subpart, including but not limited to allowable waste feeds and operating conditions necessary to meet the requirements of § 264.345, sufficient to comply with the following standards:

(1) For the period beginning with initial introduction of hazardous waste to the incinerator and ending with initiation of the trial burn, and only for the minimum time required to establish operating conditions required in paragraph (c)(2) of this section, not to exceed a duration of 720 hours operating time for treatment of hazardous waste, the operating requirements must be those most likely to ensure compliance with the performance standards of § 264.343, based on the Regional Administrator's engineering judgment. The Regional Administrator may extend the duration of this period once for up to 720 additional hours when good cause for the extension is demonstrated by the applicant.

(2) For the duration of the trial burn, the operating requirements must be sufficient to demonstrate compliance with the performance standards of § 264.343 and must be in accordance with the approved trial burn plan;

(3) For the period immediately following completion of the trial burn, and only for the minimum period sufficient to allow sample analysis, data computation, and submission of the trial burn results by the applicant, and review of the trial burn results and modification of the facility permit by the Regional Administrator, the operating requirements must be those most likely to ensure compliance with the performance standards of § 264.343, based on the Regional Administrator's engineering judgement.

(4) For the remaining duration of the permit, the operating requirements must be those demonstrated, in a trial burn or by alternative data specified in § 270.19(c) of this chapter, as sufficient to ensure compliance with the performance standards of § 264.343.

[46 FR 7678, Jan. 23, 1981, as amended at 47 FR 27532, June 24, 1982; 48 FR 14295, Apr. 1, 1983]

§ 264.345 Operating requirements.

(a) An incinerator must be operated in accordance with operating requirements specified in the permit. These will be specified on a case-by-case basis as those demonstrated (in a trial burn or in alternative data as specified in § 264.344(b) and included with Part B of a facility's permit application) to be sufficient to comply with the performance standards of § 264.343.

(b) Each set of operating requirements will specify the composition of the waste feed (including acceptable variations in the physical or chemical properties of the waste feed which will not affect compliance with the performance requirement of § 264.343) to which the operating requirements apply. For each such waste feed, the permit will specify acceptable operating limits including the following conditions:

(1) Carbon monoxide (CO) level in the stack exhaust gas;

(2) Waste feed rate;

(3) Combustion temperature;

(4) An appropriate indicator of combustion gas velocity;

(5) Allowable variations in incinerator system design or operating procedures; and

(6) Such other operating requirements as are necessary to ensure that the performance standards of § 264.343 are met.

(c) During start-up and shut-down of an incinerator, hazardous waste (except wastes exempted in accordance with § 264.340) must not be fed into the incinerator unless the incinerator is operating within the conditions of operation (temperature, air feed rate, etc.) specified in the permit.

(d) Fugitive emissions from the combustion zone must be controlled by:

(1) Keeping the combustion zone totally sealed against fugitive emissions; or

(2) Maintaining a combustion zone pressure lower than atmospheric pressure; or

(3) An alternate means of control demonstrated (with Part B of the permit application) to provide fugitive emissions control equivalent to maintenance of combustion zone pressure lower than atmospheric pressure.

(e) An incinerator must be operated with a functioning system to automatically cut off waste feed to the incinerator when operating conditions deviate from limits established under paragraph (a) of this Section.

(f) An incinerator must cease operation when changes in waste feed, incinerator design, or operating conditions exceed limits designated in its permit.

[46 FR 7678, Jan. 23, 1981, as amended at 47 FR 27532, June 24, 1982]

§ 264.346 [Reserved]

§ 264.347 Monitoring and inspections.

(a) The owner or operator must conduct, as a minimum, the following monitoring while incinerating hazardous waste:

(1) Combustion temperature, waste feed rate, and the indicator of combustion gas velocity specified in the facility permit must be monitored on a continuous basis.

(2) CO must be monitored on a continuous basis at a point in the incinerator downstream of the combustion zone and prior to release to the atmosphere.

(3) Upon request by the Regional Administrator, sampling and analysis of the waste and exhaust emissions must be conducted to verify that the operating requirements established in the permit achieve the performance standards of § 264.343.

(b) The incinerator and associated equipment (pumps, valves, conveyors, pipes, etc.) must be subjected to thorough visual inspection, at least daily, for leaks, spills, fugitive emissions, and signs of tampering.

(c) The emergency waste feed cutoff system and associated alarms must be tested at least weekly to verify operability, unless the applicant demonstrates to the Regional Administrator that weekly inspections will unduly restrict or upset operations and that less frequent inspection will be adequate. At a minimum, operational testing must be conducted at least monthly.

(d) This monitoring and inspection data must be recorded and the records must be placed in the operating log required by § 264.73.

[46 FR 7678, Jan. 23, 1981, as amended at 47 FR 27533, June 24, 1982]

§§ 264.348—264.350 [Reserved]

§ 264.351 Closure.

At closure the owner or operator must remove all hazardous waste and hazardous waste residues (including, but not limited to, ash, scrubber waters, and scrubber sludges) from the incinerator site.

[*Comment:* At closure, as throughout the operating period, unless the owner or operator can demonstrate, in accordance with § 261.3(d) of this chapter, that the residue removed from the incinerator is not a hazardous waste, the owner or operator becomes a generator of hazardous waste and must manage it in accordance with applicable requirements of Parts 262-266 of this chapter.]

§§ 264.352—264.999 [Reserved]

Appendix I—Recordkeeping Instructions

The recordkeeping provisions of § 264.73 specify that an owner or operator must keep a written operating record at his facility. This appendix provides additional instructions for keeping *portions* of the operating record. See § 264.73(b) for additional recordkeeping requirements.

The following information must be recorded, as it becomes available, and maintained in the operating record until closure of the facility in the following manner:

Records of each hazardous waste received, treated, stored, or disposed of at the facility which include the following:

(1) A description by its common name and the EPA Hazardous Waste Number(s) from

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Part 261 of this Chapter which apply to the waste. The waste description also must include the waste's physical form, i.e., liquid, sludge, solid, or contained gas. If the waste is not listed in Part 261, Subpart D, of this Chapter, the description also must include the process that produced it (for example, solid filter cake from production of ----, EPA Hazardous Waste Number W051).

Each hazardous waste listed in Part 261, Subpart D, of this Chapter, and each hazardous waste characteristic defined in Part 261, Subpart C, of this Chapter, has a four-digit EPA Hazardous Waste Number assigned to it. This number must be used for recordkeeping and reporting purposes. Where a hazardous waste contains more than one listed hazardous waste, or where more than one hazardous waste characteristic applies to the waste, the waste description must include all applicable EPA Hazardous Waste Numbers.

(2) The estimated or manifest-reported weight, or volume and density, where applicable, in one of the units of measure specified in Table 1;

(3) The method(s) (by handling code(s) as specified in Table 2) and date(s) of treatment, storage, or disposal.

TABLE 1

Unit of measure	Symbol[1]	Density
Pounds	P	
Short tons (2000 lbs)	T	
Gallons (U.S.)	G	P/G
Cubic yards	Y	T/Y
Kilograms	K	
Tonnes (1000 kg)	M	
Liters	L	K/L
Cubic meters	C	M/C

[1] Single digit symbols are used here for data processing purposes.

TABLE 2—HANDLING CODES FOR TREATMENT, STORAGE, AND DISPOSAL METHODS

Enter the handling code(s) listed below that most closely represents the technique(s) used at the facility to treat, store, or dispose of each quantity of hazardous waste received.

1. Storage
   - S01 Container (barrel, drum, etc.)
   - S02 Tank
   - S03 Waste pile
   - S04 Surface impoundment
   - S05 Other (specify)
2. Treatment
   - (a) Thermal Treatment
     - T06 Liquid injection incinerator
     - T07 Rotary kiln incinerator
     - T08 Fluidized bed incinerator
     - T09 Multiple hearth incinerator
     - T10 Infrared furnace incinerator
     - T11 Molten salt destructor
     - T12 Pyrolysis
     - T13 Wet Air oxidation
     - T14 Calcination
     - T15 Microwave discharge
     - T16 Cement kiln
     - T17 Lime kiln
     - T18 Other (specify)
   - (b) Chemical Treatment
     - T19 Absorption mound
     - T20 Absorption field
     - T21 Chemical fixation
     - T22 Chemical oxidation
     - T23 Chemical precipitation
     - T24 Chemical reduction
     - T25 Chlorination
     - T26 Chlorinolysis
     - T27 Cyanide destruction
     - T28 Degradation
     - T29 Detoxification
     - T30 Ion exchange
     - T31 Neutralization
     - T32 Ozonation
     - T33 Photolysis
     - T34 Other (specify)
   - (c) Physical Treatment
     - (1) Separation of components
       - T35 Centrifugation
       - T36 Clarification
       - T37 Coagulation
       - T38 Decanting
       - T39 Encapsulation
       - T40 Filtration
       - T41 Flocculation
       - T42 Flotation
       - T43 Foaming
       - T44 Sedimentation
       - T45 Thickening
       - T46 Ultrafiltration
       - T47 Other (specify)
     - (2) Removal of Specific Components
       - T48 Absorption-molecular sieve
       - T49 Activated carbon
       - T50 Blending
       - T51 Catalysis
       - T52 Crystallization
       - T53 Dialysis
       - T54 Distillation
       - T55 Electrodialysis
       - T56 Electrolysis
       - T57 Evaporation
       - T58 High gradient magnetic separation
       - T59 Leaching
       - T60 Liquid ion exchange
       - T61 Liquid-liquid extraction
       - T62 Reverse osmosis
       - T63 Solvent recovery
       - T64 Stripping
       - T65 Sand filter
       - T66 Other (specify)
   - (d) Biological Treatment
     - T67 Activated sludge
     - T68 Aerobic lagoon
     - T69 Aerobic tank
     - T70 Anaerobic lagoon
     - T71 Composting
     - T72 Septic tank
     - T73 Spray irrigation
     - T74 Thickening filter
     - T75 Tricking filter
     - T76 Waste stabilization pond
     - T77 Other (specify)
     - T78-79 [Reserved]
3. Disposal
   - D80 Underground injection
   - D81 Landfill
   - D82 Land treatment
   - D83 Ocean disposal
   - D84 Surface impoundment (to be closed as a landfill)
   - D85 Other (specify)

APPENDIX II—III [RESERVED]

APPENDIX IV—COCHRAN'S APPROXIMATION TO THE BEHRENS-FISHER STUDENTS' T-TEST

Using all the available background data (n_b readings), calculate the background mean ($\overline{X}_B$) and background variance (s_B^2). For the single monitoring well under investigation (n_m reading), calculate the monitoring mean ($\overline{X}_m$) and monitoring variance (s_m^2).

For any set of data (X_1, X_2 . . . X_n) the mean is calculated by:

$$\overline{X} = \frac{X_1 + X_2 \ldots + X_n}{n}$$

and the variance is calculated by:

$$s^2 = \frac{(X_1 - \overline{X})^2 + (X_2 - \overline{X})^2 \ldots + (X_n - \overline{X})^2}{n-1}$$

where "n" denotes the number of observations in the set of data.

The t-test uses these data summary measures to calculate a t-statistic (t*) and a comparison t-statistic (t_c). The t* value is compared to the t_c value and a conclusion reached as to whether there has been a statistically significant change in any indicator parameter.

The t-statistic for all parameters except pH and similar monitoring parameters is:

$$t^* = \frac{\overline{X}_m - \overline{X}_B}{\sqrt{\frac{s_m^2}{n_m} + \frac{s_B^2}{n_B}}}$$

If the value of this t-statistic is negative then there is no significant difference between the monitoring data and background data. It should be noted that significantly small negative values may be indicative of a failure of the assumption made for test validity or errors have been made in collecting the background data.

The t-statistic (t_c), against which t* will be compared, necessitates finding t_B and t_m from standard (one-tailed) tables where,

t_B = t-tables with ($n_B - 1$) degrees of freedom, at the 0.05 level of significance.

t_m = t-tables with ($n_m - 1$) degrees of freedom, at the 0.05 level of significance.

Finally, the special weightings W_B and W_m are defined as:

$$W_B = \frac{s_B^2}{n_B} \quad \text{and} \quad W_m = \frac{s_m^2}{n_m}$$

and so the comparison t-statistic is:

$$t_c = \frac{W_B t_B + W_m t_m}{W_B + W_m}$$

The t-statistic (t*) is now compared with the comparison t-statistic (t_c) using the following decision-rule:

If *t* is equal to or larger than* t_c, then conclude that there most likely *has been a significant increase* in this specific parameter.

If *t* is less than* t_c, then conclude that most likely *there has not been a change* in this specific parameter.

The t-statistic for testing pH and similar monitoring parameters is constructed in the same manner as previously described except the negative sign (if any) is discarded and the caveat concerning the negative value is ignored. The standard (two-tailed) tables are used in the construction t_c for pH and similar monitoring parameters.

If t* is equal to or larger than t_c then conclude that there most likely *has been a significant increase* (if the initial t* had been negative, this would imply a significant decrease). If t* is less than t_c, then conclude that there most likely has been no change.

A further discussion of the test may be found in *Statistical Methods* (6th Edition, Section 4.14) by G. W. Snedecor and W. G. Cochran, or *Principles and Procedures of Statistics* (1st Edition, Section 5.8) by R. G. D. Steel and J. H. Torrie.

STANDARD T-TABLES 0.05 LEVEL OF SIGNIFICANCE

Degrees of freedom	t-values (one-tail)	t-values (two-tail)
1	6.314	12.706
2	2.920	4.303
3	2.353	3.182
4	2.132	2.776
5	2.015	2.571
6	1.943	2.447
7	1.895	2.365
8	1.860	2.306
9	1.833	2.262
10	1.812	2.228
11	1.796	2.201
12	1.782	2.179
13	1.771	2.160
14	1.761	2.145
15	1.753	2.131
16	1.746	2.120
17	1.740	2.110
18	1.734	2.101
19	1.729	2.093
20	1.725	2.086
21	1.721	2.080
22	1.717	2.074
23	1.714	2.069
24	1.711	2.064
25	1.708	2.060
30	1.697	2.042
40	1.684	2.021

Adopted from Table III of *"Statistical Tables for Biological, Agricultural, and Medical Research"* (1947, R. A. Fisher and F. Yates).

[47 FR 32367, July 26, 1982]

APPENDIX V—EXAMPLES OF POTENTIALLY INCOMPATIBLE WASTE

Many hazardous wastes, when mixed with other waste or materials at a hazardous waste facility, can produce effects which are harmful to human health and the environment, such as (1) heat or pressure, (2) fire or explosion, (3) violent reaction, (4) toxic dusts, mists, fumes, or gases, or (5) flammable fumes or gases.

Below are examples of potentially incompatible wastes, waste components, and materials, along with the harmful consequences which result from mixing materials in one group with materials in another group. The list is intended as a guide to owners or operators of treatment, storage, and disposal facilities, and to enforcement and permit granting officials, to indicate the need for special precautions when managing these potentially incompatible waste materials or components.

This list is not intended to be exhaustive. An owner or operator must, as the regulations require, adequately analyze his wastes so that he can avoid creating uncontrolled substances or reactions of the type listed below, whether they are listed below or not.

It is possible for potentially incompatible wastes to be mixed in a way that precludes a reaction (e.g., adding acid to water rather than water to acid) or that neutralizes them (e.g., a strong acid mixed with a strong base), or that controls substances produced (e.g., by generating flammable gases in a closed tank equipped so that ignition cannot occur, and burning the gases in an incinerator).

In the lists below, the mixing of a Group A material with a Group B material may have the potential consequence as noted.

GROUP 1-A

Acetylene sludge
Alkaline caustic liquids
Alkaline cleaner
Alkaline corrosive liquids
Alkaline corrosive battery fluid
Caustic wastewater
Lime sludge and other corrosive alkalies
Lime wastewater
Lime and water
Spent caustic

GROUP 1-B

Acid sludge
Acid and water
Battery acid
Chemical cleaners
Electrolyte, acid
Etching acid liquid or solvent
Pickling liquor and other corrosive acids
Spent acid
Spent mixed acid
Spent sulfuric acid

Potential consequences: Heat generation; violent reaction.

GROUP 2-A

Aluminum
Beryllium
Calcium
Lithium
Magnesium
Potassium
Sodium
Zinc powder
Other reactive metals and metal hydrides

GROUP 2-B

Any waste in Group 1-A or 1-B

Potential consequences: Fire or explosion; generation of flammable hydrogen gas.

GROUP 3-A

Alcohols
Water

GROUP 3-B

Any concentrated waste in Groups 1-A or 1-B

Calcium
Lithium
Metal hydrides
Potassium
SO_2Cl_2, $SOCl_2$, PCl_3, CH_3SiCl_3
Other water-reactive waste

Potential consequences: Fire, explosion, or heat generation; generation of flammable or toxic gases.

GROUP 4-A

Alcohols
Aldehydes
Halogenated hydrocarbons
Nitrated hydrocarbons
Unsaturated hydrocarbons
Other reactive organic compounds and solvents

GROUP 4-B

Concentrated Group 1-A or 1-B wastes
Group 2-A wastes

Potential consequences: Fire, explosion, or violent reaction.

GROUP 5-A

Spent cyanide and sulfide solutions

GROUP 5-B

Group 1-B wastes

Potential consequences: Generation of toxic hydrogen cyanide or hydrogen sulfide gas.

GROUP 6-A

Chlorates
Chlorine
Chlorites
Chromic acid
Hypochlorites
Nitrates
Nitric acid, fuming
Perchlorates
Permanganates
Peroxides
Other strong oxidizers

GROUP 6-B

Acetic acid and other organic acids
Concentrated mineral acids
Group 2-A wastes
Group 4-A wastes
Other flammable and combustible wastes

Potential consequences: Fire, explosion, or violent reaction.

Source: "Law, Regulations, and Guidelines for Handling of Hazardous Waste," California Department of Health, February 1975.

[46 FR 2872, Jan. 12, 1981]

APPENDIX VI—POLITICAL JURISDICTIONS[1] IN WHICH COMPLIANCE WITH § 264.18(a) MUST BE DEMONSTRATED

ALASKA

Aleutian Islands
Anchorage
Bethel
Bristol Bay
Cordova-Valdez
Fairbanks-Fort Yukon
Juneau
Kenai-Cook Inlet
Ketchikan-Prince of Wales
Kodiak
Lynn Canal-Icy Straits
Palmer-Wasilla-Talkeena
Seward
Sitka
Wade Hampton
Wrangell Petersburg
Yukon-Kuskokwim

ARIZONA

Cochise
Graham
Greenlee
Yuma

CALIFORNIA

All

COLORADO

Archuleta
Conejos
Hinsdale
Mineral
Rio Grande
Saguache

HAWAII

Hawaii

IDAHO

Bannock
Bear Lake
Bingham
Bonneville
Caribou
Cassia
Clark
Franklin
Fremont
Jefferson
Madison
Oneida
Power
Teton

MONTANA

Beaverhead
Broadwater
Cascade
Deer Lodge
Flathead
Gallatin
Granite
Jefferson
Lake
Lewis and Clark
Madison
Meagher
Missoula
Park
Powell
Sanders
Silver Bow
Stillwater
Sweet Grass
Teton
Wheatland

NEVADA

All

[1] These include counties, city-county consolidations, and independent cities. In the case of Alaska, the political jurisdictions are election districts, and, in the case of Hawaii, the political jurisdiction listed is the island of Hawaii.

NEW MEXICO

Bernalillo	Sante Fe
Catron	Sierra
Grant	Socorro
Hidalgo	Taos
Los Alamos	Torrance
Rio Arriba	Valencia
Sandoval	

UTAH

Beaver	Piute
Box Elder	Rich
Cache	Salt Lake
Carbon	Sanpete
Davis	Sevier
Duchesne	Summit
Emery	Tooele
Garfield	Utah
Iron	Wasatch
Juab	Washington
Millard	Wayne
Morgan	Weber

WASHINGTON

Chelan	Mason
Clallam	Okanogan
Clark	Pacific
Cowlitz	Pierce
Douglas	San Juan Islands
Ferry	Skagit
Grant	Skamania
Grays Harbor	Snohomish
Jefferson	Thurston
King	Wahkiakum
Kitsap	Whatcom
Kittitas	Yakima
Lewis	

WYOMING

Fremont	Teton
Lincoln	Uinta
Park	Yellowstone National Park
Sublette	

[46 FR 57285, Nov. 23, 1981; 47 FR 953, Jan. 8, 1982]

PART 265—INTERIM STATUS STANDARDS FOR OWNERS AND OPERATORS OF HAZARDOUS WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITIES

Subpart A—General

Subpart B—General Facility Standards

Subpart C—Preparedness and Prevention

Subpart D—Contingency Plan and Emergency Procedures

Subpart E—Manifest System, Recordkeeping, and Reporting

Subpart F—Ground-Water Monitoring

Subpart G—Closure and Post-Closure

Subpart H—Financial Requirements

Subpart I—Use and Management of Containers

Subpart J—Tanks

Subpart K—Surface Impoundments

Subpart L—Waste Piles

Subpart M—Land Treatment

Subpart N—Landfills

Subpart O—Incinerators

AUTHORITY: Secs. 1006, 2002(a), and 3004 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976 (RCRA), as amended (42 U.S.C. 6905, 6912, and 6924).

SOURCE: 45 FR 33232, May 19, 1980, unless otherwise noted.

EDITORIAL NOTE: The reporting or recordkeeping provisions included in the final rule published at 47 FR 32274, July 26, 1982, will be submitted for approval to the Office of Management and Budget (OMB). They are not effective until OMB approval has been obtained. EPA will publish a notice of the effective date of the reporting and recordkeeping provisions of this rule after it obtains OMB approval.

Subpart A—General

§ 265.1 Purpose, scope, and applicability.

(a) The purpose of this part is to establish minimum national standards which define the acceptable management of hazardous waste during the period of interim status.

(b) The standards in this part apply to owners and operators of facilities which treat, store, or dispose of hazardous waste who have fully complied with the requirements for interim status under section 3005(e) of RCRA and § 270.10 of this chapter, until final administrative disposition of their permit application is made, and to those owners and operators of facilities in existence on November 19, 1980, who have failed to provide timely notification as required by section 3010(a) of RCRA, and/or failed to file Part A of the Permit Application as required by 40 CFR 270.10 (e) and (g). These standards apply to all treatment, storage, or disposal of hazardous waste at these facilities after the effective date of these regulations, except as specifically provided otherwise in this part or Part 261 of this chapter. [*Comment:* As stated in section 3005(a) of RCRA, after the effective date of regulations under that section, *i.e.*, Parts 270 and 124 of this chapter, the treatment, storage, or disposal of hazardous waste is prohibited except in accordance with a permit. Section 3005(e) of RCRA provides for the continued operation of an existing facility which meets certain conditions until final administrative disposition of the owner's and operator's permit application is made.]

(c) The requirements of this part do not apply to:

(1) A person disposing of hazardous waste by means of ocean disposal subject to a permit issued under the Marine Protection, Research, and Sanctuaries Act;

[*Comment:* These Part 265 regulations do apply to the treatment or storage of hazardous waste before it is loaded onto an ocean vessel for incineration or disposal at sea, as provided in paragraph (b) of this section.]

(2) A person disposing of hazardous waste by means of underground injection subject to a permit issued under an Underground Injection Control (UIC) program approved or promulgated under the Safe Drinking Water Act;

[*Comment:* These Part 265 regulations do apply to the aboveground treatment or storage of hazardous waste before it is injected underground. These Part 265 regulations also apply to the disposal of hazardous waste by means of underground injection, as provided in paragraph (b) of this Section, until final administrative disposition of a person's permit application is made under RCRA or under an approved or promulgated UIC program.]

(3) The owner or operator of a POTW which treats, stores, or disposes of hazardous waste;

[*Comment:* The owner or operator of a facility under paragraphs (c)(1) through (c)(3) of this section is subject to the requirements of Part 264 of this chapter to the extent they are included in a permit by rule granted to such a person under Part 122 of this chapter, or are required by § 144.14 of this chapter.]

(4) A person who treats, stores, or disposes of hazardous waste in a State with a RCRA hazardous waste program authorized under Subparts A or B of Part 271 of this chapter, except that the requirements of this part will continue to apply as stated in paragraph (c)(2) of this section, if the authorized State RCRA program does not cover disposal of hazardous waste by means of underground injection;

(5) The owner or operator of a facility permitted, licensed, or registered by a State to manage municipal or industrial solid waste, if the only hazardous waste the facility treats, stores, or disposes of is excluded from regulation under this part by § 261.5 of this chapter;

(6) The owner or operator of a facility which treats or stores hazardous waste, which treatment or storage meets the criteria in § 261.6(a) of this chapter, except to the extent that § 261.6(b) of this chapter provides otherwise;

(7) A generator accumulating waste on-site in compliance with § 262.34 of this chapter, except to the extent the requirements are included in § 262.34 of this chapter;

(8) A farmer disposing of waste pesticides from his own use in compliance with § 262.51 of this chapter; or

(9) The owner or operator of a totally enclosed treatment facility, as defined in § 260.10.

(10) The owner or operator of an elementary neutralization unit or a wastewater treatment unit as defined in § 260.10 of this chapter.

(11)(i) Except as provided in paragraph (c)(11)(ii) of this section, a person engaged in treatment or containment activities during immediate response to any of the following situations:

(A) A discharge of a hazardous waste;

(B) An imminent and substantial threat of a discharge of a hazardous waste;

(C) A discharge of a material which, when discharged, becomes a hazardous waste.

(ii) An owner or operator of a facility otherwise regulated by this part must comply with all applicable requirements of Subparts C and D.

(iii) Any person who is covered by paragraph (c)(11)(i) of this section and who continues or initiates hazardous waste treatment or containment activities after the immediate response is over is subject to all applicable requirements of this part and Parts 122—124 of this chapter for those activities.

(12) A transporter storing manifested shipments of hazardous waste in containers meeting the requirements of 40 CFR 262.30 at a transfer facility for a period of ten days or less.

(13) The addition of absorbent material to waste in a container (as defined in § 260.10 of this chapter) or the addition of waste to the absorbent material in a container provided that these actions occur at the time waste is first placed in the containers; and §§ 265.17(b), 265.171, and 265.172 are complied with.

[45 FR 33232, May 19, 1980, as amended at 45 FR 76075, Nov. 17, 1980; 45 FR 86968, Dec. 31, 1980; 46 FR 27480, May 20, 1981; 47 FR 8306, Feb. 25, 1982; 48 FR 2511, Jan. 19, 1983; 48 FR 14295, Apr. 1, 1983; 48 FR 52720, Nov. 22, 1983]

§§ 265.2—265.3 [Reserved]

§ 265.4 Imminent hazard action.

Notwithstanding any other provisions of these regulations, enforcement actions may be brought pursuant to section 7003 of RCRA.

Subpart B—General Facility Standards

§ 265.10 Applicability

The regulations in this subpart apply to owners and operators of all hazardous waste facilities, except as § 265.1 provides otherwise.

§ 265.11 Identification number.

Every facility owner or operator must apply to EPA for an EPA identification number in accordance with the EPA notification procedures (45 FR 12746).

§ 265.12 Required notices.

(a) The owner or operator of a facility that has arranged to receive hazardous waste from a foreign source must notify the Regional Administrator in writing at least four weeks in advance of the date of the waste is expected to arrive at the facility. Notice of subsequent shipments of the same waste from the same foreign source is not required.

(b) Before transferring ownership or operation of a facility during its operating life, or of a disposal facility during the post-closure care period, the owner or operator must notify the new owner or operator in writing of the requirements of this part and Part 270 of this chapter. (Also see § 270.72 of this chapter.)

[*Comment:* An owner's or operator's failure to notify the new owner or operator of the requirements of this part in no way relieves the new owner or operator of his obligation to comply with all applicable requirements.]

[45 FR 33232, May 19, 1980, as amended at 48 FR 14295, Apr. 1, 1983]

§ 265.13 General waste analysis.

(a)(1) Before an owner or operator treats, stores, or disposes of any hazardous waste, he must obtain a detailed chemical and physical analysis of a representative sample of the waste. At a minimum, this analysis must contain all the information which must be known to treat, store, or dispose of the waste in accordance with the requirements of this part.

(2) The analysis may include data developed under Part 261 of this chapter, and existing published or documented data on the hazardous waste or on waste generated from similar processes.

[*Comment:* For example, the facility's record of analyses performed on the waste before the effective date of these regulations, or studies conducted on hazardous waste generated from processes similar to that which generated the waste to be managed at the facility, may be included in the data base required to comply with paragraph (a)(1) of this section. The owner or operator of an off-site facility may arrange for the generator of the hazardous waste to supply part or all of the information required by paragraph (a)(1) of this section. If the generator does not supply the information, and the owner or operator chooses to accept a hazardous waste, the owner or operator is responsible for obtaining the information required to comply with this section.]

(3) The analysis must be repeated as necessary to ensure that it is accurate and up to date. At a minimum, the analysis must be repeated:

(i) When the owner or operator is notified, or has reason to believe, that the process or operation generating the hazardous waste has changed; and

(ii) For off-site facilities, when the results of the inspection required in paragraph (a)(4) of this section indicate that the hazardous waste received at the facility does not match the waste designated on the accompanying manifest or shipping paper.

(4) The owner or operator of an off-site facility must inspect and, if necessary, analyze each hazardous waste movement received at the facility to determine whether it matches the identity of the waste specified on the accompanying manifest or shipping paper.

(b) The owner or operator must develop and follow a written waste analysis plan which describes the procedures which he will carry out to comply with paragraph (a) of this section. He must keep this plan at the facility. At a minimum, the plan must specify:

(1) The parameters for which each hazardous waste will be analyzed and the rationale for the selection of these parameters (i.e., how analysis for these parameters will provide sufficient information on the waste's properties to comply with paragraph (a) of this section);

(2) The test methods which will be used to test for these parameters;

(3) The sampling method which will be used to obtain a representative sample of the waste to be analyzed. A representative sample may be obtained using either:

(i) One of the sampling methods described in Appendix I of Part 261 of this chapter; or

(ii) An equivalent sampling method.

[*Comment:* See § 260.20(c) of this chapter for related discussion.]

(4) The frequency with which the initial analysis of the waste will be reviewed or repeated to ensure that the analysis is accurate and up to date;

(5) For off-site facilities, the waste analyses that hazardous waste generators have agreed to supply; and

(6) Where applicable, the methods which will be used to meet the additional waste analysis requirements for specific waste management methods as specified in §§ 265.193, 265.225, 265.252, 265.273, 265.345, 265.375, and 265.402.

(c) For off-site facilities, the waste analysis plan required in paragraph (b) of this section must also specify the procedures which will be used to inspect and, if necessary, analyze each movement of hazardous waste received at the facility to ensure that it matches the identity of the waste designated on the accompanying manifest or shipping paper. At a minimum, the plan must describe:

(1) The procedures which will be used to determine the identity of each movement of waste managed at the facility; and

(2) The sampling method which will be used to obtain a representative sample of the waste to be identified, if the identification method includes sampling.

§ 265.14 Security.

(a) The owner or operator must prevent the unknowing entry, and minimize the possibility for the unauthorized entry, of persons or livestock onto the active portion of his facility, *unless:*

(1) Physical contact with the waste, structures, or equipment with the active portion of the facility will not injure unknowing or unauthorized persons or livestock which may enter the active portion of a facility, and

(2) Disturbance of the waste or equipment, by the unknowing or unauthorized entry of persons or livestock onto the active portion of a facility, will not cause a violation of the requirements of this part.

(b) Unless exempt under paragraphs (a)(1) and (a)(2) of this section, a facility must have:

(1) A 24-hour surveillance system (e.g., television monitoring or surveillance by guards of facility personnel) which continuously monitors and controls entry onto the active portion of the facility; or

(2)(i) An artificial or natural barrier (e.g., a fence in good repair or a fence combined with a cliff), which completely surrounds the active portion of the facility; and

(ii) A means to control entry, at all times, through the gates or other entrances to the active portion of the facility (e.g., an attendant, television monitors, locked entrance, or controlled roadway access to the facility).

[*Comment:* The requirements of paragraph (b) of this section are satisfied if the facility or plant within which the active portion is located itself has a surveillance system, or a barrier and a means to control entry, which complies with the requirements of paragraph (b)(1) or (b)(2) of this section.]

(c) Unless exempt under paragraphs (a)(1) and (a)(2) of this section, a sign with the legend, "Danger—Unauthorized Personnel Keep Out," must be posted at each entrance to the active portion of a facility, and at other locations, in sufficient numbers to be seen from any approach to this active portion. The legend must be written in English and in any other language predominant in the area surrounding the facility (e.g., facilities in counties bordering the Canadian province of Quebec must post signs in French; facilities in counties bordering Mexico must post signs in Spanish), and must be legible from a distance of at least 25 feet. Existing signs with a legend other than "Danger—Unauthorized Personnel Keep Out" may be used if the legend on the sign indicates that only authorized personnel are allowed

to enter the active portion, and that entry onto the active portion can be dangerous.

[*Comment:* See § 265.117(b) for discussion of security requirements at disposal facilities during the post-closure care period.]

§ 265.15 General inspection requirements.

(a) The owner or operator must inspect his facility for malfunctions and deterioration, operator errors, and discharges which may be causing—or may lead to: (1) Release of hazardous waste constituents to the environment or (2) a threat to human health. The owner or operator must conduct these inspections often enough to identify problems in time to correct them before they harm human health or the environment.

(b)(1) The owner or operator must develop and follow a written schedule for inspecting all monitoring equipment, safety and emergency equipment, security devices, and operating and structural equipment (such as dikes and sump pumps) that are important to preventing, detecting, or responding to environmental or human health hazards.

(2) He must keep this schedule at the facility.

(3) The schedule must identify the types of problems (e.g., malfunctions or deterioration) which are to be looked for during the inspection (e.g., inoperative sump pump, leaking fitting, eroding dike, etc.).

(4) The frequency of inspection may vary for the items on the schedule. However, it should be based on the rate of possible deterioration of the equipment and the probability of an environmental or human health incident if the deterioration or malfunction or any operator error goes undetected between inspections. Areas subject to spills, such as loading and unloading areas, must be inspected daily when in use. At a minimum, the inspection schedule must include the items and frequencies called for in §§ 265.174, 265.194, 265.226, 265.347, 265.377, and 265.403.

(c) The owner or operator must remedy any deterioration or malfunction of equipment or structures which the inspection reveals on a schedule which ensures that the problem does not lead to an environmental or human health hazard. Where a hazard is imminent or has already occurred, remedial action must be taken immediately.

(d) The owner or operator must record inspections in an inspection log or summary. He must keep these records for at least three years from the date of inspection. At a minimum, these records must include the date and time of the inspection, the name of the inspector, a notation of the observations made, and the date and nature of any repairs or other remedial actions.

§ 265.16 Personnel training.

(a)(1) Facility personnel must successfully complete a program of classroom instruction or on-the-job training that teaches them to perform their duties in a way that ensures the facility's compliance with the requirements of this part. The owner or operator must ensure that this program includes all the elements described in the document required under paragraph (d)(3) of this section.

(2) This program must be directed by a person trained in hazardous waste management procedures, and must include instruction which teaches facility personnel hazardous waste management procedures (including contingency plan implementation) relevant to the positions in which they are employed.

(3) At a minimum, the training program must be designed to ensure that facility personnel are able to respond effectively to emergencies by familiarizing them with emergency procedures, emergency equipment, and emergency systems, including where applicable:

(i) Procedures for using, inspecting, repairing, and replacing facility emergency and monitoring equipment;

(ii) Key parameters for automatic waste feed cut-off systems;

(iii) Communications or alarm systems;

(iv) Response to fires or explosions;

(v) Response to ground-water contamination incidents; and

(vi) Shutdown of operations.

(b) Facility personnel must successfully complete the program required in paragraph (a) of this section within six months after the effective date of these regulations or six months after the date of their employment or assignment to a facility, or to a new position at a facility, whichever is later. Employees hired after the effective date of these regulations must not work in unsupervised positions until they have completed the training requirements of paragraph (a) of this section.

(c) Facility personnel must take part in an annual review of the initial training required in paragraph (a) of this section.

(d) The owner or operator must maintain the following documents and records at the facility:

(1) The job title for each position at the facility related to hazardous waste management, and the name of the employee filling each job;

(2) A written job description for each position listed under paragraph (d)(1) of this Section. This description may be consistent in its degree of specificity with descriptions for other similar positions in the same company location or bargaining unit, but must include the requisite skill, education, or other qualifications, and duties of facility personnel assigned to each position;

(3) A written description of the type and amount of both introductory and continuing training that will be given to each person filling a position listed under paragraph (d)(1) of this section;

(4) Records that document that the training or job experience required under paragraphs (a), (b), and (c) of this section has been given to, and completed by, facility personnel.

(e) Training records on current personnel must be kept until closure of the facility. Training records on former employees must be kept for at least three years from the date the employee last worked at the facility. Personnel training records may accompany personnel transferred within the same company.

§ 265.17 General requirements for ignitable, reactive, or incompatible wastes.

(a) The owner or operator must take precautions to prevent accidental ignition or reaction of ignitable or reactive waste. This waste must be separated and protected from sources of ignition or reaction including but not limited to: open flames, smoking, cutting and welding, hot surfaces, frictional heat, sparks (static, electrical, or mechanical), spontaneous ignition (e.g., from heat-producing chemical reactions), and radiant heat. While ignitable or reactive waste is being handled, the owner or operator must confine smoking and open flame to specially designated locations. "No Smoking" signs must be conspicuously placed wherever there is a hazard from ignitable or reactive waste.

(b) Where specifically required by other sections of this part, the treatment, storage, or disposal of ignitable or reactive waste, and the mixture or commingling of incompatible wastes, or incompatible wastes and materials, must be conducted so that it does not:

(1) Generate extreme heat or pressure, fire or explosion, or violent reaction;

(2) Produce uncontrolled toxic mists, fumes, dusts, or gases in sufficient quantities to threaten human health;

(3) Produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosions;

(4) Damage the structural integrity of the device or facility containing the waste; or

(5) Through other like means threaten human health or the environment.

Subpart C—Preparedness and Prevention

§ 265.30 Applicability.

The regulations in this subpart apply to owners and operators of all hazardous waste facilities, except as § 265.1 provides otherwise.

§ 265.31 Maintenance and operation of facility.

Facilities must be maintained and operated to minimize the possibility of

a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment.

§ 265.32 Required equipment.

All facilities must be equipped with the following, *unless* none of the hazards posed by waste handled at the facility could require a particular kind of equipment specified below:

(a) An internal communications or alarm system capable of providing immediate emergency instruction (voice or signal) to facility personnel;

(b) A device, such as a telephone (immediately available at the scene of operations) or a hand-held two-way radio, capable of summoning emergency assistance from local police departments, fire departments, or State or local emergency response teams;

(c) Portable fire extinguishers, fire control equipment (including special extinguishing equipment, such as that using foam, inert gas, or dry chemicals), spill control equipment, and decontamination equipment; and

(d) Water at adequate volume and pressure to supply water hose streams, or foam producing equipment, or automatic sprinklers, or water spray systems.

§ 265.33 Testing and maintenance of equipment.

All facility communications or alarm systems, fire protection equipment, spill control equipment, and decontamination equipment, where required, must be tested and maintained as necessary to assure its proper operation in time of emergency.

§ 265.34 Access to communications or alarm system.

(a) Whenever hazardous waste is being poured, mixed, spread, or otherwise handled, all personnel involved in the operation must have immediate access to an internal alarm or emergency communication device, either directly or through visual or voice contact with another employee, *unless* such a device is not required under § 265.32.

(b) If there is ever just one employee on the premises while the facility is operating, he must have immediate access to a device, such as a telephone (immediately available at the scene of operation) or a hand-held two-way radio, capable of summoning external emergency assistance, *unless* such a device is not required under § 265.32.

§ 265.35 Required aisle space.

The owner or operator must maintain aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in an emergency, *unless* aisle space is not needed for any of these purposes.

§ 265.36 [Reserved]

§ 265.37 Arrangements with local authorities.

(a) The owner or operator must attempt to make the following arrangements, as appropriate for the type of waste handled at his facility and the potential need for the services of these organizations:

(1) Arrangements to familiarize police, fire departments, and emergency response teams with the layout of the facility, properties of hazardous waste handled at the facility and associated hazards, places where facility personnel would normally be working, entrances to roads inside the facility, and possible evacuation routes;

(2) Where more than one police and fire department might respond to an emergency, agreements designating primary emergency authority to a specific police and a specific fire department, and agreements with any others to provide support to the primary emergency authority;

(3) Agreements with State emergency response teams, emergency response contractors, and equipment suppliers; and

(4) Arrangements to familiarize local hospitals with the properties of hazardous waste handled at the facility and the types of injuries or illnesses which could result from fires, explosions, or releases at the facility.

(b) Where State or local authorities decline to enter into such arrangements, the owner or operator must document the refusal in the operating record.

Subpart D—Contingency Plan and Emergency Procedures

§ 265.50 Applicability.

The regulations in this subpart apply to owners and operators of all hazardous waste facilities, except as § 265.1 provides otherwise.

§ 265.51 Purpose and implementation of contingency plan.

(a) Each owner or operator must have a contingency plan for his facility. The contingency plan must be designed to minimize hazards to human health or the environment from fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water.

(b) The provisions of the plan must be carried out immediately whenever there is a fire, explosion, or release of hazardous waste or hazardous waste constituents which could threaten human health or the environment.

§ 265.52 Content of contingency plan.

(a) The contingency plan must describe the actions facility personnel must take to comply with §§ 265.51 and 265.56 in response to fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water at the facility.

(b) If the owner or operator has already prepared a Spill Prevention, Control, and Countermeasures (SPCC) Plan in accordance with Part 112 of this chapter, or Part 1510 of Chapter V, or some other emergency or contingency plan, he need only amend that plan to incorporate hazardous waste management provisions that are sufficient to comply with the requirements of this part.

(c) The plan must describe arrangements agreed to by local police departments, fire departments, hospitals, contractors, and State and local emergency response teams to coordinate emergency services, pursuant to § 265.37.

(d) The plan must list names, addresses, and phone numbers (office and home) of all persons qualified to act as emergency coordinator (see § 265.55), and this list must be kept up to date. Where more than one person is listed, one must be named as primary emergency coordinator and others must be listed in the order in which they will assume responsibility as alternates.

(e) The plan must include a list of all emergency equipment at the facility (such as fire extinguishing systems, spill control equipment, communications and alarm systems (internal and external), and decontamination equipment), where this equipment is required. This list must be kept up to date. In addition, the plan must include the location and a physical description of each item on the list, and a brief outline of its capabilities.

(f) The plan must include an evacuation plan for facility personnel where there is a possibility that evacuation could be necessary. This plan must describe signal(s) to be used to begin evacuation, evacuation routes, and alternate evacuation routes (in cases where the primary routes could be blocked by releases of hazardous waste or fires).

[45 FR 33233, May 19, 1980, as amended at 46 FR 27480, May 20, 1981]

§ 265.53 Copies of contingency plan.

A copy of the contingency plan and all revisions to the plan must be:

(a) Maintained at the facility; and

(b) Submitted to all local police departments, fire departments, hospitals, and State and local emergency response teams that may be called upon to provide emergency services.

§ 265.54 Amendment of contingency plan.

The contingency plan must be reviewed, and immediately amended, if necessary, whenever:

(a) Applicable regulations are revised;

(b) The plan fails in an emergency;

(c) The facility changes—in its design, construction, operation, maintenance, or other circumstances—in a

way that materially increases the potential for fires, explosions, or releases of hazardous waste or hazardous waste constituents, or changes the response necessary in an emergency;

(d) The list of emergency coordinators changes; or

(e) The list of emergency equipment changes.

§ 265.55 Emergency coordinator.

At all times, there must be at least one employee either on the facility premises or on call (i.e., available to respond to an emergency by reaching the facility within a short period of time) with the responsibility for coordinating all emergency response measures. This emergency coordinator must be thoroughly familiar with all aspects of the facility's contingency plan, all operations and activities at the facility, the location and characteristics of waste handled, the location of all records within the facility, and the facility layout. In addition, this person must have the authority to commit the resources needed to carry out the contingency plan.

[*Comment:* The emergency coordinator's responsibilities are more fully spelled out in § 265.56. Applicable responsibilities for the emergency coordinator vary, depending on factors such as type and variety of waste(s) handled by the facility, and type and complexity of the facility.]

§ 265.56 Emergency procedures.

(a) Whenever there is an imminent or actual emergency situation, the emergency coordinator (or his designee when the emergency coordinator is on call) must immediately:

(1) Activate internal facility alarms or communication systems, where applicable, to notify all facility personnel; and

(2) Notify appropriate State or local agencies with designated response roles if their help is needed.

(b) Whenever there is a release, fire, or explosion, the emergency coordinator must immediately identify the character, exact source, amount, and a real extent of any released materials. He may do this by observation or review of facility records or manifests and, if necessary, by chemical analysis.

(c) Concurrently, the emergency coordinator must assess possible hazards to human health or the environment that may result from the release, fire, or explosion. This assessment must consider both direct and indirect effects of the release, fire, or explosion (e.g., the effects of any toxic, irritating, or asphyxiating gases that are generated, or the effects of any hazardous surface water run-offs from water or chemical agents used to control fire and heat-induced explosions).

(d) If the emergency coordinator determines that the facility has had a release, fire, or explosion which could threaten human health, or the environment, outside the facility, he must report his findings as follows:

(1) If his assessment indicates that evacuation of local areas may be advisable, he must immediately notify appropriate local authorities. He must be available to help appropriate officials decide whether local areas should be evacuated; and

(2) He must immediately notify either the government official designated as the on-scene coordinator for that geographical area (in the applicable regional contingency plan under Part 1510 of this Title), or the National Response Center (using their 24-hour toll free number 800/424-8802). The report must include:

(i) Name and telephone number of reporter;

(ii) Name and address of facility;

(iii) Time and type of incident (e.g., release, fire);

(iv) Name and quantity of material(s) involved, to the extent known;

(v) The extent of injuries, if any; and

(vi) The possible hazards to human health, or the environment, outside the facility.

(e) During an emergency, the emergency coordinator must take all reasonable measures necessary to ensure that fires, explosions, and releases do not occur, recur, or spread to other hazardous waste at the facility. These measures must include, where applicable, stopping processes and operations, collecting and containing released waste, and removing or isolating containers.

(f) If the facility stops operations in response to a fire, explosion or release, the emergency coordinator must monitor for leaks, pressure buildup, gas generation, or ruptures in valves, pipes, or other equipment, wherever this is appropriate.

(g) Immediately after an emergency, the emergency coordinator must provide for treating, storing, or disposing of recovered waste, contaminated soil or surface water, or any other material that results from a release, fire, or explosion at the facility.

[*Comment:* Unless the owner or operator can demonstrate, in accordance with § 261.3(c) or (d) of this chapter, that the recovered material is not a hazardous waste, the owner or operator becomes a generator of hazardous waste and must manage it in accordance with all applicable requirements of Parts 262, 263, and 265 of this chapter.]

(h) The emergency coordinator must ensure that, in the affected area(s) of the facility:

(1) No waste that may be incompatible with the released material is treated, stored, or disposed of until cleanup procedures are completed; and

(2) All emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed.

(i) The owner or operator must notify the Regional Administrator, and appropriate State and local authorities, that the facility is in compliance with paragraph (h) of this section before operations are resumed in the affected area(s) of the facility.

(j) The owner or operator must note in the operating record the time, date, and details of any incident that requires implementing the contingency plan. Within 15 days after the incident, he must submit a written report on the incident to the Regional Administrator. The report must include:

(1) Name, address, and telephone number of the owner or operator;

(2) Name, address, and telephone number of the facility;

(3) Date, time, and type of incident (e.g., fire, explosion);

(4) Name and quantity of material(s) involved;

(5) The extent of injuries, if any;

(6) An assessment of actual or potential hazards to human health or the environment, where this is applicable; and

(7) Estimated quantity and disposition of recovered material that resulted from the incident.

Subpart E—Manifest System, Recordkeeping, and Reporting

§ 265.70 Applicability.

The regulations in this subpart apply to owners and operators of both on-site and off-site facilities, except as § 265.1 provides otherwise. Sections 265.71, 265.72, and 265.76 do not apply to owners and operators of on-site facilities that do not receive any hazardous waste from off-site sources.

§ 265.71 Use of manifest system.

(a) If a facility receives hazardous waste accompanied by a manifest, the owner or operator, or his agent, must:

(1) Sign and date each copy of the manifest to certify that the hazardous waste covered by the manifest was received;

(2) Note any significant discrepancies in the manifest (as defined in § 265.72(a)) on each copy of the manifest;

[*Comment:* The Agency does not intend that the owner or operator of a facility whose procedures under § 265.13(c) include waste analysis must perform that analysis before signing the manifest and giving it to the transporter. Section 265.72(b), however, requires reporting an unreconciled discrepancy discovered during later analysis.]

(3) Immediately give the transporter at least one copy of the signed manifest;

(4) Within 30 days after the delivery, send a copy of the manifest to the generator; and

(5) Retain at the facility a copy of each manifest for at least three years from the date of delivery.

(b) If a facility receives, from a rail or water (bulk shipment) transporter, hazardous waste which is accompanied by a shipping paper containing all the information required on the manifest (excluding the EPA identification numbers, generator's certification, and signatures), the owner or operator, or his agent, must:

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(1) Sign and date each copy of the manifest or shipping paper (if the manifest has not been received) to certify that the hazardous waste covered by the manifest or shipping paper was received;

(2) Note any significant discrepancies (as defined in § 265.72(a)) in the manifest or shipping paper (if the manifest has not been received) on each copy of the manifest or shipping paper;

[*Comment:* The Agency does not intend that the owner or operator of a facility whose procedures under § 265.13(c) include waste analysis must perform that analysis before signing the shipping paper and giving it to the transporter. Section 265.72(b), however, requires reporting an unreconciled discrepancy discovered during later analysis.]

(3) Immediately give the rail or water (bulk shipment) transporter at least one copy of the manifest or shipping paper (if the manifest has not been received);

(4) Within 30 days after the delivery, send a copy of the signed and dated manifest to the generator; however, if the manifest has not been received within 30 days after delivery, the owner or operator, or his agent, must send a copy of the shipping paper signed and dated to the generator; and

[*Comment:* Section 262.23(c) of this Chapter requires the generator to send three copies of the manifest to the facility when hazardous waste is sent by rail or water (bulk shipment).]

(5) Retain at the facility a copy of the manifest and shipping paper (if signed in lieu of the manifest at the time of delivery) for at least three years from the date of delivery.

(c) Whenever a shipment of hazardous waste is initiated from a facility, the owner or operator of that facility must comply with the requirements of Part 262 of this chapter.

[*Comment:* The provisions of § 262.34 are applicable to the on-site accumulation of hazardous wastes by generators. Therefore, the provisions of § 262.34 only apply to owners or operators who are shipping hazardous waste which they generated at that facility.]

[45 FR 33232, May 19, 1980, as amended at 45 FR 86970, 86974, Dec. 31, 1980]

§ 265.72 Manifest discrepancies.

(a) Manifest discrepancies are differences between the quantity or type of hazardous waste designated on the manifest or shipping paper, and the quantity or type of hazardous waste a facility actually receives. Significant discrepancies in quantity are: (1) for bulk waste, variations greater than 10 percent in weight, and (2) for batch waste, any variation in piece count, such as a discrepancy of one drum in a truckload. Significant discrepancies in type are obvious differences which can be discovered by inspection or waste analysis, such as waste solvent substituted for waste acid, or toxic constituents not reported on the manifest or shipping paper.

(b) Upon discovering a significant discrepancy, the owner or operator must attempt to reconcile the discrepancy with the waste generator or transporter (e.g., with telephone conversations). If the discrepancy is not resolved within 15 days after receiving the waste, the owner or operator must immediately submit to the Regional Administrator a letter describing the discrepancy and attempts to reconcile it, and a copy of the manifest or shipping paper at issue.

§ 265.73 Operating record.

(a) The owner or operator must keep a written operating record at his facility.

(b) The following information must be recorded, as it becomes available, and maintained in the operating record until closure of the facility:

(1) A description and the quantity of each hazardous waste received, and the method(s) and date(s) of its treatment, storage, or disposal at the facility as required by Appendix I;

(2) The location of each hazardous waste within the facility and the quantity at each location. For disposal facilities, the location and quantity of each hazardous waste must be recorded on a map or diagram of each cell or disposal area. For all facilities, this information must include cross-references to specific manifest document numbers, if the waste was accompanied by a manifest;

[*Comment:* See §§ 265.119, 265.279, and 265.309 for related requirements.]

(3) Records and results of waste analysis and trial tests performed as specified in §§ 265.13, 265.193, 265.225, 265.252, 265.273, 265.341, 265.375, and 265.402;

(4) Summary reports and details of all incidents that require implementing the contingency plan as specified in § 265.56(j);

(5) Records and results of inspections as required by § 265.15(d) (except these data need be kept only three years);

(6) Monitoring, testing, or analytical data where required by §§ 265.90, 265.94, 265.276, 265.278, 265.280(d)(1), 265.347, and 265.377; and,

[*Comment:* As required by § 265.94, monitoring data at disposal facilities must be kept throughout the post-closure period.]

(7) All closure cost estimates under § 265.142 and, for disposal facilities, all post-closure cost estimates under § 265.144.

[45 FR 33232, May 19, 1980, as amended at 46 FR 7680, Jan. 23, 1981]

§ 265.74 Availability, retention, and disposition of records.

(a) All records, including plans, required under this part must be furnished upon request, and made available at all reasonable times for inspection, by any officer, employee, or representative of EPA who is duly designated by the Administrator.

(b) The retention period for all records required under this part is extended automatically during the course of any unresolved enforcement action regarding the facility or as requested by the Administrator.

(c) A copy of records of waste disposal locations and quantities under § 265.73(b)(2) must be submitted to the Regional Administrator and local land authority upon closure of the facility (see § 265.119).

§ 265.75 Biennial report.

The owner or operator must prepare and submit a single copy of a biennial report to the Regional Administrator by March 1 of each even numbered year. The biennial report must be submitted on EPA Form 8700-13B. The report must cover facility activities during the previous calendar year and must include the following information:

(a) The EPA identification number, name, and address of the facility;

(b) The calendar year covered by the report;

(c) For off-site facilities, the EPA identification number of each hazardous waste generator from which the facility received a hazardous waste during the year; for imported shipments, the report must give the name and address of the foreign generator;

(d) A description and the quantity of each hazardous waste the facility received during the year. For off-site facilities, this information must be listed by EPA identification number of each generator;

(e) The method of treatment, storage, or disposal for each hazardous waste;

(f) Monitoring data under § 265.94(a)(2)(ii) and (iii), and (b)(2), where required;

(g) The most recent closure cost estimate under § 265.142, and, for disposal facilities, the most recent post-closure cost estimate under § 265.144; and

(h) The certification signed by the owner or operator of the facility or his authorized representative.

[45 FR 33232, May 19, 1980, as amended at 48 FR 3982, Jan. 28, 1983]

§ 265.76 Unmanifested waste report.

If a facility accepts for treatment, storage, or disposal any hazardous waste from an off-site source without an accompanying manifest, or without an accompanying shipping paper as described in § 263.20(e)(2) of this chapter, and if the waste is not excluded from the manifest requirement by § 261.5 of this chapter, then the owner or operator must prepare and submit a single copy of a report to the Regional Administrator within fifteen days after receiving the waste. The unmanifested waste report must be submitted on EPA form 8700-13B. Such report must be designated 'Unmanifested Waste Report' and include the following information:

(a) The EPA identification number, name, and address of the facility;

(b) The date the facility received the waste;

(c) The EPA identification number, name, and address of the generator and the transporter, if available;

(d) A description and the quantity of each unmanifested hazardous waste the facility received;

(e) The method of treatment, storage, or disposal for each hazardous waste;

(f) The certification signed by the owner or operator of the facility or his authorized representative; and

(g) A brief explanation of why the waste was unmanifested, if known.

[*Comment:* Small quantities of hazardous waste are excluded from regulation under this part and do not require a manifest. Where a facility receives unmanifested hazardous wastes, the Agency suggests that the owner or operator obtain from each generator a certification that the waste qualifies for exclusion. Otherwise, the Agency suggests that the owner or operator file an unmanifested waste report for the hazardous waste movement.]

[45 FR 33232, May 19, 1980, as amended at 48 FR 3982, Jan. 28, 1983]

§ 265.77 Additional reports.

In addition to submitting the biennial report and unmanifested waste reports described in §§ 265.75 and 265.76, the owner or operator must also report to the Regional Administrator:

(a) Releases, fires, and explosions as specified in § 265.56(j);

(b) Ground-water contamination and monitoring data as specified in §§ 265.93 and 265.94; and

(c) Facility closure as specified in § 265.115.

[45 FR 33232, May 19, 1980, as amended at 48 FR 3982, Jan. 28, 1983]

Subpart F—Ground-Water Monitoring

§ 265.90 Applicability.

(a) Within one year after the effective date of these regulations, the owner or operator of a surface impoundment, landfill, or land treatment facility which is used to manage hazardous waste must implement a ground-water monitoring program capable of determining the facility's impact on the quality of ground water in the uppermost aquifer underlying the facility, except as § 265.1 and paragraph (c) of this section provide otherwise.

(b) Except as paragraphs (c) and (d) of this section provide otherwise, the owner or operator must install, operate, and maintain a ground-water monitoring system which meets the requirements of § 265.91, and must comply with §§ 265.92—265.94. This ground-water monitoring program must be carried out during the active life of the facility, and for disposal facilities, during the post-closure care period as well.

(c) All or part of the ground-water monitoring requirements of this subpart may be waived if the owner or operator can demonstrate that there is a low potential for migration of hazardous waste or hazardous waste constituents from the facility via the uppermost aquifer to water supply wells (domestic, industrial, or agricultural) or to surface water. This demonstration must be in writing, and must be kept at the facility. This demonstration must be certified by a qualified geologist or geotechnical engineer and must establish the following:

(1) The potential for migration of hazardous waste or hazardous waste constituents from the facility to the uppermost aquifer, by an evaluation of:

(i) A water balance of precipitation, evapotranspiration, runoff, and infiltration; and

(ii) Unsaturated zone characteristics (i.e., geologic materials, physical properties, and depth to ground water); and

(2) The potential for hazardous waste or hazardous waste constituents which enter the uppermost aquifer to migrate to a water supply well or surface water, by an evaluation of:

(i) Saturated zone characteristics (i.e., geologic materials, physical properties, and rate of ground-water flow); and

(ii) The proximity of the facility to water supply wells or surface water.

(d) If an owner or operator assumes (or knows) that ground-water monitoring of indicator parameters in accordance with §§265.91 and 265.92 would show statistically significant increases (or decreases in the case of pH) when

evaluated under § 265.93(b), he may, install, operate, and maintain an alternate ground-water monitoring system (other than the one described in §§ 265.91 and 265.92). If the owner or operator decides to use an alternate ground-water monitoring system he must:

(1) Within one year after the effective date of these regulations, submit to the Regional Administrator a specific plan, certified by a qualified geologist or geotechnical engineer, which satisfies the requirements of § 265.93(d)(3), for an alternate ground-water monitoring system;

(2) Not later than one year after the effective date of these regulations, initiate the determinations specified in § 265.93(d)(4);

(3) Prepare and submit a written report in accordance with § 265.93(d)(5);

(4) Continue to make the determinations specified in § 265.93(d)(4) on a quarterly basis until final closure of the facility; and

(5) Comply with the recordkeeping and reporting requirements in § 265.94(b).

(e) The ground-water monitoring requirements of this Subpart may be waived with respect to any surface impoundment that (1) Is used to neutralize wastes which are hazardous solely because they exhibit the corrosivity characteristic under § 261.22 of this chapter or are listed as hazardous wastes in Subpart D of Part 261 of this chapter only for this reason, and (2) contains no other hazardous wastes, if the owner or operator can demonstrate that there is no potential for migration of hazardous wastes from the impoundment. The demonstration must establish, based upon consideration of the characteristics of the wastes and the impoundment, that the corrosive wastes will be neutralized to the extent that they no longer meet the corrosivity characteristic before they can migrate out of the impoundment. The demonstration must be in writing and must be certified by a qualified professional.

[45 FR 33232, May 19, 1980, as amended at 47 FR 1255, Jan. 11, 1982]

§ 265.91 Ground-water monitoring system.

(a) A ground-water monitoring system must be capable of yielding ground-water samples for analysis and must consist of:

(1) Monitoring wells (at least one) installed hydraulically upgradient (i.e., in the direction of increasing static head) from the limit of the waste management area. Their number, locations, and depths must be sufficient to yield ground-water samples that are:

(i) Representative of background ground-water quality in the uppermost aquifer near the facility; and

(ii) Not affected by the facility; and

(2) Monitoring wells (at least three) installed hydraulically downgradient (i.e., in the direction of decreasing static head) at the limit of the waste management area. Their number, locations, and depths must ensure that they immediately detect any statistically significant amounts of hazardous waste or hazardous waste constituents that migrate from the waste management area to the uppermost aquifer.

(b) Separate monitoring systems for each waste management component of a facility are not required provided that provisions for sampling upgradient and downgradient water quality will detect any discharge from the waste management area.

(1) In the case of a facility consisting of only one surface impoundment, landfill, or land treatment area, the waste management area is described by the waste boundary (perimeter).

(2) In the case of a facility consisting of more than one surface impoundment, landfill, or land treatment area, the waste management area is described by an imaginary boundary line which circumscribes the several waste management components.

(c) All monitoring wells must be cased in a manner that maintains the integrity of the monitoring well bore hole. This casing must be screened or perforated, and packed with gravel or sand where necessary, to enable sample collection at depths where appropriate aquifer flow zones exist. The annular space (i.e., the space between the bore hole and well casing) above the sampling depth must be sealed with a suitable material (e.g., cement

grout or bentonite slurry) to prevent contamination of samples and the ground water.

§ 265.92 Sampling and analysis.

(a) The owner or operator must obtain and analyze samples from the installed ground-water monitoring system. The owner or operator must develop and follow a ground-water sampling and analysis plan. He must keep this plan at the facility. The plan must include procedures and techniques for:

(1) Sample collection;

(2) Sample preservation and shipment;

(3) Analytical procedures; and

(4) Chain of custody control.

[*Comment:* See "Procedures Manual For Ground-water Monitoring At Solid Waste Disposal Facilities," EPA-530/SW-611, August 1977 and "Methods for Chemical Analysis of Water and Wastes," EPA-600/4-79-020, March 1979 for discussions of sampling and analysis procedures.]

(b) The owner or operator must determine the concentration or value of the following parameters in ground-water samples in accordance with paragraphs (c) and (d) of this section:

(1) Parameters characterizing the suitability of the ground water as a drinking water supply, as specified in Appendix III.

(2) Parameters establishing ground-water quality:

(i) Chloride

(ii) Iron

(iii) Manganese

(iv) Phenols

(v) Sodium

(vi) Sulfate

[*Comment:* These parameters are to be used as a basis for comparison in the event a ground-water quality assessment is required under § 265.93(d).]

(3) Parameters used as indicators of ground-water contamination:

(i) pH

(ii) Specific Conductance

(iii) Total Organic Carbon

(iv) Total Organic Halogen

(c)(1) For all monitoring wells, the owner or operator must establish initial background concentrations or values of all parameters specified in paragraph (b) of this section. He must do this quarterly for one year.

(2) For each of the indicator parameters specified in paragraph (b)(3) of this section, at least four replicate measurements must be obtained for each sample and the initial background arithmetic mean and variance must be determined by pooling the replicate measurements for the respective parameter concentrations or values in samples obtained from upgradient wells during the first year.

(d) After the first year, all monitoring wells must be sampled and the samples analyzed with the following frequencies:

(1) Samples collected to establish ground-water quality must be obtained and analyzed for the parameters specified in paragraph (b)(2) of this section at least annually.

(2) Samples collected to indicate ground-water contamination must be obtained and analyzed for the parameters specified in paragraph (b)(3) of this section at least semi-annually.

(e) Elevation of the ground-water surface at each monitoring well must be determined each time a sample is obtained.

§ 265.93 Preparation, evaluation, and response.

(a) Within one year after the effective date of these regulations, the owner or operator must prepare an *outline* of a ground-water quality assessment program. The outline must describe a more comprehensive ground-water monitoring program (than that described in §§ 265.91 and 265.92) capable of determining:

(1) Whether hazardous waste or hazardous waste constituents have entered the ground water;

(2) The rate and extent of migration of hazardous waste or hazardous waste constituents in the ground water; and

(3) The concentrations of hazardous waste or hazardous waste constituents in the ground water.

(b) For each indicator parameter specified in § 265.92(b)(3), the owner or operator must calculate the arithmetic mean and variance, based on at least four replicate measurements on each sample, for each well monitored in accordance with § 265.92(d)(2), and compare these results with its initial

background arithmetic mean. The comparison must consider individually each of the wells in the monitoring system, and must use the Student's t-test at the 0.01 level of significance (see Appendix IV) to determine statistically significant increases (and decreases, in the case of pH) over initial background.

(c)(1) If the comparisons for the *upgradient* wells made under paragraph (b) of this section show a significant increase (or pH decrease), the owner or operator must submit this information in accordance with § 265.94(a)(2)(ii).

(2) If the comparisons for *downgradient* wells made under paragraph (b) of this section show a significant increase (or pH decrease), the owner or operator must then immediately obtain additional ground-water samples from those downgradient wells where a significant difference was detected, split the samples in two, and obtain analyses of all additional samples to determine whether the significant difference was a result of laboratory error.

(d)(1) If the analyses performed under paragraph (c)(2) of this section confirm the significant increase (or pH decrease), the owner or operator must provide written notice to the Regional Administrator—within seven days of the date of such confirmation—that the facility may be affecting ground-water quality.

(2) Within 15 days after the notification under paragraph (d)(1) of this section, the owner or operator must develop and submit to the Regional Administrator a specific plan, based on the outline required under paragraph (a) of this section and certified by a qualified geologist or geotechnical engineer, for a ground-water quality assessment program at the facility.

(3) The plan to be submitted under § 265.90(d)(1) or paragraph (d)(2) of this section must specify:

(i) The number, location, and depth of wells;

(ii) Sampling and analytical methods for those hazardous wastes or hazardous waste constituents in the facility;

(iii) Evaluation procedures, including any use of previously-gathered ground-water quality information; and

(iv) A schedule of implementation.

(4) The owner or operator must implement the ground-water quality assessment plan which satisfies the requirements of paragraph (d)(3) of this section, and, at a minimum, determine:

(i) The rate and extent of migration of the hazardous waste or hazardous waste constituents in the ground water; and

(ii) The concentrations of the hazardous waste or hazardous waste constituents in the ground water.

(5) The owner or operator must make his first determination under paragraph (d)(4) of this section as soon as technically feasible, and, within 15 days after that determination, submit to the Regional Administrator a written report containing an assessment of the ground-water quality.

(6) If the owner or operator determines, based on the results of the first determination under paragraph (d)(4) of this section, that no hazardous waste or hazardous waste constituents from the facility have entered the ground water, then he may reinstate the indicator evaluation program described in § 265.92 and paragraph (b) of this section. If the owner or operator reinstates the indicator evaluation program, he must so notify the Regional Administrator in the report submitted under paragraph (d)(5) of this section.

(7) If the owner or operator determines, based on the first determination under paragraph (d)(4) of this section, that hazardous waste or hazardous waste constituents from the facility have entered the ground water, then he:

(i) Must continue to make the determinations required under paragraph (d)(4) of this section on a quarterly basis until final closure of the facility, if the ground-water quality assessment plan was implemented prior to final closure of the facility; or

(ii) May cease to make the determinations required under paragraph (d)(4) of this section, if the ground-water quality assessment plan was implemented during the post-closure care period.

(e) Notwithstanding any other provision of this subpart, any ground-water

quality assessment to satisfy the requirements of § 265.93(d)(4) which is initiated prior to final closure of the facility must be completed and reported in accordance with § 265.93(d)(5).

(f) Unless the ground water is monitored to satisfy the requirements of § 265.93(d)(4), at least annually the owner or operator must evaluate the data on ground-water surface elevations obtained under § 265.92(e) to determine whether the requirements under § 265.91(a) for locating the monitoring wells continues to be satisfied. If the evaluation shows that § 265.91(a) is no longer satisfied, the owner or operator must immediately modify the number, location, or depth of the monitoring wells to bring the ground-water monitoring system into compliance with this requirement.

§ 265.94 Recordkeeping and reporting.

(a) Unless the ground water is monitored to satisfy the requirements of § 265.93(d)(4), the owner or operator must:

(1) Keep records of the analyses required in § 265.92(c) and (d), the associated ground-water surface elevations required in § 265.92(e), and the evaluations required in § 265.93(b) throughout the active life of the facility, and, for disposal facilities, throughout the post-closure care period as well; and

(2) Report the following groundwater monitoring information to the Regional Administrator:

(i) During the first year when initial background concentrations are being established for the facility: concentrations or values of the parameters listed in § 265.92(b)(1) for each ground-water monitoring well within 15 days after completing each quarterly analysis. The owner or operator must separately identify for each monitoring well any parameters whose concentration or value has been found to exceed the maximum contaminant levels listed in Appendix III.

(ii) Annually: Concentrations or values of the parameters listed in § 265.92(b)(3) for each ground-water monitoring well, along with the required evaluations for these parameters under § 265.93(b). The owner or operator must separately identify any significant differences from initial background found in the upgradient wells, in accordance with § 265.93(c)(1). During the active life of the facility, this information must be submitted no later than March 1 following each calendar year.

(iii) No later than March 1 following each calendar year: Results of the evaluations of ground-water surface elevations under § 265.93(f), and a description of the response to that evaluation, where applicable.

(b) If the ground water is monitored to satisfy the requirements of § 265.93(d)(4), the owner or operator must:

(1) Keep records of the analyses and evaluations specified in the plan, which satisfies the requirements of § 265.93(d)(3), throughout the active life of the facility, and, for disposal facilities, throughout the post-closure care period as well; and

(2) Annually, until final closure of the facility, submit to the Regional Administrator a report containing the results of his or her ground-water quality assessment program which includes, but is not limited to, the calculated (or measured) rate of migration of hazardous waste or hazardous waste constituents in the ground water during the reporting period. This information must be submitted no later than March 1 following each calendar year.

[45 FR 33232, May 19, 1980, as amended at 48 FR 3982, Jan. 28, 1983]

Subpart G—Closure and Post-Closure

SOURCE: 46 FR 2875, Jan. 12, 1981, unless otherwise noted.

§ 265.110 Applicability.

Except as § 265.1 provides otherwise:

(a) Sections 265.111 through 265.115 (which concern closure) apply to the owners and operators of all hazardous waste management facilities; and

(b) Sections 265.117 through 265.120 (which concern post-closure care) apply to the owners and operators of all hazardous waste disposal facilities.

§ 265.111 Closure performance standard.

The owner or operator must close his facility in a manner that:

(a) Minimizes the need for further maintenance, and

(b) Controls, minimizes or eliminates, to the extent necessary to protect human health and the environment, post-closure escape of hazardous waste, hazardous waste constituents, leachate, contaminated rainfall, or waste decomposition products to the ground or surface waters or to the atmosphere.

§ 265.112 Closure plan; amendment of plan.

(a) By May 19, 1981, the owner or operator must have a written closure plan. He must keep a copy of the closure plan and all revisions to the plan at the facility until closure is completed and certified in accordance with § 265.115. This plan must identify the steps necessary to completely or partially close the facility at any point during its intended operating life and to completely close the facility at the end of its intended operating life. The closure plan must include, at least:

(1) A description of how and when the facility will be partially closed, if applicable, and finally closed. The description must identify the maximum extent of the operation which will be unclosed during the life of the facility, and how the requirements of §§ 265.111, 265.113, 265.114, and 265.115 and the applicable closure requirements of §§ 265.197, 265.228, 265.280, 265.310, 265.351, 265.381, and 265.404 will be met;

(2) An estimate of the maximum inventory of wastes in storage and in treatment at any time during the life of the facility;

(3) A description of the steps needed to decontaminate facility equipment during closure; and

(4) An estimate of the expected year of closure and a schedule for final closure. The schedule must include, at a minimum, the total time required to close the facility and the time required for intervening closure activities which will allow tracking of the progress of closure. (For example, in the case of a landfill, estimates of the time required to treat and dispose of all waste inventory and of the time required to place a final cover must be included.)

(b) The owner or operator may amend his closure plan at any time during the active life of the facility. (The active life of the facility is that period during which wastes are periodically received.) The owner or operator must amend the plan whenever changes in operating plans or facility design affect the closure plan, or whenever there is a change in the expected year of closure of the facility. The plan must be amended within 60 days of the changes.

(c) The owner or operator must submit his closure plan to the Regional Administrator at least 180 days before the date he expects to begin closure. The owner or operator must submit his closure plan to the Regional Administrator no later than 15 days after:

(1) Termination of interim status (except when a permit is issued to the facility simultaneously with termination of interim status; or

(2) Issuance of a judicial decree or compliance order under Section 3008 of RCRA to cease receiving wastes or close.

[*Comment:* The date when closure commences should be within 30 days after the date on which the owner or operator expects to receive the final volume of wastes.]

(d) The Regional Administrator will provide the owner or operator and the public, through a newspaper notice, the opportunity to submit written comments on the plan and request modifications of the plan within 30 days of the date of the notice. He will also, in response to a request or at his own discretion, hold a public hearing whenever such a hearing might clarify one or more issues concerning a closure plan. The Regional Administrator will give public notice of the hearing at least 30 days before it occurs. (Public notice of the hearing may be given at the same time as notice of the opportunity for the public to submit written comments, and the two notices may be combined.) The Regional Administrator will approve, modify, or disapprove the plan within 90 days of its receipt. If the Regional Administrator does not approve the plan, the owner or operator must modify the plan or submit a new plan for approval

within 30 days. The Regional Administrator will approve or modify this plan in writing within 60 days. If the Regional Administrator modifies the plan, this modified plan becomes the approved closure plan. The Regional Administrator's decision must assure that the approved closure plan is consistent with §§ 265.111, 265.113, 265.114, and 265.115 and the applicable requirements of §§ 265.197, 265.228, 265.280, 265.310, 265.351, 265.381 and 265.404. A copy of this modified plan must be mailed to the owner or operator. If the owner or operator plans to begin closure before November 19, 1981 he must submit the closure plan by May 19, 1981.

§ 265.113 Closure; time allowed for closure.

(a) Within 90 days after receiving the final volume of hazardous wastes, or 90 days after approval of the closure plan, if that is later, the owner or operator must treat, remove from the site, or dispose of on-site all hazardous wastes in accordance with the approved closure plan. The Regional Administrator may approve a longer period using the procedures under § 265.112(d) if the owner or operator demonstrates that:

(1)(i) The activities required to comply with this paragraph will, of necessity, take him longer than 90 days to complete; or

(ii)(A) The facility has the capacity to receive additional wastes;

(B) There is a reasonable likelihood that a person other than the owner or operator will recommence operation of the site; and

(C) Closure of the facility would be incompatible with continued operation of the site; and

(2) He has taken and will continue to take all steps to prevent threats to human health and the environment.

(b) The owner or operator must complete closure activities in accordance with the approved closure plan and within 180 days after receiving the final volume of wastes or 180 days after approval of the closure plan, if that is later. The Regional Administrator may approve a longer closure period using the procedures under § 265.112(c) if the owner or operator demonstrates that;

(1)(i) The closure activities will, of necessity, take him longer than 180 days to complete; or

(ii)(A) The facility has the capacity to receive additional waste;

(B) There is a reasonable likelihood that a person other than the owner or operator will recommence operation of the site;

(C) Closure of the facility would be incompatible with continued operation of the site; and

(2) He has taken and will continue to take all steps to prevent threats to human health and the environment from the unclosed but inactive facility.

[*Comment:* Under paragraphs (a)(1)(ii) and (b)(1)(ii), of this section, if operation of the facility is recommenced, the Regional Administrator may defer completion of closure activities until the new operation is terminated]

§ 265.114 Disposal or decontamination of equipment.

When closure is completed, all facility equipment and structures must have been properly disposed of, or decontaminated by removing all hazardous waste and residues.

§ 265.115 Certification of closure.

When closure is completed, the owner or operator must submit to the Regional Administrator certification both by the owner or operator and by an independent registered professional engineer that the facility has been closed in accordance with the specifications in the approved closure plan.

§ 265.116 [Reserved]

§ 265.117 Post-closure care and use of property.

(a) Post-closure care must continue for 30 years after the date of completing closure and must consist of at least the following:

(1) Ground-water monitoring and reporting in accordance with the requirements of Subpart F, and

(2) Maintenance of monitoring and waste containment systems as specified in §§ 265.91, 265.223, 265.228, 265.280, and 265.310, where applicable.

(b) The Regional Administrator may require continuation of any of the security requirements of § 265.14 for 30 years after the date closure has been completed when:

(1) Wastes may remain exposed after completion of closure; or

(2) Access by the public or domestic livestock may pose a hazard to human health.

In extending any of these requirements the Regional Administrator will use the procedures of § 265.118(c).

(c) Post-closure use of property on or in which hazardous wastes remain after closure must never be allowed to disturb the integrity of the final cover, liner(s), or any other components of any containment system, or the function of the facility's monitoring systems, unless the owner or operator can demonstrate to the Regional Administrator, either in the post-closure plan or by petition, through the procedures in § 265.118(c) or (f), as appropriate, that the disturbance:

(1) Is necessary to the proposed use of the property, and will not increase the potential hazard to human health or the environment; or

(2) Is necessary to reduce a threat to human health or the environment.

(d) All post-closure care activities must be performed in accordance with the provisions of the approved post-closure plan as specified in § 265.118.

§ 265.118 Post-closure plan; amendment of plan.

(a) By May 19, 1981, the owner or operator of a disposal facility must have a written post-closure plan. He must keep a copy of the post-closure plan and all revisions to the plan at the facility until the post-closure care period begins. The post-closure plan must identify the activities which will be carried on after closure and the frequency of these activities, and include at least:

(1) A description of the planned ground-water monitoring activities and frequencies at which they will be performed to comply with Subpart F during the post-closure period;

(2) A description of the planned maintenance activities and frequencies at which they will be performed, to ensure:

(i) The integrity of the cap and final cover or other containment structures as specified in §§ 265.223, 265.228, 265.280, and 265.310, where applicable; and

(ii) The function of the facility monitoring equipment as specified in § 265.91; and

(3) The name, address, and phone number of the person or office to contact about the disposal facility during the post-closure care period. This person or office must keep an updated post-closure plan during the post-closure care period.

(b) The owner or operator may amend his post-closure plan at any time during the active life of the disposal facility. The owner or operator must amend his plan any time changes in operating plans or facility design, or events which occur during the active life of the facility, affect his post-closure plan, The plan must be amended within 60 days after the changes or events occur.

(c) The owner or operator of a disposal facility must submit his post-closure plan to the Regional Administrator at least 180 days before the date he expects to begin closure. The date when he "expects to begin closure" should be immediately after the date on which he expects to receive the final volume of wastes. The owner or operator must submit his closure plan to the Regional Administrator no later than 15 days after:

(1) Termination of interim status (except when a permit is issued to the facility simultaneously with termination of interim status); or

(2) issuance of a judicial decree or compliance order under Section 3008 of RCRA to cease receiving wastes or close.

[*Comment:* The date when closure commences should be within 30 days after the date on which the owner or operator expects to receive the final volume of wastes.]

(d) The Regional Administrator will provide the owner or operator and the public through a newspaper notice the opportunity to submit written comments on the plan and request modifications of the plan including modification of the 30 year post-closure period required in § 265.117 within 30 days of

the date of the notice. He may also, in response to a request or at his own discretion, hold a public hearing whenever a hearing might clarify one or more issues concerning the post-closure plan. The Regional Administrator will give the public notice of the hearing at least 30 days before it occurs. (Public notice of the hearing may be given at the same time as notice of the opportunity for written public comments, and the two notices may be combined.) The Regional Administrator will approve, modify, or disapprove the plan within 90 days of its receipt. If the Regional Administrator does not approve the plan, the owner or operator must modify the plan or submit a new plan for approval within 30 days. The Regional Administrator will approve or modify this plan in writing within 60 days. If the Regional Administrator modifies the plan, this modified plan becomes the approved post-closure plan. The Regional Administrator must base his decision upon the criteria required of petitions under paragraph (f)(1)(i) of this section. A copy of this modified plan must be mailed to the owner or operator. If an owner or operator plans to begin closure before November 19, 1981, he must submit the post-closure plan by May 19, 1981.

(e) The owner or operator may amend his post-closure plan during the post-closure care period. The owner or operator must amend his plan any time changes in monitoring or maintenance plans or events which occur during the post-closure care period affect the post-closure plan. The owner or operator must petition the Regional Administrator within 60 days of the changes or events, under the procedures of paragraph (f) of this section, to allow the plan to be modified.

(f) The post-closure plan (or period) may be modified during the post-closure care period or at the end of the post-closure care period in either of the following two ways:

(1) The owner or operator or any member of the public may petition the Regional Administrator to extend or reduce the post-closure care period based on cause, or alter the requirements of the post-closure care period based on cause.

(i) The petition must include evidence demonstrating that:

(A) The secure nature of the facility makes the post-closure care requirement(s) unnecessary or supports reduction of the post-closure care period specified in the current post-closure plan (e.g., leachate or groundwater monitoring results, characteristics of the waste, application of advanced technology, or alternative disposal, treatment, or re-use techniques indicate that the facility is secure), or

(B) The requested extension in the post-closure care period or alteration of post-closure care requirements is necessary to prevent threats to human health and the environment.

(ii) These petitions will be considered by the Regional Administrator only when they present new and relevant information not previously considered by the Regional Administrator. Whenever the Regional Administrator is considering a petition, he will provide the owner or operator and the public, through a newspaper notice, the opportunity to submit written comments within 30 days of the date of the notice. He will also, in response to a request or at his own discretion, hold a public hearing whenever a hearing might clarify one or more issues concerning the post-closure plan. The Regional Administrator will give the public notice of the hearing at least 30 days before it occurs. (Public notice of the hearing may be given at the same time as notice of the opportunity for written public comments, and the two notices may be combined.) After considering the comments, he will issue a final determination, based upon the criteria set forth in paragraph (f)(1) of this section.

(iii) If the Regional Administrator denies the petition, he will send the petitioner a brief written response giving a reason for the denial.

(2) The Regional Administrator may tentatively decide to modify the post-closure plan if he deems it necessary to prevent threats to human health and the environment. He may propose to extend or reduce the post-closure care period based on cause or alter the requirements of the post-closure care period based on cause.

(i) The Regional Administrator will provide the owner or operator and the affected public, through a newspaper notice, the opportunity to submit written comments within 30 days of the date of the notice and the opportunity for a public hearing as in subparagraph (a)(1)(ii) of this section. After considering the comments, he will issue a final determination.

(ii) The Regional Administrator will base his final determination upon the same criteria as required for petitions under paragraph (f)(1)(i) of this section.

[*Comment:* A modification of the post-closure plan may include where appropriate the temporary suspension rather than permanent deletion of one or more post-closure care requirements. At the end of the specified period of suspension, the Regional Administrator would then determine whether the requirement(s) should be permanently discontinued or reinstated to prevent threats to human health and the environment.]

§ 265.119 Notice to local land authority.

Within 90 days after closure is completed, the owner or operator of a disposal facility must submit to the local land authority and to the Regional Administrator a survey plat indicating the location and dimensions of landfill cells or other disposal areas with respect to permanently surveyed benchmarks. This plat must be prepared and certified by a professional land surveyor. The plat filed with the local land authority must contain a note, prominently displayed, which states the owner's or operator's obligation to restrict disturbance of the site as specified in § 265.117(c). In addition, the owner or operator must submit to the Regional Administrator and to the local land authority a record of the type, location, and quantity of hazardous wastes disposed of within each cell or area of the facility. The owner or operator must identify the type, location, and quantity of hazardous wastes disposed of within each cell or area of the facility. For wastes disposed of before these regulations were promulgated, the owner or operator must identify the type, location, and quantity of the wastes to the best of his knowledge and in accordance with any records he has kept.

§ 265.120 Notice in deed to property.

The owner of the property on which a disposal facility is located must record, in accordance with State law, a notation on the deed to the facility property—or on some other instrument which is normally examined during title search—that will in perpetuity notify any potential purchaser of the property that: (a) the land has been used to manage hazardous waste, and (b) its use is restricted under § 265.117(c).

Subpart H—Financial Requirements

SOURCE: 47 FR 15064, Apr. 7, 1982, unless otherwise noted.

§ 265.140 Applicability.

(a) The requirements of §§ 265.142, 265.143, and 265.147 through 265.151 apply to owners and operators of all hazardous waste facilities, except as provided otherwise in this section or in § 265.1.

(b) The requirements of §§ 265.144, 265.145, and 265.146 apply only to owners and operators of disposal facilities.

(c) States and the Federal government are exempt from the requirements of this subpart.

§ 265.141 Definitions of terms as used in this subpart.

(a) "Closure plan" means the plan for closure prepared in accordance with the requirements of § 265.112.

(b) "Current closure cost estimate" means the most recent of the estimates prepared in accordance with § 265.142 (a), (b), and (c).

(c) "Current post-closure cost estimate" means the most recent of the estimates prepared in accordance with § 265.144 (a), (b), and (c).

(d) "Parent corporation" means a corporation which directly owns at least 50 percent of the voting stock of the corporation which is the facility owner or operator; the latter corporation is deemed a "subsidiary" of the parent corporation.

(e) "Post-closure plan" means the plan for post-closure care prepared in accordance with the requirements of §§ 265.117 through 265.120.

(f) The following terms are used in the specifications for the financial tests for closure, post-closure care, and liability coverage. The definitions are intended to assist in the understanding of these regulations and are not intended to limit the meanings of terms in a way that conflicts with generally accepted accounting practices.

"Assets" means all existing and all probable future economic benefits obtained or controlled by a particular entity.

"Current assets" means cash or other assets or resources commonly identified as those which are reasonably expected to be realized in cash or sold or consumed during the normal operating cycle of the business.

"Current liabilities" means obligations whose liquidation is reasonably expected to require the use of existing resources properly classifiable as current assets or the creation of other current liabilities.

"Independently audited' refers to an audit performed by an independent certified public accountant in accordance with generally accepted auditing standards.

"Liabilities" means probable future sacrifices of economic benefits arising from present obligations to transfer assets or provide services to other entities in the future as a result of past transactions or events.

"Net working capital" means current assets minus current liabilities.

"Net worth" means total assets minus total liabilities and is equivalent to owner's equity.

"Tangible net worth" means the tangible assets that remain after deducting liabilities; such assets would not include intangibles such as goodwill and rights to patents or royalties.

(g) In the liability insurance requirements the terms "bodily injury" and "property damage" shall have the meanings given these terms by applicable State law. However, these terms do not include those liabilities which, consistent with standard industry practice, are excluded from coverage in liability policies for bodily injury and property damage. The Agency intends the meanings of other terms used in the liability insurance requirements to be consistent with their common meanings within the insurance industry. The definitions given below of several of the terms are intended to assist in the understanding of these regulations and are not intended to limit their meanings in a way that conflicts with general insurance industry usage.

"Accidental occurrence" means an accident, including continuous or repeated exposure to conditions, which results in bodily injury or property damage neither expected nor intended from the standpoint of the insured.

"Legal defense costs" means any expenses that an insurer incurs in defending against claims of third parties brought under the terms and conditions of an insurance policy.

"Nonsudden accidental occurrence" means an occurrence which takes place over time and involves continuous or repeated exposure.

"Sudden accidental occurrence" means an occurrence which is not continuous or repeated in nature.

[47 FR 16558, Apr. 16, 1982]

§ 265.142 Cost estimate for closure.

(a) On May 19, 1981, the owner or operator must prepare a written estimate, in current dollars, of the cost of closing the facility in accordance with the closure plan as specified in § 265.112. The closure cost estimate must equal the cost of closure at the point in the facility's operating life when the extent and manner of its operation would make closure the most expensive, as indicated by its closure plan.

(b) The owner or operator must adjust the closure cost estimate for inflation within 30 days after each anniversary of the date on which the first closure cost estimate was prepared. The adjustment must be made as specified in paragraphs (b)(i) and (b)(ii) of this section, using an inflation factor derived from the annual Implicit Price Deflator for Gross National Product as published by the U.S. Department of Commerce in its *Survey of Current Business*. The inflation factor is the

result of dividing the latest published annual Deflator by the Deflator for the previous year.

(i) The first adjustment is made by multiplying the closure cost estimate by the inflation factor. The result is the adjusted closure cost estimate.

(ii) Subsequent adjustments are made by multiplying the latest adjusted closure cost estimate by the latest inflation factor.

(c) The owner or operator must revise the closure cost estimate whenever a change in the closure plan increases the cost of closure. The revised closure cost estimate must be adjusted for inflation as specified in § 265.142(b).

(d) The owner or operator must keep the following at the facility during the operating life of the facility: The latest closure cost estimate prepared in accordance with §§ 265.142 (a) and (c) and, when this estimate has been adjusted in accordance with § 265.142(b), the latest adjusted closure cost estimate.

§ 265.143 Financial assurance for closure.

By the effective date of these regulations, an owner or operator of each facility must establish financial assurance for closure of the facility. He must choose from the options as specified in paragraphs (a) through (e) of this section.

(a) *Closure trust fund.* (1) An owner or operator may satisfy the requirements of this section by establishing a closure trust fund which conforms to the requirements of this paragraph and submitting an originally signed duplicate of the trust agreement to the Regional Administrator. The trustee must be an entity which has the authority to act as a trustee and whose trust operations are regulated and examined by a Federal or State agency.

(2) The wording of the trust agreement must be identical to the wording specified in § 264.151(a)(1), and the trust agreement must be accompanied by a formal certification of acknowledgment (for example, see § 264.151(a)(2)). Schedule A of the trust agreement must be updated within 60 days after a change in the amount of the current closure cost estimate covered by the agreement.

(3) Payments into the trust fund must be made annually by the owner or operator over the 20 years beginning with the effective date of these regulations or over the remaining operating life of the facility as estimated in the closure plan, whichever period is shorter; this period is hereafter referred to as the "pay-in period." The payments into the closure trust fund must be made as follows:

(i) The first payment must be made by the effective date of these regulations, except as provided in paragraph (a)(5) of this section. The first payment must be at least equal to the current closure cost estimate, except as provided in § 265.143(f), divided by the number of years in the pay-in period.

(ii) Subsequent payments must be made no later than 30 days after each anniversary date of the first payment. The amount of each subsequent payment must be determined by this formula:

$$\text{Next payment} = \frac{CE - CV}{Y}$$

where CE is the current closure cost estimate, CV is the current value of the trust fund, and Y is the number of years remaining in the pay-in period.

(4) The owner or operator may accelerate payments into the trust fund or he may deposit the full amount of the current closure cost estimate at the time the fund is established. However, he must maintain the value of the fund at no less than the value that the fund would have if annual payments were made as specified in paragraph (a)(3) of this section.

(5) If the owner or operator establishes a closure trust fund after having used one or more alternate mechanisms specified in this section, his first payment must be in at least the amount that the fund would contain if the trust fund were established initially and annual payments made as specified in paragraph (a)(3) of this section.

(6) After the pay-in period is completed, whenever the current closure cost estimate changes, the owner or

operator must compare the new estimate with the trustee's most recent annual valuation of the trust fund. If the value of the fund is less than the amount of the new estimate, the owner or operator, within 60 days after the change in the cost estimate, must either deposit an amount into the fund so that its value after this deposit at least equals the amount of the current closure cost estimate, or obtain other financial assurance as specified in this section to cover the difference.

(7) If the value of the trust fund is greater than the total amount of the current closure cost estimate, the owner or operator may submit a written request to the Regional Administrator for release of the amount in excess of the current closure cost estimate.

(8) If an owner or operator substitutes other financial assurance as specified in this section for all or part of the trust fund, he may submit a written request to the Regional Administrator for release of the amount in excess of the current closure cost estimate covered by the trust fund.

(9) Within 60 days after receiving a request from the owner or operator for release of funds as specified in paragraph (a) (7) or (8) of this section, the Regional Administrator will instruct the trustee to release to the owner or operator such funds as the Regional Administrator specifies in writing.

(10) After beginning final closure, an owner or operator or any other person authorized to perform closure may request reimbursement for closure expenditures by submitting itemized bills to the Regional Administrator. Within 60 days after receiving bills for closure activities, the Regional Administrator will determine whether the closure expenditures are in accordance with the closure plan or otherwise justified, and if so, he will instruct the trustee to make reimbursement in such amounts as the Regional Administrator specifies in writing. If the Regional Administrator has reason to believe that the cost of closure will be significantly greater than the value of the trust fund, he may withhold reimbursement of such amounts as he deems prudent until he determines, in accordance with § 265.143(h), that the owner or operator is no longer required to maintain financial assurance for closure.

(11) The Regional Administrator will agree to termination of the trust when:

(i) An owner or operator substitutes alternate financial assurance as specified in this section; or

(ii) The Regional Administrator releases the owner or operator from the requirements of this section in accordance with § 265.143(h).

(b) *Surety bond guaranteeing payment into a closure trust fund.* (1) An owner or operator may satisfy the requirements of this section by obtaining a surety bond which conforms to the requirements of this paragraph and submitting the bond to the Regional Administrator. The surety company issuing the bond must, at a minimum, be among those listed as acceptable sureties on Federal bonds in Circular 570 of the U.S. Department of the Treasury.

(2) The wording of the surety bond must be identical to the wording specified in § 264.151(b).

(3) The owner or operator who uses a surety bond to satisfy the requirements of this section must also establish a standby trust fund. Under the terms of the bond, all payments made thereunder will be deposited by the surety directly into the standby trust fund in accordance with instructions from the Regional Administrator. This standby trust fund must meet the requirements specified in § 265.143(a), except that:

(i) An originally signed duplicate of the trust agreement must be submitted to the Regional Administrator with the surety bond; and

(ii) Until the standby trust fund is funded pursuant to the requirements of this section, the following are not required by these regulations:

(A) Payments into the trust fund as specified in § 265.143(a);

(B) Updating of Schedule A of the trust agreement (see § 264.151(a)) to show current closure cost estimates;

(C) Annual valuations as required by the trust agreement; and

(D) Notices of nonpayment as required by the trust agreement.

(4) The bond must guarantee that the owner or operator will:

(i) Fund the standby trust fund in an amount equal to the penal sum of the bond before the beginning of final closure of the facility; or

(ii) Fund the standby trust fund in an amount equal to the penal sum within 15 days after an order to begin closure is issued by the Regional Administrator or a U.S. district court or other court of competent jurisdiction; or

(iii) Provide alternate financial assurance as specified in this section, and obtain the Regional Administrator's written approval of the assurance provided, within 90 days after receipt by both the owner or operator and the Regional Administrator of a notice of cancellation of the bond from the surety.

(5) Under the terms of the bond, the surety will become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond.

(6) The penal sum of the bond must be in an amount at least equal to the current closure cost estimate, except as provided in § 265.143(f).

(7) Whenever the current closure cost estimate increases to an amount greater than the penal sum, the owner or operator, within 60 days after the increase, must either cause the penal sum to be increased to an amount at least equal to the current closure cost estimate and submit evidence of such increase to the Regional Administrator, or obtain other financial assurance as specified in this section to cover the increase. Whenever the current closure cost estimate decreases, the penal sum may be reduced to the amount of the current closure cost estimate following written approval by the Regional Administrator.

(8) Under the terms of the bond, the surety may cancel the bond by sending notice of cancellation by certified mail to the owner or operator and to the Regional Administrator. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the Regional Administrator, as evidenced by the return receipts.

(9) The owner or operator may cancel the bond if the Regional Administrator has given prior written consent based on his receipt of evidence of alternate financial assurance as specified in this section.

(c) *Closure letter of credit.* (1) An owner or operator may satisfy the requirements of this section by obtaining an irrevocable standby letter of credit which conforms to the requirements of this paragraph and submitting the letter to the Regional Administrator. The issuing institution must be an entity which has the authority to issue letters of credit and whose letter-of-credit operations are regulated and examined by a Federal or State agency.

(2) The wording of the letter of credit must be identical to the wording specified in § 264.151(d).

(3) An owner or operator who uses a letter of credit to satisfy the requirements of this section must also establish a standby trust fund. Under the terms of the letter of credit, all amounts paid pursuant to a draft by the Regional Administrator will be deposited by the issuing institution directly into the standby trust fund in accordance with instructions from the Regional Administrator. This standby trust fund must meet the requirements of the trust fund specified in § 265.143(a), except that:

(i) An originally signed duplicate of the trust agreement must be submitted to the Regional Administrator with the letter of credit; and

(ii) Unless the standby trust fund is funded pursuant to the requirements of this section, the following are not required by these regulations:

(A) Payments into the trust fund as specified in § 265.143(a);

(B) Updating of Schedule A of the trust agreement (see § 264.151(a)) to show current closure cost estimates;

(C) Annual valuations as required by the trust agreement; and

(D) Notices of nonpayment as required by the trust agreement.

(4) The letter of credit must be accompanied by a letter from the owner or operator referring to the letter of credit by number, issuing institution, and date, and providing the following information: the EPA Identification

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Number, name, and address of the facility, and the amount of funds assured for closure of the facility by the letter of credit.

(5) The letter of credit must be irrevocable and issued for a period of at least 1 year. The letter of credit must provide that the expiration date will be automatically extended for a period of at least 1 year unless, at least 120 days before the current expiration date, the issuing institution notifies both the owner or operator and the Regional Administrator by certified mail of a decision not to extend the expiration date. Under the terms of the letter of credit, the 120 days will begin on the date when both the owner or operator and the Regional Administrator have received the notice, as evidenced by the return receipts.

(6) The letter of credit must be issued in an amount at least equal to the current closure cost estimate, except as provided in § 265.143(f).

(7) Whenever the current closure cost estimate increases to an amount greater than the amount of the credit, the owner or operator, within 60 days after the increase, must either cause the amount of the credit to be increased so that it at least equals the current closure cost estimate and submit evidence of such increase to the Regional Administrator, or obtain other financial assurance as specified in this section to cover the increase. Whenever the current closure cost estimate decreases, the amount of the credit may be reduced to the amount of the current closure cost estimate following written approval by the Regional Administrator.

(8) Following a determination pursuant to Section 3008 of RCRA that the owner or operator has failed to perform final closure in accordance with the closure plan and other interim status requirements when required to do so, the Regional Administrator may draw on the letter of credit.

(9) If the owner or operator does not establish alternate financial assurance as specified in this section and obtain written approval of such alternate assurance from the Regional Administrator within 90 days after receipt by both the owner or operator and the Regional Administrator of a notice from the issuing institution that it has decided not to extend the letter of credit beyond the current expiration date, the Regional Administrator will draw on the letter of credit. The Regional Administrator may delay the drawing if the issuing institution grants an extension of the term of the credit. During the last 30 days of any such extension the Regional Administrator will draw on the letter of credit if the owner or operator has failed to provide alternate financial assurance as specified in this section and obtain written approval of such assurance from the Regional Administrator.

(10) The Regional Administrator will return the letter of credit to the issuing institution for termination when:

(i) An owner or operator substitutes alternate financial assurance as specified in this section; or

(ii) The Regional Administrator releases the owner or operator from the requirements of this section in accordance with § 265.143(h).

(d) *Closure insurance.* (1) An owner or operator may satisfy the requirements of this section by obtaining closure insurance which conforms to the requirements of this paragraph and submitting a certificate of such insurance to the Regional Administrator. By the effective date of these regulations the owner or operator must submit to the Regional Administrator a letter from an insurer stating that the insurer is considering issuance of closure insurance conforming to the requirements of this paragraph to the owner or operator. Within 90 days after the effective date of these regulations, the owner or operator must submit the certificate of insurance to the Regional Administrator or establish other financial assurance as specified in this section. At a minimum, the insurer must be licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more States.

(2) The wording of the certificate of insurance must be identical to the wording specified in § 264.151(e).

(3) The closure insurance policy must be issued for a face amount at least equal to the current closure cost

estimate, except as provided in § 265.143(f). The term "face amount" means the total amount the insurer is obligated to pay under the policy. Actual payments by the insurer will not change the face amount, although the insurer's future liability will be lowered by the amount of the payments.

(4) The closure insurance policy must guarantee that funds will be available to close the facility whenever final closure occurs. The policy must also guarantee that once final closure begins, the insurer will be responsible for paying out funds, up to an amount equal to the face amount of the policy, upon the direction of the Regional Administrator, to such party or parties as the Regional Administrator specifies.

(5) After beginning final closure, an owner or operator or any other person authorized to perform closure may request reimbursement for closure expenditures by submitting itemized bills to the Regional Administrator. Within 60 days after receiving bills for closure activities, the Regional Administrator will determine whether the closure expenditures are in accordance with the closure plan or otherwise justified, and if so, he will instruct the insurer to make reimbursement in such amounts as the Regional Administrator specifies in writing. If the Regional Administrator has reason to believe that the cost of closure will be significantly greater than the face amount of the policy, he may withhold reimbursement of such amounts as he deems prudent until he determines, in accordance with § 265.143(h), that the owner or operator is no longer required to maintain financial assurance for closure of the facility.

(6) The owner or operator must maintain the policy in full force and effect until the Regional Administrator consents to termination of the policy by the owner or operator as specified in paragraph (d)(10) of this section. Failure to pay the premium, without substitution of alternate financial assurance as specified in this section, will constitute a significant violation of these regulations, warranting such remedy as the Regional Administrator deems necessary. Such violation will be deemed to begin upon receipt by the Regional Administrator of a notice of future cancellation, termination, or failure to renew due to nonpayment of the premium, rather than upon the date of expiration.

(7) Each policy must contain a provision allowing assignment of the policy to a successor owner or operator. Such assignment may be conditional upon consent of the insurer, provided such consent is not unreasonably refused.

(8) The policy must provide that the insurer may not cancel, terminate, or fail to renew the policy except for failure to pay the premium. The automatic renewal of the policy must, at a minimum, provide the insured with the option of renewal at the face amount of the expiring policy. If there is a failure to pay the premium, the insurer may elect to cancel, terminate, or fail to renew the policy by sending notice by certified mail to the owner or operator and the Regional Administrator. Cancellation, termination, or failure to renew may not occur, however, during the 120 days beginning with the date of receipt of the notice by both the Regional Administrator and the owner or operator, as evidenced by the return receipts. Cancellation, termination, or failure to renew may not occur and the policy will remain in full force and effect in the event that on or before the date of expiration:

(i) The Regional Administrator deems the facility abandoned; or

(ii) Interim status is terminated or revoked; or

(iii) Closure is ordered by the Regional Administrator or a U.S. district court or other court of competent jurisdiction; or

(iv) The owner or operator is named as debtor in a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code; or

(v) The premium due is paid.

(9) Whenever the current closure cost estimate increases to an amount greater than the face amount of the policy, the owner or operator, within 60 days after the increase, must either cause the face amount to be increased to an amount at least equal to the current closure cost estimate and submit evidence of such increase to the Regional Administrator, or obtain other financial assurance as specified in this

section to cover the increase. Whenever the current closure cost estimate decreases, the face amount may be reduced to the amount of the current closure cost estimate following written approval by the Regional Administrator.

(10) The Regional Administrator will give written consent to the owner or operator that he may terminate the insurance policy when:

(i) An owner or operator substitutes alternate financial assurance as specified in this section; or

(ii) The Regional Administrator releases the owner or operator from the requirements of this section in accordance with § 265.143(h).

(e) *Financial test and corporate guarantee for closure.* (1) An owner or operator may satisfy the requirements of this section by demonstrating that he passes a financial test as specified in this paragraph. To pass this test the owner or operator must meet the criteria of either paragraph (e)(1)(i) or (e)(1)(ii) of this section:

(i) The owner or operator must have:

(A) Two of the following three ratios: A ratio of total liabilities to net worth less than 2.0; a ratio of the sum of net income plus depreciation, depletion, and amortization to total liabilities greater than 0.1; and a ratio of current assets to current liabilities greater than 1.5; and

(B) Net working capital and tangible net worth each at least six times the sum of the current closure and post-closure cost estimates; and

(C) Tangible net worth of at least $10 million; and

(D) Assets in the United States amounting to at least 90 percent of his total assets or at least six times the sum of the current closure and post-closure cost estimates.

(ii) The owner or operator must have:

(A) A current rating for his most recent bond issuance of AAA, AA, A, or BBB as issued by Standard and Poor's or Aaa, Aa, A, or Baa as issued by Moody's; and

(B) Tangible net worth at least six times the sum of the current closure and post-closure cost estimates; and

(C) Tangible net worth of at least $10 million; and

(D) Assets located in the United States amounting to at least 90 percent of his total assets or at least six times the sum of the current closure and post-closure cost estimates.

(2) The phrase "current closure and post-closure cost estimates" as used in paragraph (e)(1) of this section refers to the cost estimates required to be shown in paragraphs 1-4 of the letter from the owner's or operator's chief financial officer (§ 264.151(f)).

(3) To demonstrate that he meets this test, the owner or operator must submit the following items to the Regional Administrator:

(i) A letter signed by the owner's or operator's chief financial officer and worded as specified in § 264.151(f); and

(ii) A copy of the independent certified public accountant's report on examination of the owner's or operator's financial statements for the latest completed fiscal year; and

(iii) A special report from the owner's or operator's independent certified public accountant to the owner or operator stating that:

(A) He has compared the data which the letter from the chief financial officer specifies as having been derived from the independently audited, year-end financial statements for the latest fiscal year with the amounts in such financial statements; and

(B) In connection with that procedure, no matters came to his attention which caused him to believe that the specified data should be adjusted.

(4) The owner or operator may obtain an extension of the time allowed for submission of the documents specified in paragraph (e)(3) of this section if the fiscal year of the owner or operator ends during the 90 days prior to the effective date of these regulations and if the year-end financial statements for that fiscal year will be audited by an independent certified public accountant. The extension will end no later than 90 days after the end of the owner's or operator's fiscal year. To obtain the extension, the owner's or operator's chief financial officer must send, by the effective date of these regulations, a letter to the Regional Administrator of each Region in which the owner's or operator's facilities to be covered by the financial test are located. This letter from the chief financial officer must:

(i) Request the extension;

(ii) Certify that he has grounds to believe that the owner or operator meets the criteria of the financial test;

(iii) Specify for each facility to be covered by the test the EPA Identification Number, name, address, and current closure and post-closure cost estimates to be covered by the test;

(iv) Specify the date ending the owner's or operator's last complete fiscal year before the effective date of these regulations;

(v) Specify the date, no later than 90 days after the end of such fiscal year, when he will submit the documents specified in paragraph (e)(3) of this section; and

(vi) Certify that the year-end financial statements of the owner or operator for such fiscal year will be audited by an independent certified public accountant.

(5) After the initial submission of items specified in paragraph (e)(3) of this section, the owner or operator must send updated information to the Regional Administrator within 90 days after the close of each succeeding fiscal year. This information must consist of all three items specified in paragraph (e)(3) of this section.

(6) If the owner or operator no longer meets the requirements of paragraph (e)(1) of this section, he must send notice to the Regional Administrator of intent to establish alternate financial assurance as specified in this section. The notice must be sent by certified mail within 90 days after the end of the fiscal year for which the year-end financial data show that the owner or operator no longer meets the requirements. The owner or operator must provide the alternate financial assurance within 120 days after the end of such fiscal year.

(7) The Regional Administrator may, based on a reasonable belief that the owner or operator may no longer meet the requirements of paragraph (e)(1) of this section, require reports of financial condition at any time from the owner or operator in addition to those specified in paragraph (e)(3) of this section. If the Regional Administrator finds, on the basis of such reports or other information, that the owner or operator no longer meets the requirements of paragraph (e)(1) of this section, the owner or operator must provide alternate financial assurance as specified in this section within 30 days after notification of such a finding.

(8) The Regional Administrator may disallow use of this test on the basis of qualifications in the opinion expressed by the independent certified public accountant in his report on examination of the owner's or operator's financial statements (see paragraph (e)(3)(ii) of this section). An adverse opinion or a disclaimer of opinion will be cause for disallowance. The Regional Administrator will evaluate other qualifications on an individual basis. The owner or operator must provide alternate financial assurance as specified in this section within 30 days after notification of the disallowance.

(9) The owner or operator is no longer required to submit the items specified in paragraph (e)(3) of this section when:

(i) An owner or operator substitutes alternate financial assurance as specified in this section; or

(ii) The Regional Administrator releases the owner or operator from the requirements of this section in accordance with § 265.143(h).

(10) An owner or operator may meet the requirements of this section by obtaining a written guarantee, hereafter referred to as "corporate guarantee." The guarantor must be the parent corporation of the owner or operator. The guarantor must meet the requirements for owners or operators in paragraphs (e)(1) through (e)(8) of this section and must comply with the terms of the corporate guarantee. The wording of the corporate guarantee must be identical to the wording specified in § 264.151(h). The corporate guarantee must accompany the items sent to the Regional Administrator as specified in paragraph (e)(3) of this section. The terms of the corporate guarantee must provide that:

(i) If the owner or operator fails to perform final closure of a facility covered by the corporate guarantee in accordance with the closure plan and other interim status requirements

whenever required to do so, the guarantor will do so or establish a trust fund as specified in § 265.143(a) in the name of the owner or operator.

(ii) The corporate guarantee will remain in force unless the guarantor sends notice of cancellation by certified mail to the owner or operator and to the Regional Administrator. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the Regional Administrator, as evidenced by the return receipts.

(iii) If the owner or operator fails to provide alternate financial assurance as specified in this section and obtain the written approval of such alternate assurance from the Regional Administrator within 90 days after receipt by both the owner or operator and the Regional Administrator of a notice of cancellation of the corporate guarantee from the guarantor, the guarantor will provide such alternate financial assurance in the name of the owner or operator.

(f) *Use of multiple financial mechanisms.* An owner or operator may satisfy the requirements of this section by establishing more than one financial mechanism per facility. These mechanisms are limited to trust funds, surety bonds, letters of credit, and insurance. The mechanisms must be as specified in paragraphs (a) through (d), respectively, of this section, except that it is the combination of mechanisms, rather than the single mechanism, which must provide financial assurance for an amount at least equal to the current closure cost estimate. If an owner or operator uses a trust fund in combination with a surety bond or a letter of credit, he may use the trust fund as the standby trust fund for the other mechanisms. A single standby trust fund may be established for two or more mechanisms. The Regional Administrator may use any or all of the mechanisms to provide for closure of the facility.

(g) *Use of a financial mechanism for multiple facilities.* An owner or operator may use a financial assurance mechanism specified in this section to meet the requirements of this section for more than one facility. Evidence of financial assurance submitted to the Regional Administrator must include a list showing, for each facility, the EPA Identification Number, name, address, and the amount of funds for closure assured by the mechanism. If the facilities covered by the mechanism are in more than one Region, identical evidence of financial assurance must be submitted to and maintained with the Regional Administrators of all such Regions. The amount of funds available through the mechanism must be no less than the sum of funds that would be available if a separate mechanism had been established and maintained for each facility. In directing funds available through the mechanism for closure of any of the facilities covered by the mechanism, the Regional Administrator may direct only the amount of funds designated for that facility, unless the owner or operator agrees to the use of additional funds available under the mechanism.

(h) *Release of the owner or operator from the requirements of this section.* Within 60 days after receiving certifications from the owner or operator and an independent registered professional engineer that closure has been accomplished in accordance with the closure plan, the Regional Administrator will notify the owner or operator in writing that he is no longer required by this section to maintain financial assurance for closure of the particular facility, unless the Regional Administrator has reason to believe that closure has not been in accordance with the closure plan.

§ 265.144 Cost estimate for post-closure care.

(a) On May 19, 1981, the owner or operator of a disposal facility must prepare a written estimate, in current dollars, of the annual cost of post-closure monitoring and maintenance of the facility in accordance with the applicable post-closure regulations in §§ 265.117 through 265.120. The post-closure cost estimate is calculated by multiplying the annual post-closure cost estimate by the number of years of post-closure care required under Subpart G of Part 265.

(b) During the operating life of the facility, the owner or operator must adjust the post-closure cost estimate for inflation within 30 days after each anniversary of the date on which the first post-closure cost estimate was prepared. The adjustment must be made as specified in paragraphs (b)(1) and (2) of this section, using an inflation factor derived from the annual Implicit Price Deflator for Gross National Product as published by the U.S. Department of Commerce in its *Survey of Current Business.* The inflation factor is the result of dividing the latest published annual Deflator by the Deflator for the previous year.

(1) The first adjustment is made by multiplying the post-closure cost estimate by the inflation factor. The result is the adjusted post-closure cost estimate.

(2) Subsequent adjustments are made by multiplying the latest adjusted post-closure cost estimate by the latest inflation factor.

(c) The owner or operator must revise the post-closure cost estimate during the operating life of the facility whenever a change in the post-closure plan increases the cost of post-closure care. The revised post-closure cost estimate must be adjusted for inflation as specified in § 265.144(b).

(d) The owner or operator must keep the following at the facility during the operating life of the facility: the latest post-closure cost estimate prepared in accordance with § 265.144 (a) and (c) and, when this estimate has been adjusted in accordance with § 265.144(b), the latest adjusted post-closure cost estimate.

§ 265.145 Financial assurance for post-closure care.

By the effective date of these regulations, an owner or operator of each disposal facility must establish financial assurance for post-closure care of the facility. He must choose from the options as specified in paragraphs (a) through (e) of this section.

(a) *Post-closure trust fund.* (1) An owner or operator may satisfy the requirements of this section by establishing a post-closure trust fund which conforms to the requirements of this paragraph and submitting an originally signed duplicate of the trust agreement to the Regional Administrator. The trustee must be an entity which has the authority to act as a trustee and whose trust operations are regulated and examined by a Federal or State agency.

(2) The wording of the trust agreement must be identical to the wording specified in § 264.151(a)(1), and the trust agreement must be accompanied by a formal certification of acknowledgment (for example, see § 264.151(a)(2)). Schedule A of the trust agreement must be updated within 60 days after a change in the amount of the current post-closure cost estimate covered by the agreement.

(3) Payments into the trust fund must be made annually by the owner or operator over the 20 years beginning with the effective date of these regulations or over the remaining operating life of the facility as estimated in the closure plan, whichever period is shorter; this period is hereafter referred to as the "pay-in period." The payments into the post-closure trust fund must be made as follows:

(i) The first payment must be made by the effective date of these regulations, except as provided in paragraph (a)(5) of this section. The first payment must be at least equal to the current post-closure cost estimate, except as provided in § 265.145(f), divided by the number of years in the pay-in period.

(ii) Subsequent payments must be made no later than 30 days after each anniversary date of the first payment. The amount of each subsequent payment must be determined by this formula:

$$\text{Next payment} = \frac{CE - CV}{Y}$$

where CE is the current post-closure cost estimate, CV is the current value of the trust fund, and Y is the number of years remaining in the pay-in period.

(4) The owner or operator may accelerate payments into the trust fund or he may deposit the full amount of the

current post-closure cost estimate at the time the fund is established. However, he must maintain the value of the fund at no less than the value that the fund would have if annual payments were made as specified in paragraph (a)(3) of this section.

(5) If the owner or operator establishes a post-closure trust fund after having used one or more alternate mechanisms specified in this section, his first payment must be in at least the amount that the fund would contain if the trust fund were established initially and annual payments made as specified in paragraph (a)(3) of this section.

(6) After the pay-in period is completed, whenever the current post-closure cost estimate changes during the operating life of the facility, the owner or operator must compare the new estimate with the trustee's most recent annual valuation of the trust fund. If the value of the fund is less than the amount of the new estimate, the owner or operator, within 60 days after the change in the cost estimate, must either deposit an amount into the fund so that its value after this deposit at least equals the amount of the current post-closure cost estimate, or obtain other financial assurance as specified in this section to cover the difference.

(7) During the operating life of the facility, if the value of the trust fund is greater than the total amount of the current post-closure cost estimate, the owner or operator may submit a written request to the Regional Administrator for release of the amount in excess of the current post-closure cost estimate.

(8) If an owner or operator substitutes other financial assurance as specified in this section for all or part of the trust fund, he may submit a written request to the Regional Administrator for release of the amount in excess of the current post-closure cost estimate covered by the trust fund.

(9) Within 60 days after receiving a request from the owner or operator for release of funds as specified in paragraph (a) (7) or (8) of this section, the Regional Administrator will instruct the trustee to release to the owner or operator such funds as the Regional Administrator specifies in writing.

(10) During the period of post-closure care, the Regional Administrator may approve a release of funds if the owner or operator demonstrates to the Regional Administrator that the value of the trust fund exceeds the remaining cost of post-closure care.

(11) An owner or operator or any other person authorized to perform post-closure care may request reimbursement for post-closure expenditures by submitting itemized bills to the Regional Administrator. Within 60 days after receiving bills for post-closure activities, the Regional Administrator will determine whether the post-closure expenditures are in accordance with the post-closure plan or otherwise justified, and if so, he will instruct the trustee to make reimbursement in such amounts as the Regional Administrator specifies in writing.

(12) The Regional Administrator will agree to termination of the trust when:

(i) An owner or operator substitutes alternate financial assurance as specified in this section; or

(ii) The Regional Administrator releases the owner or operator from the requirements of this section in accordance with § 265.145(h).

(b) *Surety bond guaranteeing payment into a post-closure trust fund.* (1) An owner or operator may satisfy the requirements of this section by obtaining a surety bond which conforms to the requirements of this paragraph and submitting the bond to the Regional Administrator. The surety company issuing the bond must, at a minimum, be among those listed as acceptable sureties on Federal bonds in Circular 570 of the U.S. Department of the Treasury.

(2) The wording of the surety bond must be identical to the wording specified in § 264.151(b).

(3) The owner or operator who uses a surety bond to satisfy the requirements of this section must also establish a standby trust fund. Under the terms of the bond, all payments made thereunder will be deposited by the surety directly into the standby trust

fund in accordance with instructions from the Regional Administrator. This standby trust fund must meet the requirements specified in § 265.145(a), except that:

(i) An originally signed duplicate of the trust agreement must be submitted to the Regional Administrator with the surety bond; and

(ii) Until the standby trust fund is funded pursuant to the requirements of this section, the following are not required by these regulations:

(A) Payments into the trust fund as specified in § 265.145(a);

(B) Updating of Schedule A of the trust agreement (see § 264.151(a)) to show current post-closure cost estimates;

(C) Annual valuations as required by the trust agreement; and

(D) Notices of nonpayment as required by the trust agreement.

(4) The bond must guarantee that the owner or operator will:

(i) Fund the standby trust fund in an amount equal to the penal sum of the bond before the beginning of final closure of the facility; or

(ii) Fund the standby trust fund in an amount equal to the penal sum within 15 days after an order to begin closure is issued by the Regional Administrator or a U.S. district court or other court of competent jurisdiction; or

(iii) Provide alternate financial assurance as specified in this section, and obtain the Regional Administrator's written approval of the assurance provided, within 90 days after receipt by both the owner or operator and the Regional Administrator of a notice of cancellation of the bond from the surety.

(5) Under the terms of the bond, the surety will become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond.

(6) The penal sum of the bond must be in an amount at least equal to the current post-closure cost estimate, except as provided in § 265.145(f).

(7) Whenever the current post-closure cost estimate increases to an amount greater than the penal sum, the owner or operator, within 60 days after the increase, must either cause the penal sum to be increased to an amount at least equal to the current post-closure cost estimate and submit evidence of such increase to the Regional Administrator, or obtain other financial assurance as specified in this section to cover the increase. Whenever the current post-closure cost estimate decreases, the penal sum may be reduced to the amount of the current post-closure cost estimate following written approval by the Regional Administrator.

(8) Under the terms of the bond, the surety may cancel the bond by sending notice of cancellation by certified mail to the owner or operator and to the Regional Administrator. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the Regional Administrator, as evidenced by the return receipts.

(9) The owner or operator may cancel the bond if the Regional Administrator has given prior written consent based on his receipt of evidence of alternate financial assurance as specified in this section.

(c) *Post-closure letter of credit.* (1) An owner or operator may satisfy the requirements of this section by obtaining an irrevocable standby letter of credit which conforms to the requirements of this paragraph and submitting the letter to the Regional Administrator. The issuing institution must be an entity which has the authority to issue letters of credit and whose letter-of-credit operations are regulated and examined by a Federal or State agency.

(2) The wording of the letter of credit must be identical to the wording specified in § 264.151(d).

(3) An owner or operator who uses a letter of credit to satisfy the requirements of this section must also establish a standby trust fund. Under the terms of the letter of credit, all amounts paid pursuant to a draft by the Regional Administrator will be deposited by the issuing institution directly into the standby trust fund in accordance with instructions from the Regional Administrator. This standby trust fund must meet the require-

ments of the trust fund specified in § 265.145(a), except that:

(i) An originally signed duplicate of the trust agreement must be submitted to the Regional Administrator with the letter of credit; and

(ii) Unless the standby trust fund is funded pursuant to the requirements of this section, the following are not required by these regulations:

(A) Payments into the trust fund as specified in § 265.145(a);

(B) Updating of Schedule A of the trust agreement (see § 264.151(a)) to show current post-closure cost estimates;

(C) Annual valuations as required by the trust agreement; and

(D) Notices of nonpayment as required by the trust agreement.

(4) The letter of credit must be accompanied by a letter from the owner or operator referring to the letter of credit by number, issuing institution, and date, and providing the following information: the EPA Identification Number, name, and address of the facility, and the amount of funds assured for post-closure care of the facility by the letter of credit.

(5) The letter of credit must be irrevocable and issued for a period of at least 1 year. The letter of credit must provide that the expiration date will be automatically extended for a period of at least 1 year unless, at least 120 days before the current expiration date, the issuing institution notifies both the owner or operator and the Regional Administrator by certified mail of a decision not to extend the expiration date. Under the terms of the letter of credit, the 120 days will begin on the date when both the owner or operator and the Regional Administrator have received the notice, as evidenced by the return receipts.

(6) The letter of credit must be issued in an amount at least equal to the current post-closure cost estimate, except as provided in § 265.145(f).

(7) Whenever the current post-closure cost estimate increases to an amount greater than the amount of the credit during the operating life of the facility, the owner or operator, within 60 days after the increase, must either cause the amount of the credit to be increased so that it at least equals the current post-closure cost estimate and submit evidence of such increase to the Regional Administrator, or obtain other financial assurance as specified in this section to cover the increase. Whenever the current post-closure cost estimate decreases during the operating life of the facility, the amount of the credit may be reduced to the amount of the current post-closure cost estimate following written approval by the Regional Administrator.

(8) During the period of post-closure care, the Regional Administrator may approve a decrease in the amount of the letter of credit if the owner or operator demonstrates to the Regional Administrator that the amount exceeds the remaining cost of post-closure care.

(9) Following a determination pursuant to Section 3008 of RCRA that the owner or operator has failed to perform post-closure care in accordance with the post-closure plan and other interim status requirements, the Regional Administrator may draw on the letter of credit.

(10) If the owner or operator does not establish alternate financial assurance as specified in this section and obtain written approval of such alternate assurance from the Regional Administrator within 90 days after receipt by both the owner or operator and the Regional Administrator of a notice from the issuing institution that it has decided not to extend the letter of credit beyond the current expiration date, the Regional Administrator will draw on the letter of credit. The Regional Administrator may delay the drawing if the issuing institution grants an extension of the term of the credit. During the last 30 days of any such extension the Regional Administrator will draw on the letter of credit if the owner or operator has failed to provide alternate financial assurance as specified in this section and obtain written approval of such assurance from the Regional Administrator.

(11) The Regional Administrator will return the letter of credit to the issuing institution for termination when:

(i) An owner or operator substitutes alternate financial assurance as specified in this section; or

(ii) The Regional Administrator releases the owner or operator from the requirements of this section in accordance with § 265.145(h).

(d) *Post-closure insurance.* (1) An owner or operator may satisfy the requirements of this section by obtaining post-closure insurance which conforms to the requirements of this paragraph and submitting a certificate of such insurance to the Regional Administrator. By the effective date of these regulations the owner or operator must submit to the Regional Administrator a letter from an insurer stating that the insurer is considering issuance of post-closure insurance conforming to the requirements of this paragraph to the owner or operator. Within 90 days after the effective date of these regulations, the owner or operator must submit the certificate of insurance to the Regional Administrator or establish other financial assurance as specified in this section. At a minimum, the insurer must be licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more States.

(2) The wording of the certificate of insurance must be identical to the wording specified in § 264.151(e).

(3) The post-closure insurance policy must be issued for a face amount at least equal to the current post-closure cost estimate, except as provided in § 265.145(f). The term "face amount" means the total amount the insurer is obligated to pay under the policy. Actual payments by the insurer will not change the face amount, although the insurer's future liability will be lowered by the amount of the payments.

(4) The post-closure insurance policy must guarantee that funds will be available to provide post-closure care of the facility whenever the post-closure period begins. The policy must also guarantee that once post-closure care begins the insurer will be responsible for paying out funds, up to an amount equal to the face amount of the policy, upon the direction of the Regional Administrator, to such party or parties as the Regional Administrator specifies.

(5) An owner or operator or any other person authorized to perform post-closure care may request reimbursement for post-closure expenditures by submitting itemized bills to the Regional Administrator. Within 60 days after receiving bills for post-closure activities, the Regional Administrator will determine whether the post-closure expenditures are in accordance with the post-closure plan or otherwise justified, and if so, he will instruct the insurer to make reimbursement in such amounts as the Regional Administrator specifies in writing.

(6) The owner or operator must maintain the policy in full force and effect until the Regional Administrator consents to termination of the policy by the owner or operator as specified in paragraph (d)(11) of this section. Failure to pay the premium, without substitution of alternate financial assurance as specified in the section, will constitute a significant violation of these regulations, warranting such remedy as the Regional Administrator deems necessary. Such violation will be deemed to begin upon receipt by the Regional Administrator of a notice of future cancellation, termination, or failure to renew due to nonpayment of the premium, rather than upon the date of expiration.

(7) Each policy most contain a provision allowing assignment of the policy to a successor owner or operator. Such assignment may be conditional upon consent of the insurer, provided such consent is not unreasonably refused.

(8) The policy must provide that the insurer may not cancel, terminate, or fail to renew the policy except for failure to pay the premium. The automatic renewal of the policy must, at a minimum, provide the insured with the option of renewal at the face amount of the expiring policy. If there is a failure to pay the premium, the insurer may elect to cancel, terminate, or fail to renew the policy by sending notice by certified mail to the owner or operator and the Regional Administrator. Cancellation, termination, or failure to renew may not occur, however, during the 120 days beginning with

the date of receipt of the notice by both the Regional Administrator and the owner or operator, as evidenced by the return receipts. Cancellation, termination, or failure to renew may not occur and the policy will remain in full force and effect in the event that on or before the date of expiration:

(i) The Regional Administrator deems the facility abandoned; or

(ii) Interim status is terminated or revoked; or

(iii) Closure is ordered by the Regional Administrator or a U.S. district court or other court of competent jurisdiction; or

(iv) The owner or operator is named as debtor in a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code; or

(v) The premium due is paid.

(9) Whenever the current post-closure cost estimate increases to an amount greater than the face amount of the policy during the operating life of the facility, the owner or operator, within 60 days after the increase, must either cause the face amount to be increased to an amount at least equal to the current post-closure cost estimate and submit evidence of such increase to the Regional Administrator, or obtain other financial assurance as specified in this section to cover the increase. Whenever the current post-closure cost estimate decreases during the operating life of the facility, the face amount may be reduced to the amount of the current post-closure cost estimate following written approval by the Regional Administrator.

(10) Commencing on the date that liability to make payments pursuant to the policy accrues, the insurer will thereafter annually increase the face amount of the policy. Such increase must be equivalent to the face amounts of the policy, less any payments made, multiplied by an amount equivalent to 85 percent of the most recent investment rate or of the equivalent coupon-issue yield announced by the U.S. Treasury for 26-week Treasury securities.

(11) The Regional Administrator will give written consent to the owner or operator that he may terminate the insurance policy when:

(i) An owner or operator substitutes alternate financial assurance as specified in this section; or

(ii) The Regional Administrator releases the owner or operator from the requirements of this section in accordance with § 265.145(h).

(e) *Financial test and corporate guarantee for post-closure care.* (1) An owner or operator may satisfy the requirements of this section by demonstrating that he passes a financial test as specified in this paragraph. To pass this test the owner or operator must meet the criteria either of paragraph (e)(1)(i) or (e)(1)(ii) of this section:

(i) The owner or operator must have:

(A) Two of the following three ratios: a ratio of total liabilities to net worth less than 2.0; a ratio of the sum of net income plus depreciation, depletion, and amortization to total liabilities greater than 0.1; and a ratio of current assets to current liabilities greater than 1.5; and

(B) Net working capital and tangible net worth each at least six times the sum of the current closure and post-closure cost estimates; and

(C) Tangible net worth of at least $10 million; and

(D) Assets in the United States amounting to a least 90 percent of his total assets or at least six times the sum of the current closure and post-closure cost estimates.

(ii) The owner or operator must have:

(A) A current rating for his most recent bond issuance of AAA, AA, A, or BBB as issued by Standard and Poor's or Aaa, Aa, A, or Baa as issued by Moody's; and

(B) Tangible net worth at least six times the sum of the current closure and post-closure cost estimates; and

(C) Tangible net worth of at least $10 million; and

(D) Assets located in the United States amounting to at least 90 percent of his total assets or at least six times the sum of the current closure and post-closure cost estimates.

(2) The phrase "current closure and post-closure cost estimates" as used in paragraph (e)(1) of this section refers to the cost estimates required to be shown in paragraphs 1-4 of the letter

from the owner's or operator's chief financial officer (§ 264.151(f)).

(3) To demonstrate that he meets this test, the owner or operator must submit the following items to the Regional Administrator:

(i) A letter signed by the owner's or operator's chief financial officer and worded as specified in § 264.151(f); and

(ii) A copy of the independent certified public accountant's report on examination of the owner's or operator's financial statements for the latest completed fiscal year; and

(iii) A special report from the owner's or operator's independent certified public accountant to the owner or operator stating that:

(A) He has compared the data which the letter from the chief financial officer specifies as having been derived from the independently audited, year-end financial statements for the latest fiscal year with the amounts in such financial statements; and

(B) In connection with that procedure, no matters came to his attention which caused him to believe that the specified data should be adjusted.

(4) The owner or operator may obtain an extension of the time allowed for submission of the documents specified in paragraph (e)(3) of this section if the fiscal year of the owner or operator ends during the 90 days prior to the effective date of these regulations and if the year-end financial statements for that fiscal year will be audited by an independent certified public accountant. The extension will end no later than 90 days after the end of the owner's or operator's fiscal year. To obtain the extension, the owner's or operator's chief financial officer must send, by the effective date of these regulations, a letter to the Regional Administrator of each Region in which the owner's or operator's facilities to be covered by the financial test are located. This letter from the chief financial officer must:

(i) Request the extension;

(ii) Certify that he has grounds to believe that the owner or operator meets the criteria of the financial test;

(iii) Specify for each facility to be covered by the test the EPA Identification Number, name, address, and the current closure and post-closure cost estimates to be covered by the test;

(iv) Specify the date ending the owner's or operator's latest complete fiscal year before the effective date of these regulations;

(v) Specify the date, no later than 90 days after the end of such fiscal year, when he will submit the documents specified in paragraph (e)(3) of this section; and

(vi) Certify that the year-end financial statements of the owner or operator for such fiscal year will be audited by an independent certified public accountant.

(5) After the initial submission of items specified in paragraph (e)(3) of this section, the owner or operator must send updated information to the Regional Administrator within 90 days after the close of each succeeding fiscal year. This information must consist of all three items specified in paragraph (e)(3) of this section.

(6) If the owner or operator no longer meets the requirements of paragraph (e)(1) of this section, he must send notice to the Regional Administrator of intent to establish alternate financial assurance as specified in this section. The notice must be sent by certified mail within 90 days after the end of the fiscal year for which the year-end financial data show that the owner or operator no longer meets the requirements. The owner or operator must provide the alternate financial assurance within 120 days after the end of such fiscal year.

(7) The Regional Administrator may, based on a reasonable belief that the owner or operator may no longer meet the requirements of paragraph (e)(1) of this section, require reports of financial condition at any time from the owner or operator in addition to those specified in paragraph (e)(3) of this section. If the Regional Administrator finds, on the basis of such reports or other information, that the owner or operator no longer meets the requirements of paragraph (e)(1) of this section, the owner or operator must provide alternate financial assurance as specified in this section within 30 days after notification of such a finding.

(8) The Regional Administrator may disallow use of this test on the basis of qualifications in the opinion expressed by the independent certified public accountant in his report on examination of the owner's or operator's financial statements (see paragraph (e)(3)(ii) of this section). An adverse opinion or a disclaimer of opinion will be cause for disallowance. The Regional Administrator will evaluate other qualifications on an individual basis. The owner or operator must provide alternate financial assurance as specified in this section within 30 days after notification of the disallowance.

(9) During the period of post-closure care, the Regional Administrator may approve a decrease in the current post-closure cost estimate for which this test demonstrates financial assurance if the owner or operator demonstrates to the Regional Administrator that the amount of the cost estimate exceeds the remaining cost of post-closure care.

(10) The owner or operator is no longer required to submit the items specified in paragraph (e)(3) of this section when:

(i) An owner or operator substitutes alternate financial assurance as specified in this section; or

(ii) The Regional Administrator releases the owner or operator from the requirements of this section in accordance with § 265.145(h).

(11) An owner or operator may meet the requirements of this section by obtaining a written guarantee, hereafter referred to as "corporate guarantee." The guarantor must be the parent corporation of the owner or operator. The guarantor must meet the requirements for owners or operators in paragraphs (e)(1) through (9) of this section and must comply with the terms of the corporate guarantee. The wording of the corporate guarantee must be identical to the wording specified in § 264.151(h). The corporate guarantee must accompany the items sent to the Regional Administrator as specified in paragraph (e)(3) of this section. The terms of the corporate guarantee must provide that:

(i) If the owner or operator fails to perform post-closure care of a facility covered by the corporate guarantee in accordance with the post-closure plan and other interim status requirements whenever required to do so, the guarantor will do so or establish a trust fund as specified in § 265.145(a) in the name of the owner or operator.

(ii) The corporate guarantee will remain in force unless the guarantor sends notice of cancellation by certified mail to the owner or operator and to the Regional Administrator. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the Regional Administrator, as evidenced by the return receipts.

(iii) If the owner or operator fails to provide alternate financial assurance as specified in this section and obtain the written approval of such alternate assurance from the Regional Administrator within 90 days after receipt by both the owner or operator and the Regional Administrator of a notice of cancellation of the corporate guarantee from the guarantor, the guarantor will provide such alternate financial assurance in the name of the owner or operator.

(f) *Use of multiple financial mechanisms.* An owner or operator may satisfy the requirements of this section by establishing more than one financial mechanism per facility. These mechanisms are limited to trust funds, surety bonds, letters of credit, and insurance. The mechanisms must be as specified in paragraphs (a) through (d), respectively, of this section, except that it is the combination of mechanisms, rather than the single mechanism, which must provide financial assurance for an amount at least equal to the current post-closure cost estimate. If an owner or operator uses a trust fund in combination with a surety bond or a letter of credit, he may use the trust fund as the standby trust fund for the other mechanisms. A single standby trust fund may be established for two or more mechanisms. The Regional Administrator may use any or all of the mechanisms to provide for post-closure care of the facility.

(g) *Use of a financial mechanism for multiple facilities.* An owner or operator may use a financial assurance

mechanism specified in this section to meet the requirements of this section for more than one facility. Evidence of financial assurance submitted to the Regional Administrator must include a list showing, for each facility, the EPA Identification Number, name, address, and the amount of funds for post-closure care assured by the mechanism. If the facilities covered by the mechanism are in more than one Region, identical evidence of financial assurance must be submitted to and maintained with the Regional Administrators of all such Regions. The amount of funds available through the mechanism must be no less than the sum of funds that would be available if a separate mechanism had been established and maintained for each facility. In directing funds available through the mechanism for post-closure care of any of the facilities covered by the mechanism, the Regional Administrator may direct only the amount of funds designated for that facility, unless the owner or operator agrees to the use of additional funds available under the mechanism.

(h) *Release of the owner or operator from the requirements of this section.* When an owner or operator has completed, to the satisfaction of the Regional Administrator, all post-closure care requirements in accordance with the post-closure plan, the Regional Administrator will, at the request of the owner or operator, notify him in writing that he is no longer required by this section to maintain financial assurance for post-closure care of the particular facility.

§ 265.146 Use of a mechanism for financial assurance of both closure and post-closure care.

An owner or operator may satisfy the requirements for financial assurance for both closure and post-closure care for one or more facilities by using a trust fund, surety bond, letter of credit, insurance, financial test, or corporate guarantee that meets the specifications for the mechanism in both §§ 265.143 and 265.145. The amount of funds available through the mechanism must be no less than the sum of funds that would be available if a separate mechanism had been established and maintained for financial assurance of closure and of post-closure care.

§ 265.147 Liability requirements.

(a) *Coverage for sudden accidental occurrences.* By the effective date of these regulations, an owner or operator of a hazardous waste treatment, storage, or disposal facility, or a group of such facilities, must demonstrate financial responsibility for bodily injury and property damage to third parties caused by sudden accidental occurrences arising from operations of the facility or group of facilities. The owner or operator must have and maintain liability coverage for sudden accidental occurrences in the amount of at least $1 million per occurrence with an annual aggregate of at least $2 million, exclusive of legal defense costs. This liability coverage may be demonstrated in one of three ways, as specified in paragraphs (a)(1), (2), and (3) of this section:

(1) An owner or operator may demonstrate the required liability coverage by having liability insurance as specified in this paragraph.

(i) Each insurance policy must be amended by attachment of the Hazardous Waste Facility Liability Endorsement or evidenced by a Certificate of Liability Insurance. The wording of the endorsement must be identical to the wording specified in § 264.151(i). The wording of the certificate of insurance must be identical to the wording specified in § 264.151(j). The owner or operator must submit a signed duplicate original of the endorsement or the certificate of insurance to the Regional Administrator, or Regional Administrator if the facilities are located in more than one Region. If requested by a Regional Administrator, the owner or operator must provide a signed duplicate original of the insurance policy.

(ii) Each insurance policy must be issued by an insurer which, at a minimum, is licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more States.

(2) An owner or operator may meet the requirements of this section by

passing a financial test for liability coverage as specified in paragraph (f) of this section.

(3) An owner or operator may demonstrate the required liability coverage through use of both the financial test and insurance as these mechanisms are specified in this section. The amounts of coverage demonstrated must total at least the minimum amounts required by this paragraph.

(b) *Coverage for nonsudden accidental occurrences.* An owner or operator of a surface impoundment, landfill, or land treatment facility which is used to manage hazardous waste, or a group of such facilities, must demonstrate financial responsibility for bodily damage and property damage to third parties caused by nonsudden accidental occurrences arising from operations of the facility or group of facilities. The owner or operator must have and maintain liability coverage for nonsudden accidental occurrences in the amount of at least $3 million per occurrence with an annual aggregate of at least $6 million, exclusive of legal defense costs. This liability coverage may be demonstrated in one of three ways, as specified in paragraphs (b)(1), (b)(2), and (b)(3) of this section:

(1) An owner or operator may demonstrate the required liability coverage by having liability insurance as specified in this paragraph.

(i) Each insurance policy must be amended by attachment of the Hazardous Waste Facility Liability Endorsement or evidenced by a Certificate of Liability Insurance. The wording of the endorsement must be identical to the wording specified in § 264.151(i). The wording of the certificate of insurance must be identical to the wording specified in § 264.151(j). The owner or operator must submit a signed duplicate original of the endorsement or the certificate of insurance to the Regional Administrator, or Regional Administrators if the facilities are located in more than one Region. If requested by a Regional Administrator, the owner or operator must provide a signed duplicate original of the insurance policy.

(ii) Each insurance policy must be issued by an insurer which, at a minimum, is licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more States.

(2) An owner or operator may meet the requirements of this section by passing a financial test for liability coverage as specified in paragraph (f) of this section.

(3) An owner or operator may demonstrate the required liability coverage through use of both the financial test and insurance as these mechanisms are specified in this section. The amounts of coverage must total at least the minimum amounts required by this paragraph.

(4) The required liability coverage for nonsudden accidental occurrences must be demonstrated by the dates listed below. The total sales or revenues of the owner or operator in all lines of business, in the fiscal year preceding the effective date of these regulations, will determine which of the dates applies. If the owner and operator of a facility are two different parties, or if there is more than one owner or operator, the sales or revenues of the owner or operator with the largest sales or revenues will determine the date by which the coverage must be demonstrated. The dates are as follows:

(i) For an owner or operator with sales or revenues totalling $10 million or more, 6 months after the effective date of these regulations.

(ii) For an owner or operator with sales or revenues greater than $5 million but less than $10 million, 18 months after the effective date of these regulations.

(iii) All other owners or operators, 30 months after the effective date of these regulations.

(5) By the date 6 months after the effective date of these regulations an owner or operator who is within either of the last two categories (paragraphs (b)(4)(ii) or (b)(4)(iii) of this section) must, unless he has demonstrated liability coverage for nonsudden accidental occurrences, send a letter to the Regional Administrator stating the date by which he plans to establish such coverage.

(c) *Request for variance.* If an owner or operator can demonstrate to the satisfaction of the Regional Administrator that the levels of financial responsibility required by paragraph (a) or (b) of this section are not consistent with the degree and duration of risk associated with treatment, storage, or disposal at the facility or group of facilities, the owner or operator may obtain a variance from the Regional Administrator. The request for a variance must be submitted in writing to the Regional Administrator. If granted, the variance will take the form of an adjusted level of required liability coverage, such level to be based on the Regional Administrator's assessment of the degree and duration of risk associated with the ownership or operation of the facility or group of facilities. The Regional Administrator may require an owner or operator who requests a variance to provide such technical and engineering information as is deemed necessary by the Regional Administrator to determine a level of financial responsibility other than that required by paragraph (a) or (b) of this section. The Regional Administrator will process a variance request as if it were a permit modification request under § 270.41(a)(5) of this chapter and subject to the procedures of § 124.5 of this chapter. Notwithstanding any other provision, the Regional Administrator may hold a public hearing at his discretion or whenever he finds, on the basis of requests for a public hearing, a significant degree of pubic interest in a tentative decision to grant a variance.

(d) *Adjustments by the Regional Administrator.* If the Regional Administrator determines that the levels of financial responsibility required by paragraph (a) or (b) of this section are not consistent with the degree and duration of risk associated with treatment, storage, or disposal at the facility or group of facilities, the Regional Administrator may adjust the level of financial responsibility required under paragraph (a) or (b) of this section as may be necessary to protect human health and the environment. This adjusted level will be based on the Regional Administrator's assessment of the degree and duration of risk associated with the ownership or operation of the facility or group of facilities. In addition, if the Regional Administrator determines that there is a significant risk to human health and the environment from nonsudden accidental occurrences resulting from the operations of a facility that is not a surface impoundment, landfill, or land treatment facility, he may require that an owner or operator of the facility comply with paragraph (b) of this section. An owner or operator must furnish to the Regional Administrator, within a reasonable time, any information which the Regional Administrator requests to determine whether cause exists for such adjustments of level or type of coverage. The Regional Administrator will process an adjustment of the level of required coverage as if it were a permit modification under § 270.41(a)(5) of this chapter and subject to the procedures of § 124.5 of this chapter. Notwithstanding any other provision, the Regional Administrator may hold a public hearing at his discretion or whenever he finds, on the basis of requests for a public hearing, a significant degree of public interest in a tentative decision to adjust the level or type of required coverage.

(e) *Period of coverage.* An owner or operator must continuously provide liability coverage for a facility as required by this section until certifications of closure of the facility, as specified in § 265.115, are received by the Regional Administrator.

(f) *Financial test for liability coverage.* (1) An owner or operator may satisfy the requirements of this section by demonstrating that he passes a financial test as specified in this paragraph. To pass this test the owner or operator must meet the criteria of paragraph (f)(1)(i) or (f)(1)(ii):

(i) The owner or operator must have:

(A) Net working capital and tangible net worth each at least six times the amount of liability coverage to be demonstrated by this test; and

(B) Tangible net worth of at least $10 million; and

(C) Assets in the United States amounting to either: (*1*) At least 90 percent of his total assets; or (*2*) at least six times the amount of liability coverage to be demonstrated by this test.

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(ii) The owner or operator must have:

(A) A current rating for his most recent bond issuance of AAA, AA, A, or BBB as issued by Standard and Poor's, or Aaa, Aa, A, or Baa as issued by Moody's; and

(B) Tangible net worth of at least $10 million; and

(C) Tangible net worth at least six times the amount of liability coverage to be demonstrated by this test; and

(D) Assets in the United States amounting to either: (*1*) at least 90 percent of his total assets; or (*2*) at least six times the amount of liability coverage to be demonstrated by this test.

(2) The phrase "amount of liability coverage" as used in paragraph (f)(1) of this section refers to the annual aggregate amounts for which coverage is required under paragraphs (a) and (b) of this section.

(3) To demonstrate that he meets this test, the owner or operator must submit the following three items to the Regional Administrator:

(i) A letter signed by the owner's or operator's chief financial officer and worded as specified in § 264.151(g). If an owner or operator is using the financial test to demonstrate both assurance for closure or post-closure care, as specified by §§ 264.143(f), 264.145(f), 265.143(e), and 265.145(e), *and* liability coverage, he must submit the letter specified in § 264.151(g) to cover both forms of financial responsibility; a separate letter as specified in § 264.151(f) is not required.

(ii) A copy of the independent certified public accountant's report on examination of the owner's or operator's financial statements for the latest completed fiscal year.

(iii) A special report from the owner's or operator's independent certified public accountant to the owner or operator stating that:

(A) He has compared the data which the letter from the chief financial officer specifies as having been derived from the independently audited, year-end financial statements for the latest fiscal year with the amounts in such financial statements; and

(B) In connection with that procedure, no matters came to his attention which caused him to believe that the specified data should be adjusted.

(4) The owner or operator may obtain a one-time extension of the time allowed for submission of the documents specified in paragraph (f)(3) of this section if the fiscal year of the owner or operator ends during the 90 days prior to the effective date of these regulations and if the year-end financial statements for that fiscal year will be audited by an independent certified public accountant. The extension will end no later than 90 days after the end of the owner's or operator's fiscal year. To obtain the extension, the owner's or operator's chief financial officer must send, by the effective date of these regulations, a letter to the Regional Administrator of each Region in which the owner's or operator's facilities to be covered by the financial test are located. This letter from the chief financial officer must:

(i) Request the extension;

(ii) Certify that he has grounds to believe that the owner or operator meets the criteria of the financial test;

(iii) Specify for each facility to be covered by the test the EPA Identification Number, name, address, the amount of liability coverage and, when applicable, current closure and post-closure cost estimates to be covered by the test;

(iv) Specify the date ending the owner's or operator's last complete fiscal year before the effective date of these regulations;

(v) Specify the date, no later than 90 days after the end of such fiscal year, when he will submit the documents specified in paragraph (f)(3) of this section; and

(vi) Certify that the year-end financial statements of the owner or operator for such fiscal year will be audited by an independent certified public accountant.

(5) After the initial submission of items specified in paragraph (f)(3) of this section, the owner or operator must send updated information to the Regional Administrator within 90 days after the close of each succeeding fiscal year. This information must consist of all three items specified in paragraph (f)(3) of this section.

(6) If the owner or operator no longer meets the requirements of paragraph (f)(1) of this section, he must obtain insurance for the entire amount of required liability coverage as specified in this section. Evidence of insurance must be submitted to the Regional Administrator within 90 days after the end of the fiscal year for which the year-end financial data show that the owner or operator no longer meets the test requirements.

(7) The Regional Administrator may disallow use of this test on the basis of qualifications in the opinion expressed by the independent certified public accountant in his report on examination of the owner's or operator's financial statements (see paragraph (f)(3)(ii) of this section). An adverse opinion or a disclaimer of opinion will be cause for disallowance. The Regional Administrator will evaluate other qualifications on an individual basis. The owner or operator must provide evidence of insurance for the entire amount of required liability coverage as specified in this section within 30 days after notification of disallowance.

(g) Notwithstanding any other provision of this part, an owner or operator using liability insurance to satisfy the requirements of this section may use, until October 16, 1982, a Hazardous Waste Facility Liability Endorsement or Certificate of Liability Insurance that does not certify that the insurer is licensed to transact the business of insurance, or eligible as an excess or surplus lines insurer, in one or more States.

(Approved by the Office of Management and Budget under control number 2000-0445, for paragraphs (a)(1)(i), (b)(1)(i), (b)(5), (c), (d), and (f) (3) through (6).

[47 FR 16558, Apr. 16, 1982, as amended at 47 FR 28627, July 1, 1982; 47 FR 30447, July 13, 1982; 48 FR 30115, June 30, 1983]

§ 265.148 Incapacity of owners or operators, guarantors, or financial institutions.

(a) An owner or operator must notify the Regional Administrator by certified mail of the commencement of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code, naming the owner or operator as debtor, within 10 days after commencement of the proceeding. A guarantor of a corporate guarantee as specified in §§ 265.143(e) and 265.145(e) must make such a notification if he is named as debtor, as required under the terms of the corporate guarantee (§ 264.151(h)).

(b) An owner or operator who fulfills the requirements of § 265.143, § 265.145, or § 265.147 by obtaining a trust fund, surety bond, letter of credit, or insurance policy will be deemed to be without the required financial assurance or liability coverage in the event of bankruptcy of the trustee or issuing institution, or a suspension or revocation of the authority of the trustee institution to act as trustee or of the institution issuing the surety bond, letter of credit, or insurance policy to issue such instruments. The owner or operator must establish other financial assurance or liability coverage within 60 days after such an event.

§ 265.149 Use of State-required mechanisms.

(a) For a facility located in a State where EPA is administering the requirements of this Subpart but where the State has hazardous waste regulations that include requirements for financial assurance of closure or post-closure care or liability coverage, an owner or operator may use State-required financial mechanisms to meet the requirements of § 265.143, § 265.145, or § 265.147 if the Regional Administrator determines that the State mechanisms are at least equivalent to the financial mechanisms specified in this Subpart. The Regional Administrator will evaluate the equivalency of the mechanisms principally in terms of (1) certainty of the availability of funds for the required closure or post-closure care activities or liability coverage and (2) the amount of funds that will be made available. The Regional Administrator may also consider other factors as he deems appropriate. The owner or operator must submit to the Regional Administrator evidence of the establishment of the mechanism together with a letter requesting that the State-required mechanism be considered acceptable

for meeting the requirements of this Subpart. The submission must include the following information: The facility's EPA Identification Number, name, and address, and the amount of funds for closure or post-closure care or liability coverage assured by the mechanism. The Regional Administrator will notify the owner or operator of his determination regarding the mechanism's acceptability in lieu of financial mechanisms specified in this Subpart. The Regional Administrator may require the owner or operator to submit additional information as is deemed necessary to make this determination. Pending this determination, the owner or operator will be deemed to be in compliance with the requirements of § 265.143, § 265.145, or § 265.147, as applicable.

(b) If a State-required mechanism is found acceptable as specified in paragraph (a) of this section except for the amount of funds available, the owner or operator may satisfy the requirements of this Subpart by increasing the funds available through the State-required mechanism or using additional financial mechanisms as specified in this Subpart. The amount of funds available through the State and Federal mechanisms must at least equal the amount required by this subpart.

§ 265.150 State assumption of responsibility.

(a) If a State either assumes legal responsibility for an owner's or operator's compliance with the closure, post-closure care, or liability requirements of this Part or assures that funds will be available from State sources to cover those requirements, the owner or operator will be in compliance with the requirements of § 265.143, § 265.145, or § 265.147 if the Regional Administrator determines that the State's assumption of responsibility is at least equivalent to the financial mechanisms specified in this Subpart. The Regional Administrator will evaluate the equivalency of State guarantees principally in terms of (1) certainty of the availability of funds for the required closure or post-closure care activities or liability coverage and (2) the amount of funds that will be made available. The Regional Administrator may also consider other factors as he deems appropriate. The owner or operator must submit to the Regional Administrator a letter from the State describing the nature of the State's assumption of responsibility together with a letter from the owner or operator requesting that the State's assumption of responsibility be considered acceptable for meeting the requirements of this Subpart. The letter from the State must include, or have attached to it, the following information: the facility's EPA Identification Number, name, and address, and the amount of funds for closure or post-closure care or liability coverage that are guaranteed by the State. The Regional Administrator will notify the owner or operator of his determination regarding the acceptability of the State's guarantee in lieu of financial mechanisms specified in this Subpart. The Regional Administrator may require the owner or operator to submit additional information as is deemed necessary to make this determination. Pending this determination, the owner or operator will be deemed to be in compliance with the requirements of §§ 265.143, § 265.145, or § 265.147, as applicable.

(b) If a State's assumption of responsibility is found acceptable as specified in paragraph (a) of this section except for the amount of funds available, the owner or operator may satisfy the requirements of this Subpart by use of both the State's assurance *and* additional financial mechanisms as specified in this Subpart. The amount of funds available through the State and Federal mechanisms must at least equal the amount required by this subpart.

Subpart I—Use and Management of Containers

§ 265.170 Applicability.

The regulations in this subpart apply to owners and operators of all hazardous waste facilities that store containers of hazardous waste, except as § 265.1 provides otherwise.

§ 265.171 Condition of containers.

If a container holding hazardous waste is not in good condition, or if it begins to leak, the owner or operator must transfer the hazardous waste from this container to a container that is in good condition, or manage the waste in some other way that complies with the requirements of this part.

§ 265.172 Compatibility of waste with container.

The owner or operator must use a container made of or lined with materials which will not react with, and are otherwise compatible with, the hazardous waste to be stored, so that the ability of the container to contain the waste is not impaired.

§ 265.173 Management of containers.

(a) A container holding hazardous waste must always be closed during storage, except when it is necessary to add or remove waste.

(b) A container holding hazardous waste must not be opened, handled, or stored in a manner which may rupture the container or cause it to leak.

[*Comment:* Re-use of containers in transportation is governed by U.S. Department of Transportation regulations, including those set forth in 49 CFR 173.28.]

[45 FR 33232, May 19, 1980, as amended at 45 FR 78529, Nov. 25, 1980]

§ 265.174 Inspections.

The owner or operator must inspect areas where containers are stored, at least weekly, looking for leaks and for deterioration caused by corrosion or other factors.

[*Comment:* See § 265.171 for remedial action required if deterioration or leaks are detected.]

§ 265.175 [Reserved]

§ 265.176 Special requirements for ignitable or reactive waste.

Containers holding ignitable or reactive waste must be located at least 15 meters (50 feet) from the facility's property line.

[*Comment:* See § 265.17(a) for additional requirements.]

§ 265.177 Special requirements for incompatible wastes.

(a) Incompatible wastes, or incompatible wastes and materials, (see Appendix V for examples) must not be placed in the same container, unless § 265.17(b) is complied with.

(b) Hazardous waste must not be placed in an unwashed container that previously held an incompatible waste or material (see Appendix V for examples), unless § 265.17(b) is complied with.

(c) A storage container holding a hazardous waste that is incompatible with any waste or other materials stored nearby in other containers, piles, open tanks, or surface impoundments must be separated from the other materials or protected from them by means of a dike, berm, wall, or other device.

[*Comment:* The purpose of this is to prevent fires, explosions, gaseous emissions, leaching, or other discharge of hazardous waste or hazardous waste constituents which could result from the mixing of incompatible wastes or materials if containers break or leak.]

Subpart J—Tanks

§ 265.190 Applicability.

The regulations in this subpart apply to owners and operators of facilities that use tanks to treat or store hazardous waste, except as § 265.1 provides otherwise.

§ 265.191 [Reserved]

§ 265.192 General operating requirements.

(a) Treatment or storage of hazardous waste in tanks must comply with § 265.17(b).

(b) Hazardous wastes or treatment reagents must not be placed in a tank if they could cause the tank or its inner liner to rupture, leak, corrode, or otherwise fail before the end of its intended life.

(c) Uncovered tanks must be operated to ensure at least 60 centimeters (2 feet) of freeboard, *unless* the tank is equipped with a containment structure (e.g., dike or trench), a drainage control system, or a diversion structure (e.g., standby tank) with a capac-

ity that equals or exceeds the volume of the top 60 centimeters (2 feet) of the tank.

(d) Where hazardous waste is continuously fed into a tank, the tank must be equipped with a means to stop this inflow (e.g., a waste feed cutoff system or by-pass system to a stand-by tank).

[*Comment:* These systems are intended to be used in the event of a leak or overflow from the tank due to a system failure (e.g., a malfunction in the treatment process, a crack in the tank, etc.).]

§ 265.193 Waste analysis and trial tests.

(a) In addition to the waste analysis required by § 265.13, whenever a tank is to be used to:

(1) Chemically treat or store a hazardous waste which is substantially different from waste previously treated or stored in that tank; or

(2) Chemically treat hazardous waste with a substantially different process than any previously used in that tank; the owner or operator must, before treating or storing the different waste or using the different process:

(i) Conduct waste analyses and trial treatment or storage tests (e.g., bench scale or pilot plant scale tests); or

(ii) Obtain written, documented information on similar storage or treatment of similar waste under similar operating conditions;

to show that this proposed treatment or storage will meet all applicable requirements of § 265.192(a) and (b).

[*Comment:* As required by § 265.13, the waste analysis plan must include analyses needed to comply with §§ 265.198 and 265.199. As required by § 265.73, the owner or operator must place the results from each waste analysis and trial test, or the documented information, in the operating record of the facility.]

§ 265.194 Inspections.

(a) The owner or operator of a tank must inspect, where present:

(1) Discharge control equipment (e.g., waste feed cut-off systems, bypass systems, and drainage systems), at least once each operating day, to ensure that it is in good working order;

(2) Data gathered from monitoring equipment (e.g., pressure and temperature gauges), at least once each operating day, to ensure that the tank is being operated according to its design;

(3) The level of waste in the tank, at least once each operating day, to ensure compliance with § 265.192(c);

(4) The construction materials of the tank, at least weekly, to detect corrosion or leaking of fixtures or seams; and

(5) The construction materials of, and the area immediately surrounding, discharge confinement structures (e.g., dikes), at least weekly, to detect erosion or obvious signs of leakage (e.g., wet spots or dead vegetation).

[*Comment:* As required by § 265.15(c), the owner or operator must remedy any deterioration or malfunction he finds.]

§§ 265.195—265.196 [Reserved]

§ 265.197 Closure.

At closure, all hazardous waste and hazardous waste residues must be removed from tanks, discharge control equipment, and discharge confinement structures.

[*Comment:* At closure, as throughout the operating period, unless the owner or operator can demonstrate, in accordance with § 261.3(c) or (d) of this Chapter, that any solid waste removed from his tank is not a hazardous waste, the owner or operator becomes a generator of hazardous waste and must manage it in accordance with all applicable requirements of Parts 262, 263, and 265 of this chapter.]

§ 265.198 Special requirements for ignitable or reactive waste.

(a) Ignitable or reactive waste must not be placed in a tank, unless:

(1) The waste is treated, rendered, or mixed before or immediately after placement in the tank so that (i) the resulting waste, mixture, or dissolution of material no longer meets the definition of ignitable or reactive waste under § 261.21 or § 261.23 of this chapter, and (ii) § 265.17(b) is complied with; or

(2) The waste is stored or treated in such a way that it is protected from any material or conditions which may cause the waste to ignite or react; or

(3) The tank is used solely for emergencies.

(b) The owner or operator of a facility which treats or stores ignitable or reactive waste in covered tanks must comply with the buffer zone requirements for tanks contained in Tables 2-1 through 2-6 of the National Fire Protection Association's "Flammable and Combustible Liquids Code" (1977 or 1981), (incorporated by reference, see § 260.11).

[45 FR 33232, May 19, 1980, as amended at 46 FR 35249, July 7, 1981]

§ 265.199 Special requirements for incompatible wastes.

(a) Incompatible wastes, or incompatible wastes and materials, (see Appendix V for examples) must not be placed in the same tank, unless § 265.17(b) is complied with.

(b) Hazardous waste must not be placed in an unwashed tank which previously held an incompatible waste or material, unless § 265.17(b) is complied with.

Subpart K—Surface Impoundments

§ 265.220 Applicability.

The regulations in this Subpart apply to owners and operators of facilities that use surface impoundments to treat, store, or dispose of hazardous waste, except as § 265.1 provides otherwise.

§ 265.221 [Reserved]

§ 265.222 General operating requirements.

A surface impoundment must maintain enough freeboard to prevent any overtopping of the dike by overfilling, wave action, or a storm. There must be at least 60 centimeters (2 feet) of freeboard.

[*Comment:* Any point source discharge from a surface impoundment to waters of the United States is subject to the requirements of Section 402 of the Clean Water Act, as amended. Spills may be subject to Section 311 of that Act.]

§ 265.223 Containment system.

All earthen dikes must have a protective cover, such as grass, shale, or rock, to minimize wind and water erosion and to preserve their structural integrity.

§ 265.224 [Reserved]

§ 265.225 Waste analysis and trial tests.

(a) In addition to the waste analyses required by § 265.13, whenever a surface impoundment is to be used to:

(1) Chemically treat a hazardous waste which is substantially different from waste previously treated in that impoundment; or

(2) Chemically treat hazardous waste with a substantially different process than any previously used in that impoundment; the owner or operator must, before treating the different waste or using the different process:

(i) Conduct waste analyses and trial treatment tests (e.g., bench scale or pilot plant scale tests); or

(ii) Obtain written, documented information on similar treatment of similar waste under similar operating conditions; to show that this treatment will comply with § 265.17(b).

[*Comment:* As required by § 265.13, the waste analysis plan must include analyses needed to comply with §§ 265.229 and 265.230. As required by § 265.73, the owner or operator must place the results from each waste analysis and trial test, or the documented information, in the operating record of the facility.]

§ 265.226 Inspections.

(a) The owner or operator must inspect:

(1) The freeboard level at least once each operating day to ensure compliance with § 265.222, and

(2) The surface impoundment, including dikes and vegetation surrounding the dike, at least once a week to detect any leaks, deterioration, or failures in the impoundment.

[*Comment:* As required by § 265.15(c), the owner or operator must remedy any deterioration or malfunction he finds.]

§ 265.227 [Reserved]

§ 265.228 Closure and post-closure.

(a) At closure, the owner or operator may elect to remove from the impoundment:

(1) Standing liquids;

(2) Waste and waste residues;

(3) The liner, if any; and

(4) Underlying and surrounding contaminated soil.

(b) If the owner or operator removes all the impoundment materials in paragraph (a) of this section, or can demonstrate under § 261.3(c) and (d) of this chapter that none of the materials listed in paragraph (a) of this Section remaining at any stage of removal are hazardous wastes, the impoundment is not further subject to the requirements of this part.

[*Comment:* At closure, as throughout the operating period, unless the owner or operator can demonstrate, in accordance with § 261.3 (c) or (d) of this chapter, that any solid waste removed from the surface impoundment is not a hazardous waste, he becomes a generator of hazardous waste and must manage it in accordance with all applicable requirements of Parts 262, 263, and 265 of this chapter. The surface impoundment may be subject to Part 257 of this chapter even if it is not subject to this Part.]

(c) If the owner or operator does not remove all the impoundment materials in paragraph (a) of this section, or does not make the demonstration in paragraph (b) of this section, he must close the impoundment and provide post-closure care as for a landfill under Subpart G and § 265.310. If necessary to support the final cover specified in the approved closure plan, the owner or operator must treat remaining liquids, residues, and soils by removal of liquids, drying, or other means.

[*Comment:* The closure requirements under § 265.310 will vary with the amount and nature of the residue remaining, if any, and the degree of contamination of the underlying and surrounding soil. Section 265.117(d) allows the Regional Administrator to vary post-closure care requirements.]

§ 265.229 Special requirements for ignitable or reactive waste.

(a) Ignitable or reactive waste must not be placed in a surface impoundment, unless:

(1) The waste is treated, rendered, or mixed before or immediately after placement in the impoundment so that (i) the resulting waste, mixture, or dissolution of material no longer meets the definition of ignitable or reactive waste under §§ 261.21 or 261.23 of this chapter, and (ii) § 265.17(b) is complied with; or

(2) The surface impoundment is used solely for emergencies.

§ 265.230 Special requirements for incompatible wastes.

Incompatible wastes, or incompatible wastes and materials, (see Appendix V for examples) must not be placed in the same surface impoundment, unless § 265.17(b) is complied with.

Subpart L—Waste Piles

§ 265.250 Applicability.

The regulations in this subpart apply to owners and operators of facilities that treat or store hazardous waste in piles, except as § 265.1 provides otherwise. Alternatively, a pile of hazardous waste may be managed as a landfill under Subpart N.

§ 265.251 Protection from wind.

The owner or operator of a pile containing hazardous waste which could be subject to dispersal by wind must cover or otherwise manage the pile so that wind dispersal is controlled.

§ 265.252 Waste analysis.

In addition to the waste analyses required by § 265.13, the owner or operator must analyze a representative sample of waste from each incoming movement before adding the waste to any existing pile, *unless* (1) The only wastes the facility receives which are amenable to piling are compatible with each other, or (2) the waste received is compatible with the waste in the pile to which it is to be added. The analysis conducted must be capable of differentiating between the types of hazardous waste the owner or operator places in piles, so that mixing of incompatible waste does not inadvertently occur. The analysis must include a visual comparison of color and texture.

[*Comment:* As required by § 265.13, the waste analysis plan must include analyses needed to comply with §§ 265.256 and 265.257. As required by § 265.73, the owner or operator must place the results of this

analysis in the operating record of the facility.]

§ 265.253 Containment.

If leachate or run-off from a pile is a hazardous waste, then either:

(a)(1) The pile must be placed on an impermeable base that is compatible with the waste under the conditions of treatment or storage;

(2) The owner or operator must design, construct, operate, and maintain a run-on control system capable of preventing flow onto the active portion of the pile during peak discharge from at least a 25-year storm;

(3) The owner or operator must design, construct, operate, and maintain a run-off management system to collect and control at least the water volume resulting from a 24-hour, 25-year storm; and

(4) Collection and holding facilities (e.g., tanks or basins) associated with run-on and run-off control systems must be emptied or otherwise managed expeditiously to maintain design capacity of the system; or

(b)(1) The pile must be protected from precipitation and run-on by some other means; and

(2) No liquids or wastes containing free liquids may be placed in the pile.

[*Comment:* If collected leachate or run-off is discharged through a point source to waters of the United States, it is subject to the requirements of Section 402 of the Clean Water Act, as amended.]

[45 FR 33232, May 19, 1980, as amended at 47 FR 32367, July 26, 1982]

§§ 265.254—265.255 [Reserved]

§ 265.256 Special requirements for ignitable or reactive waste.

(a) Ignitable or reactive wastes must not be placed in a pile, *unless:*

(1) Addition of the waste to an existing pile (i) results in the waste or mixture no longer meeting the definition of ignitable or reactive waste under § 261.21 or § 261.23 of this chapter, and (ii) complies with § 265.17(b); or

(2) The waste is managed in such a way that it is protected from any material or conditions which may cause it to ignite or react.

§ 265.257 Special requirements for incompatible wastes.

(a) Incompatible wastes, or incompatible wastes and materials, (see Appendix V for examples) must not be placed in the same pile, unless § 265.17(b) is complied with.

(b) A pile of hazardous waste that is incompatible with any waste or other material stored nearby in other containers, piles, open tanks, or surface impoundments must be separated from the other materials, or protected from them by means of a dike, berm, wall, or other device.

[*Comment:* The purpose of this is to prevent fires, explosions, gaseous emissions, leaching, or other discharge of hazardous waste or hazardous waste constituents which could result from the contact or mixing of incompatible wastes or materials.]

(c) Hazardous waste must not be piled on the same area where incompatible wastes or materials were previously piled, unless that area has been decontaminated sufficiently to ensure compliance with § 265.17(b).

§ 265.258 Closure and post-closure care.

(a) At closure, the owner or operator must remove or decontaminate all waste residues, contaminated containment system components (liners, etc.), contaminated subsoils, and structures and equipment contaminated with waste and leachate, and manage them as hazardous waste unless § 261.3(d) of this chapter applies; or

(b) If, after removing or decontaminating all residues and making all reasonable efforts to effect removal or decontamination of contaminated components, subsoils, structures, and equipment as required in paragraph (a) of this section, the owner or operator finds that not all contaminated subsoils can be practicably removed or decontaminated, he must close the facility and perform post-closure care in accordance with the closure and post-closure requirements that apply to landfills (§ 265.310).

[47 FR 32368, July 26, 1982]

Subpart M—Land Treatment

§ 265.270 Applicability.

The regulations in this subpart apply to owners and operators of hazardous waste land treatment facilities, except as § 265.1 provides otherwise.

§ 265.271 [Reserved]

§ 265.272 General operating requirements.

(a) Hazardous waste must not be placed in or on a land treatment facility unless the waste can be made less hazardous or non-hazardous by biological degradation or chemical reactions occurring in or on the soil.

(b) The owner or operator must design, construct, operate, and maintain a run-on control system capable of preventing flow onto the active portions of the facility during peak discharge from at least a 25-year storm.

(c) The owner or operator must design, construct, operate, and maintain a run-off management system capable of collecting and controlling a water volume at least equivalent to a 24-hour, 25-year storm.

(d) Collection and holding facilities (e.g., tanks or basins) associated with run-on and run-off control systems must be emptied or otherwise managed expeditiously after storms to maintain design capacity of the system.

(e) If the treatment zone contains particulate matter which may be subject to wind dispersal, the owner or operator must manage the unit to control wind dispersal.

[45 FR 33232, May 19, 1980, as amended at 47 FR 32368, July 26, 1982]

§ 265.273 Waste analysis.

In addition to the waste analyses required by § 265.13, before placing a hazardous waste in or on a land treatment facility, the owner or operator must:

(a) Determine the concentrations in the waste of any substances which exceed the maximum concentrations contained in Table I of § 261.24 of this chapter that cause a waste to exhibit the EP toxicity characteristic;

(b) For any waste listed in Part 261, Subpart D, of this chapter, determine the concentrations of any substances which caused the waste to be listed as a hazardous waste; and

(c) If food chain crops are grown, determine the concentrations in the waste of each of the following constituents: arsenic, cadmium, lead, and mercury, *unless* the owner or operator has written, documented data that show that the constituent is not present.

[*Comment:* Part 261 of this chapter specifies the substances for which a waste is listed as a hazardous waste. As required by § 265.13, the waste analysis plan must include analyses needed to comply with §§ 265.281 and 265.282. As required by § 265.73, the owner or operator must place the results from each waste analysis, or the documented information, in the operating record of the facility.]

§§ 265.274—265.275 [Reserved]

§ 265.276 Food chain crops.

(a) An owner or operator of a hazardous waste land treatment facility on which food chain crops are being grown, or have been grown and will be grown in the future, must notify the Regional Administrator within 60 days after the effective date of this part.

[*Comment:* The growth of food chain crops at a facility which has never before been used for this purpose is a significant change in process under § 122.72(c) of this chapter. Owners or operators of such land treatment facilities who propose to grow food chain crops after the effective date of this part must comply with § 122.72(c) of this chapter.]

(b)(1) Food chain crops must not be grown on the treated area of a hazardous waste land treatment facility unless the owner or operator can demonstrate, based on field testing, that any arsenic, lead, mercury, or other constituents identified under § 265.273(b):

(i) Will not be transferred to the food portion of the crop by plant uptake or direct contact, and will not otherwise be ingested by food chain animals (e.g., by grazing); or

(ii) Will not occur in greater concentrations in the crops grown on the land treatment facility than in the same crops grown on untreated soils under similar conditions in the same region.

(2) The information necessary to make the demonstration required by paragraph (b)(1) of this section must be kept at the facility and must, at a minimum:

(i) Be based on tests for the specific waste and application rates being used at the facility; and

(ii) Include descriptions of crop and soil characteristics, sample selection criteria, sample size determination, analytical methods, and statistical procedures.

(c) Food chain crops must not be grown on a land treatment facility receiving waste that contains cadmium unless all requirements of paragraphs (c)(1) (i) through (iii) of this section or all requirements of paragraphs (c)(2) (i) through (iv) of this section are met.

(1)(i) The pH of the waste and soil mixture is 6.5 or greater at the time of each waste application, except for waste containing cadmium at concentrations of 2 mg/kg (dry weight) or less;

(ii) The annual application of cadmium from waste does not exceed 0.5 kilograms per hectare (kg/ha) on land used for production of tobacco, leafy vegetables, or root crops grown for human consumption. For other food chain crops, the annual cadmium application rate does not exceed:

Time period	Annual Cd application rate (kg/ha)
Present to June 30, 1984	2.0
July 1, 1984 to Dec. 31, 1986	1.25
Beginning Jan. 1, 1987	0.5

(iii) The cumulative application of cadmium from waste does not exceed the levels in either paragraph (c)(1)(iii)(A) of this section or paragraph (c)(1)(iii)(B) of this section.

(A)

Soil caption exchange capacity (meq/100g)	Maximum cumulative application (kg/ha)	
	Background soil pH less than 6.5	Background soil pH greater than 6.5
Less than 5	5	5
5 to 15	5	10
Greater than 15	5	20

(B) For soils with a background pH of less than 6.5, the cumulative cadmium application rate does not exceed the levels below: *Provided*, that the pH of the waste and soil mixture is adjusted to and maintained at 6.5 or greater whenever food chain crops are grown.

Soil caption exchange capacity (meq/100g)	Maximum cumulative application (kg/ha)
Less than 5	5
5 to 15	10
Greater than 15	20

(2)(i) The only food chain crop produced is animal feed.

(ii) The pH of the waste and soil mixture is 6.5 or greater at the time of waste application or at the time the crop is planted, whichever occurs later, and this pH level is maintained whenever food chain crops are grown.

(iii) There is a facility operating plan which demonstrates how the animal feed will be distributed to preclude ingestion by humans. The facility operating plan describes the measures to be taken to safeguard against possible health hazards from cadmium entering the food chain, which may result from alternative land uses.

(iv) Future property owners are notified by a stipulation in the land record or property deed which states that the property has received waste at high cadmium application rates and that food chain crops must not be grown except in compliance with paragraph (c)(2) of this section.

[*Comment:* As required by § 265.73, if an owner or operator grows food chain crops on his land treatment facility, he must place the information developed in this section in the operating record of the facility.]

[45 FR 33232, May 19, 1980, as amended at 47 FR 32368, July 26, 1982; 48 FR 14295, Apr. 1, 1983]

§ 265.277 [Reserved]

§ 265.278 Unsaturated zone (zone of aeration) monitoring.

(a) The owner or operator must have in writing, and must implement, an unsaturated zone monitoring plan which is designed to:

(1) Detect the vertical migration of hazardous waste and hazardous waste constituents under the active portion of the land treatment facility, and

(2) Provide information on the background concentrations of the hazardous waste and hazardous waste constituents in similar but untreated soils nearby; this background monitoring must be conducted before or in conjunction with the monitoring required under paragraph (a)(1) of this section.

(b) The unsaturated zone monitoring plan must include, at a minimum:

(1) Soil monitoring using soil cores, and

(2) Soil-pore water monitoring using devices such as lysimeters.

(c) To comply with paragraph (a)(1) of this section, the owner or operator must demonstrate in his unsaturated zone monitoring plan that:

(1) The depth at which soil and soil-pore water samples are to be taken is below the depth to which the waste is incorporated into the soil;

(2) The number of soil and soil-pore water samples to be taken is based on the variability of:

(i) The hazardous waste constituents (as identified in § 265.273(a) and (b)) in the waste and in the soil; and

(ii) The soil type(s); and

(3) The frequency and timing of soil and soil-pore water sampling is based on the frequency, time, and rate of waste application, proximity to ground water, and soil permeability.

(d) The owner or operator must keep at the facility his unsaturated zone monitoring plan, and the rationale used in developing this plan.

(e) The owner or operator must analyze the soil and soil-pore water samples for the hazardous waste constituents that were found in the waste during the waste analysis under § 265.273 (a) and (b).

[*Comment:* As required by § 265.73, all data and information developed by the owner or operator under this section must be placed in the operating record of the facility.]

§ 265.279 Recordkeeping.

The owner or operator must include hazardous waste application dates and rates in the operating record required under § 265.73.

[47 FR 32368, July 26, 1982]

§ 265.280 Closure and post-closure.

(a) In the closure plan under § 265.112 and the post-closure plan under § 265.118, the owner or operator must address the following objectives and indicate how they will be achieved:

(1) Control of the migration of hazardous waste and hazardous waste constituents from the treated area into the ground water;

(2) Control of the release of contaminated run-off from the facility into surface water;

(3) Control of the release of airborne particulate contaminants caused by wind erosion; and

(4) Compliance with § 265.276 concerning the gowth of food-chain crops.

(b) The owner or operator must consider at least the following factors in addressing the closure and post-closure care objectives of paragraph (a) of this section:

(1) Type and amount of hazardous waste and hazardous waste constituents applied to the land treatment facility;

(2) The mobility and the expected rate of migration of the hazardous waste and hazardous waste constituents;

(3) Site location, topography, and surrounding land use, with respect to the potential effects of pollutant migration (e.g., proximity to ground water, surface water and drinking water sources);

(4) Climate, including amount, frequency, and pH of precipitation;

(5) Geological and soil profiles and surface and subsurface hydrology of the site, and soil characteristics, including cation exchange capacity, total organic carbon, and pH;

(6) Unsaturated zone monitoring information obtained under § 265.278; and

(7) Type, concentration, and depth of migration of hazardous waste constituents in the soil as compared to their background concentrations.

(c) The owner or operator must consider at least the following methods in addressing the closure and post-closure care objectives of paragraph (a) of this section:

(1) Removal of contaminated soils;

(2) Placement of a final cover, considering:

(i) Functions of the cover (e.g., infiltration control, erosion and run-off control, and wind erosion control); and

(ii) Characteristics of the cover, including material, final surface contours, thickness, porosity and permeability, slope, length of run of slope, and type of vegetation on the cover; and

(3) Monitoring of ground water.

(d) In addition to the requirements of Subpart G of this part, during the closure period the owner or operator of a land treatment facility must:

(1) Continue unsaturated zone monitoring in a manner and frequency specified in the closure plan, except that soil pore liquid monitoring may be terminated 90 days after the last application of waste to the treatment zone;

(2) Maintain the run-on control system required under § 265.272(b);

(3) Maintain the run-off management system required under § 265.272(c); and

(4) Control wind dispersal of particulate matter which may be subject to wind dispersal.

(e) For the purpose of complying with § 265.115, when closure is completed the owner or operator may submit to the Regional Administrator certification both by the owner or operator and by an independent qualified soil scientist, in lieu of an independent registered professional engineer, that the facility has been closed in accordance with the specifications in the approved closure plan.

(f) In addition to the requirements of § 265.117, during the post-closure care period the owner or operator of a land treatment unit must:

(1) Continue soil-core monitoring by collecting and analyzing samples in a manner and frequency specified in the post-closure plan;

(2) Restrict access to the unit as appropriate for its post-closure use;

(3) Assure that growth of food chain crops complies with § 265.276; and

(4) Control wind dispersal of hazardous waste.

[45 FR 33232, May 19, 1980, as amended at 47 FR 32368, July 26, 1982]

§ 265.281 Special requirements for ignitable or reactive waste.

Ignitable or reactive waste must not be land treated unless:

(a) The waste is immediately incorporated into the soil so that:

(1) The resulting waste, mixture, or dissolution of material no longer meets the definition of ignitable or reactive waste under § 265.21 or § 261.23 of this chapter; and

(2) Section 264.17(b) is complied with; or

(b) The waste is managed in such a way that it is protected from any material or conditions which may cause it to ignite or react.

[47 FR 32368, July 26, 1982]

§ 265.282 Special requirements for incompatible wastes.

Incompatible wastes, or incompatible wastes and materials (see Appendix V for examples), must not be placed in the same land treatment area, unless § 265.17(b) is complied with.

Subpart N—Landfills

§ 265.300 Applicability.

The regulations in this subpart apply to owners and operators of facilities that dispose of hazardous waste in landfills, except as § 265.1 provides otherwise. A waste pile used as a disposal facility is a landfill and is governed by this Subpart.

§ 265.301 [Reserved]

§ 265.302 General operating requirements.

(a) The owner or operator must design, construct, operate, and maintain a run-on control system capable of preventing flow onto the active por-

tion of the landfill during peak discharge from at least a 25-year storm.

(b) The owner or operator must design, construct, operate and maintain a run-off management system to collect and control at least the water volume resulting from a 24-hour, 25-year storm.

(c) Collection and holding facilities (e.g., tanks or basins) associated with run-on and run-off control systems must be emptied or otherwise managed expeditiously after storms to maintain design capacity of the system.

(d) The owner or operator of a landfill containing hazardous waste which is subject to dispersal by wind must cover or otherwise manage the landfill so that wind dispersal of the hazardous waste is controlled.

[*Comment:* As required by § 265.13, the waste analysis plan must include analyses needed to comply with §§ 265.312 and 265.313. As required by § 265.73, the owner or operator must place the results of these analyses in the operating record of the facility.]

[45 FR 33232, May 19, 1980, as amended at 47 FR 32368, July 26, 1982]

§§ 265.303—265.308 [Reserved]

§ 265.309 Surveying and recordkeeping.

The owner or operator of a landfill must maintain the following items in the operating record required in §.265.73:

(a) On a map, the exact location and dimensions, including depth, of each cell with respect to permanently surveyed benchmarks; and

(b) The contents of each cell and the approximate location of each hazardous waste type within each cell.

§ 265.310 Closure and post-closure.

(a) The owner or operator must place a final cover over the landfill, and the closure plan under § 265.112 must specify the function and design of the cover. In the post-closure plan under § 265.118, the owner or operator must include the post-closure care requirements of paragraph (d) of this section.

(b) In the closure and post-closure plans, the owner or operator must address the following objectives and indicate how they will be achieved:

(1) Control of pollutant migration from the facility via ground water, surface water, and air;

(2) Control of surface water infiltration, including prevention of pooling; and

(3) Prevention of erosion.

(c) The owner or operator must consider at least the following factors in addressing the closure and post-closure care objectives of paragraph (b) of this section:

(1) Type and amount of hazardous waste and hazardous waste constituents in the landfill;

(2) The mobility and the expected rate of migration of the hazardous waste and hazardous waste constituents;

(3) Site location, topography, and surrounding land use, with respect to the potential effects of pollutant migration (e.g., proximity to ground water, surface water, and drinking water sources);

(4) Climate, including amount, frequency, and pH of precipitation;

(5) Characteristics of the cover including material, final surface contours, thickness, porosity and permeability, slope, length of run of slope, and type of vegetation on the cover; and

(6) Geological and soil profiles and surface and subsurface hydrology of the site.

(d) In addition to the requirements of § 265.117, during the post-closure care period, the owner or operator of a hazardous waste landfill must:

(1) Maintain the function and integrity of the final cover as specified in the approved closure plan;

(2) Maintain and monitor the leachate collection, removal, and treatment system (if there is one present in the landfill) to prevent excess accumulation of leachate in the system;

[*Comment:* If the collected leachate is a hazardous waste under Part 261 of this Chapter, it must be managed as a hazardous waste in accordance with all applicable requirements of Parts 262, 263, and 265 of this Chapter. If the collected leachate is discharged through a point source to waters of the United States, it is subject to the requirements of Section 402 of the Clean Water Act, as amended.]

(3) Maintain and monitor the gas collection and control system (if there is one present in the landfill) to control the vertical and horizontal escape of gases;

(4) Protect and maintain surveyed benchmarks; and

(5) Restrict access to the landfill as appropriate for its post-closure use.

§ 265.311 [Reserved]

§ 265.312 Special requirements for ignitable or reactive waste.

(a) Except as provided in paragraph (b) of this section, and in § 265.316, ignitable or reactive waste must not be placed in a landfill, unless the waste is treated, rendered, or mixed before or immediately after placement in a landfill so that:

(1) The resulting waste, mixture, or dissolution or material no longer meets the definition of ignitable or reactive waste under § 261.21 or § 261.23 of this chapter; and

(2) Section 265.17(b) is complied with.

(b) Ignitable wastes in containers may be landfilled without meeting the requirements of paragraph (a) of this section provided that the wastes are disposed in such a way that they are protected from any material or conditions which may cause them to ignite. At a minimum, ignitable wastes must be disposed in non-leaking containers which are carefully handled and placed so as to avoid heat, sparks, rupture, or any other condition that might cause ignition of the wastes; must be covered daily with soil or other non-combustible material to minimize the potential for ignition of the wastes; and must not be disposed in cells that contain or will contain other wastes which may generate heat sufficient to cause ignition of the waste.

[47 FR 32368, July 26, 1982]

§ 265.313 Special requirements for incompatible wastes.

Incompatible wastes, or incompatible wastes and materials, (see Appendix V for examples) must not be placed in the same landfill cell, unless § 265.17(b) is complied with.

§ 265.314 Special requirements for liquid waste.

(a) Bulk or non-containerized liquid waste or waste containing free liquids must not be placed in a landfill unless:

(1) The landfill has a liner and leachate collection and removal system that meets the requirements of § 264.301(a) of this chapter; or

(2) Before disposal, the liquid waste or waste containing free liquids is treated or stabilized, chemically or physically (e.g., by mixing with an absorbent solid), so that free liquids are no longer present.

(b) Containers holding free liquids must not be placed in a landfill unless:

(1) All free-standing liquid (i) has been removed by decanting, or other methods, (ii) has been mixed with absorbent or solidified so that free-standing liquid is no longer observed or (iii) had been otherwise eliminated; or

(2) The container is very small, such as an ampule; or

(3) The container is designed to hold free liquids for use other than storage, such as a battery or capacitor; or

(4) The container is a lab pack as defined in § 265.316 and is disposed of in accordance with § 265.316.

(c) The date for compliance with paragraph (a) of this section is November 19, 1981. The date for compliance with paragraph (b) of this section is March 22, 1982.

[45 FR 33232, May 19, 1980, as amended at 47 FR 12318, Mar. 22, 1982; 47 FR 32369, July 26, 1982]

§ 265.315 Special requirements for containers.

(a) An empty container must be crushed flat, shredded, or similarly reduced in volume before it is buried beneath the surface of a landfill.

(b) The date for compliance with this section is 12 months after the effective date of this part.

§ 265.316 Disposal of small containers of hazardous waste in overpacked drums (lab packs).

Small containers of hazardous waste in overpacked drums (lab packs) may

be placed in a landfill if the following requirements are met:

(a) Hazardous waste must be packaged in non-leaking inside containers. The inside containers must be of a design and constructed of a material that will not react dangerously with, be decomposed by, or be ignited by the waste held therein. Inside containers must be tightly and securely sealed. The inside containers must be of the size and type specified in the Department of Transportation (DOT) hazardous materials regulations (49 CFR Parts 173, 178 and 179), if those regulations specify a particular inside container for the waste.

(b) The inside containers must be overpacked in an open head DOT-specification metal shipping container (49 CFR Parts 178 and 179) of no more than 416-liter (110 gallon) capacity and surrounded by, at a minimum, a sufficient quantity of absorbent material to completely absorb all of the liquid contents of the inside containers. The metal outer container must be full after packing with inside containers and absorbent material.

(c) The absorbent material used must not be capable of reacting dangerously with, being decomposed by, or being ignited by the contents of the inside containers, in accordance with § 265.17(b).

(d) Incompatible wastes, as defined in § 260.10(a) of this chapter, must not be placed in the same outside container.

(e) Reactive waste, other than cyanide- or sulfide-bearing waste as defined in § 261.23(a)(5) of this chapter, must be treated or rendered non-reactive prior to packaging in accordance with paragraphs (a) through (d) of this section. Cyanide- and sulfide-bearing reactive waste may be packaged in accordance with paragraphs (a) through (d) of this section without first being treated or rendered non-reactive.

[46 FR 56596, Nov. 17, 1981]

Subpart O—Incinerators

SOURCE: 46 FR 7680, Jan. 23, 1981, unless otherwise noted.

§ 265.340 Applicability.

(a) The regulations in this subpart apply to owners or operators of facilities that treat hazardous waste in incinerators, except as § 265.1 and paragraph (b) of this section provide otherwise.

(b) Owners and operators of incinerators burning hazardous waste are exempt from all of the requirements of this subpart, except § 265.351 (Closure), provided that the owner or operator has documented, in writing, that the waste would not reasonably be expected to contain any of the hazardous constituents listed in Part 261, Appendix VIII, of this chapter, and such documentation is retained at the facility, if the waste to be burned is:

(1) Listed as a hazardous waste in Part 261, Subpart D, of this chapter solely because it is ignitable (Hazard Code I), corrosive (Hazard Code C), or both; or

(2) Listed as a hazardous waste in Part 261, Subpart D, of this chapter solely because it is reactive (Hazard Code R) for characteristics other than those listed in § 261.23(a) (4) and (5), and will not be burned when other hazardous wastes are present in the combustion zone; or

(3) A hazardous waste solely because it possesses the characteristic of ignitability, corrosivity, or both, as determined by the tests for characteristics of hazardous wastes under Part 261, Subpart C, of this chapter; or

(4) A hazardous waste solely because it possesses the reactivity characteristics described by § 261.23(a) (1), (2), (3), (6), (7), or (8) of this chapter, and will not be burned when other hazardous wastes are present in the combustion zone.

[46 FR 7678, Jan. 23, 1981, as amended at 47 FR 27533, June 24, 1982]

§ 265.341 Waste analysis.

In addition to the waste analyses required by § 265.13, the owner or operator must sufficiently analyze any waste which he has not previously burned in his incinerator to enable him to establish steady state (normal) operating conditions (including waste and auxiliary fuel feed and air flow) and to determine the type of pollutants which might be emitted. At a minimum, the analysis must determine:

(a) Heating value of the waste;

(b) Halogen content and sulfur content in the waste; and

(c) Concentrations in the waste of lead and mercury, unless the owner or operator has written, documented data that show that the element is not present.

[*Comment:* As required by § 265.73, the owner or operator must place the results from each waste analysis, or the documented information, in the operating record of the facility.]

§§ 265.342—265.344 [Reserved]

§ 265.345 General operating requirements.

During start-up and shut-down of an incinerator, the owner or operator must not feed hazardous waste unless the incinerator is at steady state (normal) conditions of operation, including steady state operating temperature and air flow.

§ 265.346 [Reserved]

§ 265.347 Monitoring and inspections.

The owner or operator must conduct, as a minimum, the following monitoring and inspections when incinerating hazardous waste:

(a) Existing instruments which relate to combustion and emission control must be monitored at least every 15 minutes. Appropriate corrections to maintain steady state combustion conditions must be made immediately either automatically or by the operator. Instruments which relate to combustion and emission control would normally include those measuring waste feed, auxiliary fuel feed, air flow, incinerator temperature, scrubber flow, scrubber pH, and relevant level controls.

(b) The complete incinerator and associated equipment (pumps, valves, conveyors, pipes, etc.) must be inspected at least daily for leaks, spills, and fugitive emissions, and all emergency shutdown controls and system alarms must be checked to assure proper operation.

[46 FR 7678, Jan. 23, 1981, as amended at 47 FR 27533, June 24, 1982]

§§ 265.348—265.350 [Reserved]

§ 265.351 Closure.

At closure, the owner or operator must remove all hazardous waste and hazardous waste residues (including but not limited to ash, scrubber waters, and scrubber sludges) from the incinerator.

[*Comment:* At closure, as throughout the operating period, unless the owner or operator can demonstrate, in accordance with § 261.3(d) of this chapter, that the residue removed from his incinerator is not a hazardous waste, the owner or operator becomes a generator of hazardous waste and must manage it in accordance with all applicable requirements of Parts 262 through 266 of this chapter.]

§§ 265.352—265.369 [Reserved]

Subpart P—Thermal Treatment

§ 265.370 Applicability.

The regulations in this subpart apply to owners and operators of facilities that thermally treat hazardous waste in devices other than incinerators, except as § 265.1 provides otherwise. Thermal treatment in incinerators is subject to the requirements of Subpart O.

§§ 265.371—265.372 [Reserved]

§ 265.373 General operating requirements.

Before adding hazardous waste, the owner or operator must bring his thermal treatment process to steady state (normal) conditions of operation—including steady state operating temperature—using auxiliary fuel or other means, unless the process is a non-continuous (batch) thermal treatment process which requires a complete thermal cycle to treat a discrete quantity of hazardous waste.

§ 265.374 [Reserved]

§ 265.375 Waste analysis.

In addition to the waste analyses required by § 265.13, the owner or operator must sufficiently analyze any waste which he has not previously treated in his thermal process to enable him to establish steady state (normal) or other appropriate (for a

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non-continuous process) operating conditions (including waste and auxiliary fuel feed) and to determine the type of pollutants which might be emitted. At a minimum, the analysis must determine:

(a) Heating value of the waste;

(b) Halogen content and sulfur content in the waste; and

(c) Concentrations in the waste of lead and mercury, *unless* the owner or operator has written, documented data that show that the element is not present.

[*Comment:* As required by § 265.73, the owner or operator must place the results from each waste analysis, or the documented information, in the operating record of the facility.]

§ 265.376 [Reserved]

§ 265.377 Monitoring and inspections.

(a) The owner or operator must conduct, as a minimum, the following monitoring and inspections when thermally treating hazardous waste:

(1) Existing instruments which relate to temperature and emission control (if an emission control device is present) must be monitored at least every 15 minutes. Appropriate corrections to maintain steady state or other appropriate thermal treatment conditions must be made immediately either automatically or by the operator. Instruments which relate to temperature and emission control would normally include those measuring waste feed, auxiliary fuel feed, treatment process temperature, and relevant process flow and level controls.

(2) The stack plume (emissions), where present, must be observed visually at least hourly for normal appearance (color and opacity). The operator must immediately make any indicated operating corrections necessary to return any visible emissions to their normal appearance.

(3) The complete thermal treatment process and associated equipment (pumps, valves, conveyors, pipes, etc.) must be inspected at least daily for leaks, spills, and fugitive emissions, and all emergency shutdown controls and system alarms must be checked to assure proper operation.

§§ 265.378—265.380 [Reserved]

§ 265.381 Closure.

At closure, the owner or operator must remove all hazardous waste and hazardous waste residues (including, but not limited to, ash) from the thermal treatment process or equipment.

[*Comment:* At closure, as throughout the operating period, unless the owner or operator can demonstrate, in accordance with § 261.3(c) or (d) of this chapter, that any solid waste removed from his thermal treatment process or equipment is not a hazardous waste, the owner or operator becomes a generator of hazardous waste and must manage it in accordance with all applicable requirements of Parts 262, 263, and 265 of this chapter.]

§ 265.382 Open burning; waste explosives.

Open burning of hazardous waste is prohibited except for the open burning and detonation of waste explosives. Waste explosives include waste which has the potential to detonate and bulk military propellants which cannot safely be disposed of through other modes of treatment. Detonation is an explosion in which chemical transformation passes through the material faster than the speed of sound (0.33 kilometers/second at sea level). Owners or operators choosing to open burn or detonate waste explosives must do so in accordance with the following table and in a manner that does not threaten human health or the environment.

Pounds of waste explosives or propellants	Minimum distance from open burning or detonation to the property of others
0 to 100	204 meters (670 feet).
101 to 1,000	380 meters (1,250 feet).
1,001 to 10,000	530 meters (1,730 feet).
10,001 to 30,000	690 meters (2,260 feet).

Subpart Q—Chemical, Physical, and Biological Treatment

§ 265.400 Applicability.

The regulations in this Subpart apply to owners and operators of facilities which treat hazardous wastes by chemical, physical, or biological methods in other than tanks, surface impoundments, and land treatment facilities, except as § 265.1 provides otherwise. Chemical, physical, and biological treatment of hazardous waste in tanks, surface impoundments, and land treatment facilities must be conducted in accordance with Subparts J, K, and M, respectively.

§ 265.401 General operating requirements.

(a) Chemical, physical, or biological treatment of hazardous waste must comply with § 265.17(b).

(b) Hazardous wastes or treatment reagents must not be placed in the treatment process or equipment if they could cause the treatment process or equipment to rupture, leak, corrode, or otherwise fail before the end of its intended life.

(c) Where hazardous waste is continuously fed into a treatment process or equipment, the process or equipment must be equipped with a means to stop this inflow (e.g., a waste feed cut-off system or by-pass system to a standby containment device).

[*Comment:* These systems are intended to be used in the event of a malfunction in the treatment process or equipment.]

§ 265.402 Waste analysis and trial tests.

(a) In addition to the waste analysis required by § 265.13, whenever:

(1) A hazardous waste which is substantially different from waste previously treated in a treatment process or equipment at the facility is to be treated in that process or equipment, or

(2) A substantially different process than any previously used at the facility is to be used to chemically treat hazardous waste;

the owner or operator must, before treating the different waste or using the different process or equipment:

(i) Conduct waste analyses and trial treatment tests (e.g., bench scale or pilot plant scale tests); or

(ii) Obtain written, documented information on similar treatment of similar waste under similar operating conditions;

to show that this proposed treatment will meet all applicable requirements of § 265.401 (a) and (b).

[*Comment:* As required by § 265.13, the waste analysis plan must include analyses needed to comply with §§ 265.405 and 265.406. As required by § 265.73, the owner or operator must place the results from each waste analysis and trial test, or the documented information, in the operating record of the facility.]

§ 265.403 Inspections.

(a) The owner or operator of a treatment facility must inspect, where present:

(1) Discharge control and safety equipment (e.g., waste feed cut-off systems, by-pass systems, drainage systems, and pressure relief systems) at least once each operating day, to ensure that it is in good working order;

(2) Data gathered from monitoring equipment (e.g., pressure and temperature gauges), at least once each operating day, to ensure that the treatment process or equipment is being operated according to its design;

(3) The construction materials of the treatment process or equipment, at least weekly, to detect corrosion or leaking of fixtures or seams; and

(4) The construction materials of, and the area immediately surrounding, discharge confinement structures (e.g., dikes), at least weekly, to detect erosion or obvious signs of leakage (e.g., wet spots or dead vegetation).

[*Comment:* As required by § 265.15(c), the owner or operator must remedy any deterioration or malfunction he finds.]

§ 265.404 Closure.

At closure, all hazardous waste and hazardous waste residues must be removed from treatment processes or equipment, discharge control equipment, and discharge confinement structures.

[*Comment:* At closure, as throughout the operating period, unless the owner or operator can demonstrate, in accordance with § 261.3 (c) or (d) of this chapter, that any solid waste removed from his treatment process or equipment is not a hazardous waste, the owner or operator becomes a generator of hazardous waste and must manage it in accordance with all applicable requirements of Parts 262, 263, and 265 of this chapter.]

§ 265.405 Special requirements for ignitable or reactive waste.

(a) Ignitable or reactive waste must not be placed in a treatment process or equipment unless:

(1) The waste is treated, rendered, or mixed before or immediately after placement in the treatment process or equipment so that (i) the resulting waste, mixture, or dissolution of material no longer meets the definition of ignitable or reactive waste under § 261.21 or 261.23 or this chapter, and (ii) § 265.17(b) is complied with; or

(2) The waste is treated in such a way that it is protected from any material or conditions which may cause the waste to ignite or react.

§ 265.406 Special requirements for incompatible wastes.

(a) Incompatible wastes, or incompatible wastes and materials, (see Appendix V for examples) must not be placed in the same treatment process or equipment, unless § 265.17(b) is complied with.

(b) Hazardous waste must not be placed in unwashed treatment equipment which previously held an incompatible waste or material, unless § 265.17(b) is complied with.

Subpart R—Underground Injection

§ 265.430 Applicability.

Except as § 265.1 provides otherwise:

(a) The owner or operator of a facility which disposes of hazardous waste by underground injection is excluded from the requirements of Subparts G and H of this part.

(b) The requirements of this subpart apply to owners and operators of wells used to dispose of hazardous waste which are classified as Class I under § 144.6(a) of this chapter and which are classified as Class IV under § 144.6(d) of this chapter.

[*Comment:* In addition to the requirements of Subparts A through E of this Part, the owner or operator of a facility which disposes of hazardous waste by underground injection ultimately must comply with the requirements of §§ 265.431 through 265.437. These sections are reserved at this time. The Agency will propose regulations that would establish those requirements.]

[45 FR 33232, May 19, 1980, as amended at 48 FR 30115, June 30, 1983]

Appendix I—Recordkeeping Instructions

The recordkeeping provisions of § 265.73 specify that an owner or operator must keep a written operating record at his facility. This appendix provides additional instructions for keeping *portions* of the operating record. See § 265.73(b) for additional recordkeeping requirements.

The following information must be recorded, as it becomes available, and maintained in the operating record until closure of the facility in the following manner:

Records of each hazardous waste received, treated, stored, or disposed of at the facility which include the following:

(1) A description by its common name and the EPA Hazardous Waste Number(s) from Part 261 of this chapter which apply to the waste. The waste description also must include the waste's physical form, i.e., liquid, sludge, solid, or contained gas. If the waste is not listed in Part 261, Subpart D, of this chapter, the description also must include the process that produced it (for example, solid filter cake from production of ——, EPA Hazardous Waste Number W051).

Each hazardous waste listed in Part 261, Subpart D, of this chapter, and each hazardous waste characteristic defined in Part 261, Subpart C, of this chapter, has a four-digit EPA Hazardous Waste Number assigned to it. This number must be used for recordkeeping and reporting purposes. Where a hazardous waste contains more than one listed hazardous waste, or where more than one hazardous waste characteristic applies to the waste, the waste description must include all applicable EPA Hazardous Waste Numbers.

(2) The estimated or manifest-reported weight, or volume and density, where applicable, in one of the units of measure specified in Table 1; and

(3) The method(s) (by handling code(s) as specified in Table 2) and date(s) of treatment, storage, or disposal.

Table 1

Unit of measure	Symbol[1]	Density
Pounds	P	
Short tons (2000 lbs)	T	
Gallons (U.S.)	G	P/G
Cubic yards	Y	T/Y
Kilograms	K	
Tonnes (1000 kg)	M	
Liters	L	K/L
Cubic meters	C	M/C

[1] Single digit symbols are used here for data processing purposes.

Table 2—Handling Codes for Treatment, Storage, and Disposal Methods

Enter the handling code(s) listed below that most closely represents the technique(s) used at the facility to treat, store, or dispose of each quantity of hazardous waste received.

1. Storage

S01 Container (barrel, drum, etc.)
S02 Tank
S03 Waste pile
S04 Surface impoundment
S05 Other (specify)

2. Treatment

(a) Thermal Treatment

T06 Liquid injection incinerator
T07 Rotary kiln incinerator
T08 Fluidized bed incinerator
T09 Multiple hearth incinerator
T10 Infrared furnace incinerator
T11 Molten salt destructor
T12 Pyrolysis
T13 Wet air oxidation
T14 Calcination
T15 Microwave discharge
T16 Cement kiln
T17 Lime kiln
T18 Other (specify)

(b) Chemical Treatment

T19 Absorption mound
T20 Absorption field
T21 Chemical fixation
T22 Chemical oxidation
T23 Chemical precipitation
T24 Chemical reduction
T25 Chlorination
T26 Chlorinolysis
T27 Cyanide destruction
T28 Degradation
T29 Detoxification
T30 Ion exchange
T31 Neutralization
T32 Ozonation
T33 Photolysis
T34 Other (specify)

(c) Physical Treatment:

(1) Separation of components

T35 Centrifugation
T36 Clarification
T37 Coagulation
T38 Decanting
T39 Encapsulation
T40 Filtration
T41 Flocculation
T42 Flotation
T43 Foaming
T44 Sedimentation
T45 Thickening
T46 Ultrafiltration
T47 Other (specify)

(2) Removal of Specific Components

T48 Absorption-molecular sieve
T49 Activated carbon
T50 Blending
T51 Catalysis
T52 Crystallization
T53 Dialysis
T54 Distillation
T55 Electrodialysis
T56 Electrolysis
T57 Evaporation
T58 High gradient magnetic separation
T59 Leaching
T60 Liquid ion exchange
T61 Liquid-liquid extraction
T62 Reverse osmosis
T63 Solvent recovery
T64 Stripping
T65 Sand filter
T66 Other (specify)

(d) Biological Treatment

T67 Activated sludge
T68 Aerobic lagoon
T69 Aerobic tank
T70 Anaerobic lagoon
T71 Composting
T72 Septic tank
T73 Spray irrigation
T74 Thickening filter
T75 Tricking filter
T76 Waste stabilization pond
T77 Other (specify)
T78-79 [Reserved]

3. Disposal

D80 Underground injection
D81 Landfill
D82 Land treatment
D83 Ocean disposal
D84 Surface impoundment (to be closed as a landfill)
D85 Other (specify)

Appendix II—[Reserved]

Appendix III—EPA Interim Primary Drinking Water Standards

Parameter	Maximum level (mg/l)
Arsenic	0.05
Barium	1.0
Cadmium	0.01
Chromium	0.05
Fluoride	1.4–2.4
Lead	0.05
Mercury	0.002
Nitrate (as N)	10
Selenium	0.01
Silver	0.05
Endrin	0.0002
Lindane	0.004
Methoxychlor	0.1
Toxaphene	0.005
2,4-D	0.1
2,4,5-TP Silver	0.01

Parameter	Maximum level (mg/l)
Radium	5 pCi/1
Gross Alpha	15 pCi/1
Gross Beta	4 millirem/yr
Turbidity	1/TU
Coliform Bacteria	1/100 ml

[*Comment:* Turbidity is applicable only to surface water supplies.]

Appendix IV—Tests for Significance

As required in § 265.93(b) the owner or operator must use the Student's t-test to determine statistically significant changes in the concentration or value of an indicator parameter in periodic ground-water samples when compared to the initial background concentration or value of that indicator parameter. The comparison must consider individually each of the wells in the monitoring system. For three of the indicator parameters (specific conductance, total organic carbon, and total organic halogen) a single-tailed Student's t-test must be used to test at the 0.01 level of significance for significant increases over background. The difference test for pH must be a two-tailed Student's t-test at the overall 0.01 level of significance.

The student's t-test involves calculation of the value of a t-statistic for each comparison of the mean (average) concentration or value (based on a minimum of four replicate measurements) of an indicator parameter with its initial background concentration or value. The calculated value of the t-statistic must then be compared to the value of the t-statistic found in a table for t-test of significance at the specified level of significance. A calculated value of t which exceeds the value of t found in the table indicates a statistically significant change in the concentration or value of the indicator parameter.

Formulae for calculation of the t-statistic and tables for t-test of significance can be found in most introductory statistics texts.

Appendix V—Examples of Potentially Incompatible Waste

Many hazardous wastes, when mixed with other waste or materials at a hazardous waste facility, can produce effects which are harmful to human health and the environment, such as (1) heat or pressure, (2) fire or explosion, (3) violent reaction, (4) toxic dusts, mists, fumes, or gases, or (5) flammable fumes or gases.

Below are examples of potentially incompatible wastes, waste components, and materials, along with the harmful consequences which result from mixing materials in one group with materials in another group. The list is intended as a guide to owners or operators of treatment, storage, and disposal facilities, and to enforcement and permit granting officials, to indicate the need for special precautions when managing these potentially incompatible waste materials or components.

This list is not intended to be exhaustive. An owner or operator must, as the regulations require, adequately analyze his wastes so that he can avoid creating uncontrolled substances or reactions of the type listed below, whether they are listed below or not.

It is possible for potentially incompatible wastes to be mixed in a way that precludes a reaction (e.g., adding acid to water rather than water to acid) or that neutralizes them (e.g., a strong acid mixed with a strong base), or that controls substances produced (e.g., by generating flammable gases in a closed tank equipped so that ignition cannot occur, and burning the gases in an incinerator).

In the lists below, the mixing of a Group A material with a Group B material may have the potential consequence as noted.

Group 1-A	Group 1-B
Acetylene sludge	Acid sludge
Alkaline caustic liquids	Acid and water
Alkaline cleaner	Battery acid
Alkaline corrosive liquids	Chemical cleaners
Alkaline corrosive battery fluid	Electrolyte, acid
Caustic wastewater	Etching acid liquid or solvent
Lime sludge and other corrosive alkalies	
Lime wastewater	Pickling liquor and other corrosive acids
Lime and water	Spent acid
Spent caustic	Spent mixed acid
	Spent sulfuric acid

Potential consequences: Heat generation; violent reaction.

Group 2-A	Group 2-B
Aluminum	Any waste in Group 1-A or 1-B
Beryllium	
Calcium	
Lithium	
Magnesium	
Potassium	
Sodium	
Zinc powder	
Other reactive metals and metal hydrides	

Potential consequences: Fire or explosion; generation of flammable hydrogen gas.

Group 3-A	Group 3-B
Alcohols	Any concentrated waste in Groups 1-A or 1-B
Water	Calcium
	Lithium
	Metal hydrides
	Potassium
	SO_2Cl_2, $SOCl_2$, PCl_3, CH_3SiCl_3
	Other water-reactive waste

Potential consequences: Fire, explosion, or heat generation; generation of flammable or toxic gases.

Group 4-A	Group 4-B
Alcohols	Concentrated Group 1-A or 1-B wastes
Aldehydes	Group 2-A wastes
Halogenated hydrocarbons	
Nitrated hydrocarbons	
Unsaturated hydrocarbons	
Other reactive organic compounds and solvents	

Potential consequences: Fire, explosion, or violent reaction.

Group 5-A	Group 5-B
Spent cyanide and sulfide solutions	Group 1-B wastes

Potential consequences: Generation of toxic hydrogen cyanide or hydrogen sulfide gas.

Group 6-A	Group 6-B
Chlorates	Acetic acid and other organic acids
Chlorine	Concentrated mineral acides
Chlorites	Group 2-A wastes
Chromic acid	Group 4-A wastes
Hyphochlorites	Other flammable and combustible wastes
Nitrates	
Nitric acid, fuming	
Perchlorates	
Permanganates	
Peroxides	
Other strong oxidizers	

Potential consequences: Fire, explosion, or violent reaction.

Source: "Law, Regulations, and Guidelines for Handling of Hazardous Waste." California Department of Health, February 1975.

PART 267—INTERIM STANDARDS FOR OWNERS AND OPERATORS OF NEW HAZARDOUS WASTE LAND DISPOSAL FACILITIES

Subpart A—General

Sec.

Subpart B—Environmental Performance Standard

Subpart C—Landfills

Subpart D—Surface Impoundments

Subpart E—Land Treatment

Subpart F—Ground-Water Monitoring

Subpart G—Underground Injection

assure compliance with § 267.10. An unsaturated zone monitoring program must include an unsaturated zone monitoring system at the facility or at a representative test plot, as well as procedures for sampling, analysis and evaluation of data. The unsaturated zone monitoring program required by this paragraph must reflect a consideration of:

(a) The placement and depth of monitoring wells that is necessary to obtain a representative sample of the success of waste treatment in the facility;

(b) Soil characteristics, including its pH, its permeability and the level of microbial activity in the soil;

(c) Climatic conditions in the area;

(d) The potential for rapid migration of waste constituents through the soil; and

(e) The accessibility of the monitoring system devices for maintenance and repair.

§ 267.44 Closure and post-closure.

(a) A land treatment facility must be closed in a manner that will comply with § 267.10 of this part. The closure plan under § 264.112 of this chapter must specify the measures which will be used to satisfy this paragraph. Proper closure of a land treatment facility must reflect a consideration of:

(1) The type and amount of waste applied to the facility;

(2) The mobility and expected rate of migration of the waste;

(3) Site location, topography and surrounding land use;

(4) Climatic conditions in the area, including the amount, frequency and pH of precipitation;

(5) Geologic and soil profiles and surface and subsurface hydrology of the site, including cation exchange capacity, total organic carbon and pH of the soil; and

(6) Unsaturated zone monitoring information obtained under § 267.43.

(b) A land treatment facility must be maintained in a manner that complies with § 267.10 of this part during the post-closure period. The post-closure plan under § 264.118 of this chapter must specify the procedures that will be used to satisfy this paragraph. Proper maintenance of a land treatment facility during the post-closure period must reflect a consideration of:

(1) The type and amount of waste applied to the facility;

(2) The mobility and expected rate of migration of the waste;

(3) Site location, topography and surrounding land use;

(4) Climatic conditions in the area, including the amount, frequency and pH of precipitation;

(5) Geologic and soil profiles and surface and subsurface hydrology of the site, including cation exchange capacity, total organic carbon and pH of the soil;

(6) Unsaturated zone monitoring information obtained under § 267.43; and

(7) The maintenance of any ground-water monitoring system at the facility.

§ 267.45 Treatment of waste.

The Regional Administrator may waive any of the requirements in § 267.21, § 267.22 or § 267.23 of this subpart where necessary to achieve treatment of hazardous waste in a land treatment facility, provided that the waiver does not result in non-compliance with § 267.10.

§ 267.46 Additional requirements.

The Regional Administrator may place additional requirements on owners or operators of new land treatment facilities, besides those otherwise required by this subpart, where necessary to comply with § 267.10 of this part.

Subpart F—Ground-Water Monitoring

§ 267.50 Applicability.

Each new hazardous waste landfill, surface impoundment, or land treatment facility must have a ground-water monitoring program, which includes a ground-water monitoring system, procedures for sampling, analysis and evaluation of ground-water data, and appropriate response procedures.

§ 267.51 Ground-water monitoring system.

The ground-water system required by this subpart must be capable of determining the facility's impact on ground-water in the uppermost aquifer so as to assure compliance with § 267.10 of this part. The design of the ground-water monitoring system must reflect a consideration of:

(a) The placement and depth of monitoring wells that is necessary to obtain a representative sample of constituents in the uppermost aquifer, including those present in the ground-water upgradient from the facility;

(b) Measures such as casing which maintain the integrity of the monitoring well bore hole; and

(c) Measures which prevent contamination of ground-water samples.

§ 267.52 Ground-water monitoring procedures.

(a) The ground-water monitoring procedures required by this subpart must be capable of assuring compliance with § 267.10 of this part. The procedures must reflect a consideration of:

(1) Sample collection procedures;

(2) Sample preservation and shipment procedures;

(3) Analytical methods;

(4) Chain of custody control; and

(5) Evaluation procedures, including methods for determining the extent and rate of migration of waste constituents.

(b) The ground-water monitoring procedures required by this subpart must include appropriate procedures for when the ground-water monitoring program indicates that the facility is not in compliance with § 267.10 of this part. Such response procedures must be contained in the contingency plan required by Subpart D of Part 264.

§ 267.53 Additional requirements.

The Regional Administrator may place additional ground-water monitoring requirements on owners or operators of facilities subject to this Part, besides those otherwise required by this subpart, where necessary to comply with § 267.10 of this part.

Subpart G—Underground Injection

§ 267.60 Applicability.

The regulations in this Subpart apply to owners and operators of new facilities that dispose of hazard waste in underground injection wells which are classified as Class I under § 122.32(a) of this chapter.

§ 267.61 General design requirements.

An injection well must be designed to comply with § 267.10 of this part. The facility design must include measures (*e.g.* casing, tubing and packer set) to prevent the escape of injected fluids to the area above the zone of injection.

§ 267.62 General operating requirements.

An injection well must be operated in a manner that will comply with § 267.10 of this part. The methods for operating the injection well must reflect a consideration of:

(a) The volume and physical and chemical characteristics of the waste injected in the well;

(b) The injection pressure; and

(c) Monitoring measures to assure that the mechanical integrity of the well is maintained.

§ 267.63 Closure.

An injection well must be plugged and sealed at closure to prevent the escape of injected fluids to the area above the zone of injection.

§ 267.64 Additional requirements.

The Regional Administrator may place additional requirements on owners and operators of new injection wells, besides those otherwise required by this subpart, where necessary to comply with § 267.10 of this part.

PART 270—EPA ADMINISTERED PERMIT PROGRAMS: THE HAZARDOUS WASTE PERMIT PROGRAM

Subpart A—General Information

Sec.

Subpart B—Permit Application

Subpart C—Permit Conditions

Subpart D—Changes to Permits

Subpart E—Expiration and Continuation of Permits

Subpart F—Special Forms of Permits

Subpart G—Interim Status

AUTHORITY: Secs. 1006, 2002(a), 3005, 3007 and 7004 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended (RCRA) (42 U.S.C. 6901, 6912(a), 6925, 6927 and 6974), unless otherwise noted.

EFFECTIVE DATE NOTE: At 49 FR 17718, Apr. 24, 1984, the authority for Part 270 was published as set forth above, effective October 24, 1984. For the convenience of the user, the superseded authority is set forth below.

AUTHORITY: Secs. 1006, 2002, 3005, 3007 and 7004, Solid Waste Disposal Act, as amended by the Resource Conservation Act of 1976, as amended (RCRA) (42 U.S.C. 6905, 6912, 6925, 6927 and 6974), unless otherwise noted.

SOURCE: 48 FR 14228, Apr. 1, 1983, unless otherwise noted.

Subpart A—General Information

§ 270.1 Purpose and scope of these regulations.

(a) *Coverage.* (1) These permit regulations establish provisions for the Hazardous Waste Permit Program under Subtitle C of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended (RCRA), (Pub. L. 94-580, as amended by Pub. L. 95-609 and by Pub. L. 96-482; 42 U.S.C. 6091 et seq.). They apply to EPA and to approved States to the extent provided in Part 271.

(2) The regulations in this part cover basic EPA permitting requirements, such as application requirements, standard permit conditions, and monitoring and reporting requirements. These regulations are part of a regulatory scheme implementing RCRA set forth in different parts of the Code of Federal Regulations. The following chart indicates where the regulations implementing RCRA appear in the Code of Federal Regulations.

Section of RCRA	Coverage	Final regulation
Subtitle C	Overview and definitions	40 CFR Part 260
3001	Indentification and listing of hazardous waste	40 CFR Part 261
3002	Generators of hazardous waste.	40 CFR Part 262
3003	Transporters of hazardous waste.	40 CFR Part 263
3004	Standards for HWM facilities.	40 CFR Parts 264, 265, 266, and 267
3005	Permit requirements for HWM facilities.	40 CFR Parts 270 and 124
3006	Guidelines for State programs.	40 CFR Part 271
3010	Preliminary notification of HWM activity.	(public notice) 45 *FR* 12746 Feb. 26, 1980

(3) *Technical regulations.* The RCRA permit program has separate additional Regulations that contain technical requirements. These separate regulations are used by permit issuing authorities to determine what requirements must be placed in permits if they are issued. These separate regulations are located in 40 CFR Parts 264, 266, and 267.

(b) *Overview of the RCRA Permit Program.* Not later than 90 days after the promulgation or revision of regulations in 40 CFR Part 261 (identifying and listing hazardous wastes) generators and transporters of hazardous waste, and owners or operators of hazardous waste treatment, storage, or disposal facilities may be required to file a notification of that activity under section 3010. Six months after the initial promulgation of the Part 261 regulations, treatment, storage, or disposal of hazardous waste by any person who has not applied for or received a RCRA permit is prohibited. A RCRA permit application consists of two parts, Part A (see § 270.13) and Part B (see § 270.14 and applicable sections in §§ 270.15 through 270.29). For "existing HWM facilities," the requirement to submit an application is satisfied by submitting only Part A of the permit application until the date the Director sets for submitting Part B of the application. (Part A consists of Forms 1 and 3 of the Consolidated Permit Application Forms.) Timely submission of both notification under section 3010 and Part A qualifies owners and operators of existing HWM facilities (who are required to have a permit) for interim status under section 3005(e) of RCRA. Facility owners and operators with interim status are treated as having been issued a permit until EPA or a State with interim authorization for Phase II or final authorization under Part 271 makes a final determination on the permit application. Facility owners and operators with interim status must comply with interim status standards set forth at 40 CFR Part 265 or with the analagous provisions of a State program which has received interim or final authorization under Part 271. Facility owners and operators with interim status are not relieved from complying with other State requirements. For existing HWM facilities, the Director shall set a date, giving at least six months notice, for submission of Part B of the application. There is no form for Part B of the application; rather, Part B must be submitted in narrative form and contain the information set forth in the applicable sections of §§ 270.14 through 270.29. Owners or operators of new HWM facilities must submit Part A and Part B of the permit application at least 180 days before physical construction is expected to commence.

(c) *Scope of the RCRA Permit Requirement.* RCRA requires a permit for the "treatment," "storage," or "disposal" of any "hazardous waste" as identified or listed in 40 CFR Part 261. The terms "treatment," "storage," "disposal," and "hazardous waste" are defined in § 270.2. Owners and operators of hazardous waste management units must have permits during the active life (including the closure period) of the unit, and, for any unit which closes after January 26, 1983, during any post-closure care period required under § 264.117 and during any compliance period specified under § 264.96, including any extension of the compliance period under § 264.96(c).

(1) *Specific inclusions.* Owners and operators of certain facilities require RCRA permits as well as permits under other programs for certain aspects of the facility operation. RCRA permits are required for:

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(i) Injection wells that dispose of hazardous waste, and associated surface facilities that treat, store or dispose of hazardous waste, (See § 270.64). However, the owner and operator with a UIC permit in a State with an approved or promulgated UIC program, will be deemed to have a RCRA permit for the injection well itself if they comply with the requirements of § 270.60(b) (permit-by-rule for injection wells).

(ii) Treatment, storage, or disposal of hazardous waste at facilities requiring an NPDES permit. However, the owner and operator of a publicly owned treatment works receiving hazardous waste will be deemed to have a RCRA permit for that waste if they comply with the requirements of § 270.60(c) (permit-by-rule for POTWs).

(iii) Barges or vessels that dispose of hazardous waste by ocean disposal and onshore hazardous waste treatment or storage facilities associated with an ocean disposal operation. However, the owner and operator will be deemed to have a RCRA permit for ocean disposal from the barge or vessel itself it they comply with the requirements of § 270.60(a) (permit-by-rule for ocean disposal barges and vessels).

(2) *Specific exclusions.* The following persons are among those who are not required to obtain a RCRA permit:

(i) Generators who accumulate hazardous waste on site for less than 90 days as provided in 40 CFR 262.34.

(ii) Farmers who dispose of hazardous waste pesticides from their own use as provided in 40 CFR 262.51.

(iii) Persons who own or operate facilities solely for the treatment, storage or disposal of hazardous waste excluded from regulations under this part by 40 CFR 261.4 or 261.5 (small generator exemption).

(iv) Owners or operators of totally enclosed treatment facilities as defined in 40 CFR 260.10.

(v) Owners and operators of elementary neutralization units or wastewater treatment units as defined in 40 CFR 260.10.

(vi) Transporters storing manifested shipments of hazardous waste in containers meeting the requirements of 40 CFR 262.30 at a transfer facility for a period of ten days or less.

(vii) Persons adding absorbent material to waste in a container (as defined in § 260.10 of this chapter) and persons adding waste to absorbent material in a container, provided that these actions occur at the time waste is first placed in the container; and §§ 264.17(b), 264.171, and 264.172 of this chapter are complied with.

(3) *Further exclusions.* (i) A person is not required to obtain an RCRA permit for treatment or containment activities taken during immediate response to any of the following situations:

(A) A discharge of a hazardous waste;

(B) An imminent and substantial threat of a discharge of hazardous waste;

(C) A discharge of a material which, when discharged, becomes a hazardous waste.

(ii) Any person who continues or initiates hazardous waste treatment or containment activities after the immediate response is over is subject to all applicable requirements of this part for those activities.

(4) *Permits for less than an entire facility.* EPA may issue or deny a permit for one or more units at a facility without simultaneously issuing or denying a permit to all of the units at the facility. The interim status of any unit for which a permit has not been issued or denied is not affected by the issuance or denial of a permit to any other unit at the facility.

[48 FR 14228, Apr. 1, 1983, as amended at 48 FR 30113, June 30, 1983]

§ 270.2 Definitions.

The following definitions apply to Parts 270, 271 and 124. Terms not defined in this section have the meaning given by RCRA.

Administrator means the Administrator of the United States Environmental Protection Agency, or an authorized representative.

Application means the EPA standard national forms for applying for a permit, including any additions, revisions or modifications to the forms; or forms approved by EPA for use in approved States, including any approved modifications or revisions. Application also includes the information required by the Director under §§ 270.14—270.29 (contents of Part B of the RCRA application).

Approved program or approved State means a State which has been approved or authorized by EPA under Part 271.

Aquifer means a geological formation, group of formations, or part of a formation that is capable of yielding a significant amount of water to a well or spring.

Closure means the act of securing a Hazardous Waste Management facility pursuant to the requirements of 40 CFR Part 264.

CWA means the Clean Water Act (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act amendments of 1972) Pub. L. 92-500, as amended by Pub. L. 92-217 and Pub. L. 95-576; 33 U.S.C. 1251 *et seq.*

Director means the Regional Administrator or the State Director, as the context requires, or an authorized representative. When there is no approved State program, and there is an EPA administered program, Director means the Regional Administrator. When there is an approved State program, Director normally means the State Director. In some circumstances, however, EPA retains the authority to take certain actions even when there is an approved State program. In such cases, the term Director means the Regional Administrator and not the State Director.

Disposal means the discharge, deposit, injection, dumping, spilling, leaking, or placing of any hazardous waste into or on any land or water so that such hazardous waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any waters, including ground water.

Disposal facility means a facility or part of a facility at which hazardous waste is intentionally placed into or on the land or water, and at which hazardous waste will remain after closure.

Draft permit means a document prepared under § 124.6 indicating the Director's tentative decision to issue or deny, modify, revoke and reissue, terminate, or reissue a permit. A notice of intent to terminate a permit, and a notice of intent to deny a permit, as discussed in § 124.5, are types of draft permits. A denial of a request for modification, revocation and reissuance, or termination, as discussed in § 124.5 is not a "draft permit." A proposed permit is not a draft permit.

Elementary neutralization unit means a device which:

(a) Is used for neutralizing wastes which are hazardous wastes only because they exhibit the corrosivity characteristic defined in § 261.22 of this chapter, or are listed in Subpart D of Part 261 of this chapter only for this reason; and

(b) Meets the definition of tank, container, transport vehicle, or vessel in § 260.10 of this chapter.

Emergency permit means a RCRA permit issued in accordance with § 270.61.

Environmental Protection Agency (EPA) means the United States Environmental Protection Agency.

EPA means the United States Environmental Protection Agency.

Existing hazardous waste management (HWM) facility or existing facility means a facility which was in operation or for which construction commenced on or before November 19, 1980. A facility has commenced construction if:

(a) The owner or operator has obtained the Federal, State and local approvals or permits necessary to begin physical construction; and either

(b)(1) A continuous on-site, physical construction program has begun; or

(2) The owner or operator has entered into contractual obligations which cannot be cancelled or modified without substantial loss—for physical construction of the facility to be completed within a reasonable time.

Facility or activity means any HWM facility or any other facility or activity (including land or appurtenances thereto) that is subject to regulation under the RCRA program.

Federal, State and local approvals or permits necessary to begin physical construction means permits and approvals required under Federal, State

or local hazardous waste control statutes, regulations or ordinances.

Final authorization means approval by EPA of a State program which has met the requirements of section 3006(b) of RCRA and the applicable requirements of Part 271, Subpart A.

Generator means any person, by site location, whose act, or process produces "hazardous waste" identified or listed in 40 CFR Part 261.

Ground water means water below the land surface in a zone of saturation.

Hazardous waste means a hazardous waste as defined in 40 CFR 261.3.

Hazardous Waste Management facility (HWM facility) means all contiguous land, and structures, other appurtenances, and improvements on the land, used for treating, storing, or disposing of hazardous waste. A facility may consist of several treatment, storage, or disposal operational units (for example, one or more landfills, surface impoundments, or combinations of them).

HWM facility means Hazardous Waste Management facility.

Injection well means a well into which fluids are being injected.

In operation means a facility which is treating, storing, or disposing of hazardous waste.

Interim authorization means approval by EPA of a State hazardous waste program which has met the requirements of section 3006(c) of RCRA and applicable requirements of Part 271, Subpart B.

Major facility means any facility or activity classified as such by the Regional Administrator, or, in the case of approved State programs, the Regional Administrator in conjunction with the State Director.

Manifest means the shipping document originated and signed by the generator which contains the information required by Subpart B of 40 CFR Part 262.

National Pollutant Discharge Elimination System means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under sections 307, 402, 318, and 405 of the CWA. The term includes an approved program.

NPDES means National Pollutant Discharge Elimination System.

New HWM facility means a Hazardous Waste Management facility which began operation or for which construction commenced after November 19, 1980.

Off-site means any site which is not on-site.

On-site means on the same or geographically continguous property which may be divided by public or private right(s)-of-way, provided the entrance and exit between the properties is at a cross-roads intersection, and access is by crossing as opposed to going along, the right(s)-of-way. Noncontiguous properties owned by the same person but connected by a right-of-way which the person controls and to which the public does not have access, is also considered on-site property.

Owner or operator means the owner or operator of any facility or activity subject to regulation under RCRA.

Permit means an authorization, license, or equivalent control document issued by EPA or an approved State to implement the requirements of this part and Parts 271 and 124. Permit includes permit by rule (§ 270.60), and emergency permit (§ 270.61). Permit does not include RCRA interim status (Subpart G of this part), or any permit which has not yet been the subject of final agency action, such as a draft permit or a proposed permit.

Permit-by-rule means a provision of these regulations stating that a facility or activity is deemed to have a RCRA permit if it meets the requirements of the provision.

Person means an individual, association, partnership, corporation, municipality, State or Federal agency, or an agent or employee thereof.

Phase I means that phase of the Federal hazardous waste management program commencing on the effective date of the last of the following to be initially promulgated: 40 CFR Parts 260, 261, 262, 263, 265, 270 and 271. Promulgation of Phase I refers to promulgation of the regulations necessary for Phase I to begin.

Phase II means that phase of Federal hazardous waste management program commencing on the effective date of the first Subpart of 40 CFR Part 264, Subparts F through R to be initially promulgated. Promulgation of Phase II refers to promulgation of the regulations necessary for Phase II to begin.

Physical construction means excavation, movement of earth, erection of forms or structures, or similar activity to prepare an HWM facility to accept hazardous waste.

POTW means publicly owned treatment works.

Publicly owned treatment works (POTW) means any device or system unsed in the treatment (including recycling and reclamation) of municipal sewage or industrial wastes of a liquid nature which is owned by a State or municipality. This definition includes sewers, pipes, or other conveyances only if they convey wastewater to a POTW providing treatment.

RCRA means the Solid Waste Disposal Act as amended by the Resource Conservation and Recovery Act of 1976 (Pub. L. 94-580, as amended by Pub. L. 95-609 and Pub. L. 96-482, 42 U.S.C. 6901 *et seq.*)

Regional Administrator means the Regional Administrator of the appropriate Regional Office of the Environmental Protection Agency or the authorized representative of the Regional Administrator.

Schedule of compliance means a schedule of remedial measures included in a permit, including an enforceable sequence of interim requirements (for example, actions, operations, or milestone events) leading to compliance with the Act and regulations.

SDWA means the Safe Drinking Water Act (Pub. L. 95-523, as amended by Pub. L. 95-1900; 42 U.S.C. 3001 *et seq.*).

Site means the land or water area where any facility or activity is physically located or conducted, including adjacent land used in connection with the facility or activity.

State means any of the 50 States, the District of Columbia, Guam, the Commonwealth of Puerto Rico, the Virgin Islands, American Samoa, and the Commonwealth of the Northern Mariana Islands.

State Director means the chief administrative officer of any State agency operating an approved program, or the delegated representative of the State Director. If responsibility is divided among two or more State agencies, State Director means the chief administrative officer of the State agency authorized to perform the particular procedure or function to which reference is made.

State/EPA Agreement means an agreement between the Regional Administrator and the State which coordinates EPA and State activities, responsibilities and programs.

Storage means the holding of hazardous waste for a temporary period, at the end of which the hazardous waste is treated, disposed, or stored elsewhere.

Transfer facility means any transportation-related facility including loading docks, parking areas, storage areas and other similar areas where shipments of hazardous waste are held during the normal course of transportation.

Transporter means a person engaged in the off-site transportation of hazardous waste by air, rail, highway or water.

Treatment means any method, technique, or process, including neutralization, designed to change the physical, chemical, or biological character or composition of any hazardous waste so as to neutralize such wastes, or so as to recover energy or material resources from the waste, or so as to render such waste non-hazardous, or less hazardous; safer to transport, store, or dispose of; or amenable for recovery, amenable for storage, or reduced in volume.

UIC means the Underground Injection Control Program under Part C of the Safe Drinking Water Act, including an approved program.

Underground injection means a well injection.

Underground source of drinking water (*USDW*) means an aquifer or its portion:

(a)(1) Which supplies any public water system; or

(2) Which contains a sufficient quantity of ground water to supply a public water system; and

(i) Currently supplies drinking water for human consumption; or

(ii) Contains fewer than 10,000 mg/l total dissolved solids; and

(b) Which is not an exempted aquifer.

USDW means underground source of drinking water.

Wastewater treatment unit means a device which:

(a) Is part of a wastewater treatment facility which is subject to regulation under either Section 402 or Section 307(b) of the Clean Water Act; and

(b) Receives and treats or stores an influent wastewater which is a hazardous waste as defined in § 261.3 of this chapter, or generates and accumulates a wastewater treatment sludge which is a hazardous waste as defined in § 261.3 of this chapter, or treats or stores a wastewater treatment sludge which is a hazardous waste as defined in § 261.3 of this chapter; and

(c) Meets the definition of tank in § 260.10 of this chapter.

[48 FR 14228, Apr. 1, 1983, as amended at 48 FR 30113, June 30, 1983]

§ 270.3 Considerations under Federal law.

The following is a list of Federal laws that may apply to the issuance of permits under these rules. When any of these laws is applicable, its procedures must be followed. When the applicable law requires consideration or adoption of particular permit conditions or requires the denial of a permit, those requirements also must be followed.

(a) *The Wild and Scenic Rivers Act.* 16 U.S.C. 1273 *et seq.* Section 7 of the Act prohibits the Regional Administrator from assisting by license or otherwise the construction of any water resources project that would have a direct, adverse effect on the values for which a national wild and scenic river was established.

(b) *The National Historic Preservation Act of 1966.* 16 U.S.C. 470 *et seq.* Section 106 of the Act and implementing regulations (36 CFR Part 800) require the Regional Administrator, before issuing a license, to adopt measures when feasible to mitigate potential adverse effects of the licensed activity and properties listed or eligible for listing in the National Register of Historic Places. The Act's requirements are to be implemented in cooperation with State Historic Preservation Officers and upon notice to, and when appropriate, in consultation with the Advisory Council on Historic Preservation.

(c) *The Endangered Species Act.* 16 U.S.C. 1531 *et seq.* Section 7 of the Act and implementing regulations (50 CFR Part 402) require the Regional Administrator to ensure, in consultation with the Secretary of the Interior or Commerce, that any action authorized by EPA is not likely to jeopardize the continued existence of any endangered or threatened species or adversely affect its critical habitat.

(d) *The Coastal Zone Management Act.* 16 U.S.C. 1451 *et seq.* Section 307(c) of the Act and implementing regulations (15 CFR Part 930) prohibit EPA from issuing a permit for an activity affecting land or water use in the coastal zone until the applicant certifies that the proposed activity complies with the State Coastal Zone Management program, and the State or its designated agency concurs with the certification (or the Secretary of Commerce overrides the State's nonconcurrence).

(e) *The Fish and Wildlife Coordination Act.* 16 U.S.C. 661 *et seq.* requires that the Regional Administrator, before issuing a permit proposing or authorizing the impoundment (with certain exemptions), diversion, or other control or modification of any body of water, consult with the appropriate State agency exercising jurisdiction over wildlife resources to conserve those resources.

(f) *Executive orders.* [Reserved]

(Clean Water Act (33 U.S.C. 1251 et seq.), Safe Drinking Water Act (42 U.S.C. 300f et seq.), Clean Air Act (42 U.S.C. 7401 et seq.), Resource Conservation and Recovery Act (42 U.S.C. 6901 et seq.))

[48 FR 14228, Apr 1, 1983, as amended at 48 FR 39622, Sept. 1, 1983]

§ 270.4 Effect of a permit.

(a) Compliance with a RCRA permit during its term constitutes compliance, for purposes of enforcement, with Subtitle C of RCRA. However a permit may be modified, revoked and reissued, or terminated during its term for cause as set forth in §§ 270.41 and 270.43.

(b) The issuance of a permit does not convey any property rights of any sort, or any exclusive privilege.

(c) The issuance of a permit does not authorize any injury to persons or property or invasion of other private rights, or any infringement of State or local law or regulations.

§ 270.5 Noncompliance and program reporting by the Director.

The Director shall prepare quarterly and annual reports as detailed below. When the State is the permit-issuing authority, the State Director shall submit any reports required under this section to the Regional Administrator. When EPA is the permit-issuing authority, the Regional Administrator shall submit any report required under this section to EPA Headquarters. For purposes of this section only, RCRA permittees shall include RCRA interim status facilities, when appropriate.

(a) *Quarterly reports.* The Director shall submit quarterly narrative reports for major facilities as follows:

(1) *Format.* The report shall use the following format:

(i) Information on noncompliance for each facility;

(ii) Alphabetize by permittee name. When two or more permittees have the same name, the lowest permit number shall be entered first;

(iii) For each entry on the list, include the following information in the following order:

(A) Name, location, and permit number of the noncomplying permittee.

(B) A brief description and date of each instance of noncompliance for that permittee. Instances of noncompliance may include one or more of the kinds set forth in paragraph (a)(2) of this section. When a permittee has noncompliance of more than one kind, combine the information into a single entry for each such permittee.

(C) The date(s) and a brief description of the action(s) taken by the Director to ensure compliance.

(D) Status of the instance(s) of noncompliance with the date of the review of the status or the date of resolution.

(E) Any details which tend to explain or mitigate the instance(s) of noncompliance.

(2) *Instances of noncompliance to be reported.* Any instances of noncompliance within the following categories shall be reported in successive reports until the noncompliance is reported as resolved. Once noncompliance is reported as resolved it need not appear in subsequent reports.

(i) *Failure to complete construction elements.* When the permittee has failed to complete, by the date specified in the permit, an element of a compliance schedule involving either planning for construction (for example, award of a contract, preliminary plans), or a construction step (for example, begin construction, attain operation level); and the permittee has not returned to compliance by accomplishing the required element of the schedule within 30 days from the date a compliance schedule report is due under the permit.

(ii) *Modifications to schedules of compliance.* When a schedule of compliance in the permit has been modified under § 270.41 or § 270.42 because of the permittee's noncompliance.

(iii) *Failure to complete or provide compliance schedule or monitoring reports.* When the permittee has failed to complete or provide a report required in a permit compliance schedule (for example, progress report or notice of noncompliance or compliance) or a monitoring report; and the permittee has not submitted the complete report within 30 days from the date it is due under the permit for compliance schedules, or from the date specified in the permit for monitoring reports.

(iv) *Deficient reports.* When the required reports provided by the permittee are so deficient as to cause misunderstanding by the Director and thus impede the review of the status of compliance.

(v) *Noncompliance with other permit requirements.* Noncompliance

shall be reported in the following circumstances:

(A) Whenever the permittee has violated a permit requirement (other than reported under paragraph (a)(2)(i) or (ii) of this section), and has not returned to compliance within 45 days from the date reporting of noncompliance was due under the permit; or

(B) When the Director determines that a pattern of noncompliance exists for a major facility permittee over the most recent four consecutive reporting periods. This pattern includes any violation of the same requirement in two consecutive reporting periods, and any violation of one or more requirements in each of four consecutive reporting periods; or

(C) When the Director determines significant permit non-compliance or other significant event has occurred such as a fire or explosion or migration of fluids into a USDW.

(vi) *All other.* Statistical information shall be reported quarterly on all other instances of noncompliance by major facilities with permit requirements not otherwise reported under paragraph (a) of this section.

(b) *Annual reports.*

(1) *Annual noncompliance report.* Statistical reports shall be submitted by the Director on nonmajor RCRA permittees indicating the total number reviewed, the number of noncomplying nonmajor permittees, the number of enforcement actions, and number of permit modifications extending compliance deadlines. The statistical information shall be organized to follow the types of noncompliance listed in paragraph (a) of this section.

(2) In addition to the annual noncompliance report, the Director shall prepare a "program report" which contains information (in a manner and form prescribed by the Administrator) on generators and transporters and the permit status of regulated facilities. The Director shall also include, on a biennial basis, summary information on the quantities and types of hazardous wastes generated, transported, treated, stored and disposed during the preceding odd-numbered year. This summary information shall be reported in a manner and form prescribed by the Administrator and shall be reported according to EPA characteristics and lists of hazardous wastes at 40 CFR Part 261.

(c) *Schedule.*

(1) For all quarterly reports. On the last working day of May, August, November, and February, the State Director shall submit to the Regional Administrator information concerning noncompliance with RCRA permit requirements by major facilities in the State in accordance with the following schedule. The Regional Administrator shall prepare and submit information for EPA-issued permits to EPA Headquarters in accordance with the same schedule.

QUARTERS COVERED BY REPORTS ON NONCOMPLIANCE BY MAJOR DISCHARGERS

[Date for completion of reports]	
January, February, and March	[1] May 31
April, May, and June	[1] August 31
July, August, and September	[1] November 30
October, November, and December.	[1] February 28

[1] Reports must be made available to the public for inspection and copying on this date.

[48 FR 14228, Apr. 1, 1983, as amended at 48 FR 30113, June 30, 1983]

§ 270.6 References.

(a) When used in Part 270 of this chapter, the following publications are incorporated by reference:

"Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846 (First Edition, 1980, as updated by Revisions A (August, 1980), B (July, 1981), and C (February, 1982) or (Second Edition, 1982). The first edition of SW-846 is no longer in print. Revisions A and B are available from EPA, Office of Solid Waste, (WH-565-B), 401 M Street, SW., Washington, D.C. 20460. Revision C is available from NTIS, 5285 Port Royal Road, Springfield, Virginia 22161. The second edition of SW-846 includes material from the first edition and Revisions A, B, and C in a reorganized format. It is available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, (202) 783-3238, on a subscription basis, and future updates will automatically be mailed to the subscriber.

(b) The references listed in paragraph (a) of this section are also available for inspection at the Office of the FEDERAL REGISTER, 1100 L Street, N.W., Washington, D.C. 20408. These incorporations by reference were approved by the Director of the Federal Register. These materials are incorporated as they exist on the date of approval and a notice of any change in these materials will be published in the Federal Register.

[48 FR 14228, Apr. 1, 1983, as amended at 48 FR 30113, June 30, 1983]

§§ 270.7—270.9 [Reserved]

Subpart B—Permit Application

§ 270.10 General application requirements.

(a) *Permit application.* Any person who is required to have a permit (including new applicants and permittees with expiring permits) shall complete, sign, and submit an application to the Director as described in this section and §§ 270.70 through 270.73. Persons currently authorized with interim status shall apply for permits when required by the Director. Persons covered by RCRA permits by rule (§ 270.60), need not apply. Procedures for applications, issuance and administration of emergency permits are found exclusively in § 270.61.

(b) *Who applies?* When a facility or activity is owned by one person but is operated by another person, it is the operator's duty to obtain a permit, except that the owner must also sign the permit application.

(c) *Completeness.* The Director shall not issue a permit before receiving a complete application for a permit except for permits by rule, or emergency permits. An application for a permit is complete when the Director receives an application form and any supplemental information which are completed to his or her satisfaction. The completeness of any application for a permit shall be judged independently of the status of any other permit application or permit for the same facility. For EPA-Administered programs, an application which is reviewed under § 124.3 is complete when the Director receives information listed in a notice of deficiency.

(d) *Information requirements.* All applicants for RCRA permits shall provide information set forth in § 270.13 and applicable sections in §§ 270.14 through 270.29 to the Director, using the application form provided by the Director.

(e) *Existing HWM facilities.* (1) Owners and operators of existing hazardous waste management facilities must submit Part A of their permit application to the Regional Administrator no later than (i) six months after the date of publication of regulations which first require them to comply with the standards set forth in 40 CFR Parts 265 or 266, or (ii) thirty days after the date they first become subject to the standards set forth in 40 CFR Parts 265 or 266, whichever first occurs.

[NOTE: For facilities which must comply with Part 265 because they handle a waste listed in EPA's May 19, 1980, Part 261 regulations (45 FR 33066 *et seq.*), the deadline for submitting an application is November 19, 1980. Where other existing facilities must begin in complying with Parts 265 or 266 at a later date because of revisions to Parts 260, 261, 265, or 266, the Administrator will specify in the preamble to those revisions when those facilities must submit a permit application.]

(2) The Administrator may by publication in the FEDERAL REGISTER extend the date by which owners and operators of specified classes of existing hazardous waste management facilities must submit Part A of their permit application if he finds that (i) there has been substantial confusion as to whether the owners and operators of such facilities were required to file a permit application and (ii) such confusion is attributed to ambiguities in EPA's Parts 260, 261, 265, or 266 regulations.

(3) The Administrator may by compliance order issued under Section 3008 of RCRA extend the date by which the owner and operator of an existing hazardous waste management facility must submit Part A of their permit application.

(4) At any time after promulgation of Phase II the owner and operator of an existing HWM facility may be re-

quired to submit Part B of their permit application. The State Director may require submission of Part B (or equivalent completion of the State RCRA application process) if the State in which the facility is located has received interim authorization for Phase II or final authorization; if not, the Regional Administrator may require submission of Part B. Any owner or operator shall be allowed at least six months from the date of request to submit Part B of the application. Any owner or operator of an existing HWM facility may voluntarily submit Part B of the application at any time.

(5) Failure to furnish a requested part B application on time, or to furnish in full the information required by the Part B application, is grounds for termination of interim status under Part 124.

(f) *New HWM facilities.* (1) Except as provided in paragraph (f)(3) of this section, no person shall begin physical construction of a new HWM facility without having submitted Part A and Part B of the permit application and having received a finally effective RCRA permit.

(2) An application for a permit for a new HWM facility (including both Part A and Part B) may be filed any time after promulgation of those standards in Part 264, Subpart I *et seq.* applicable to such facility. The application shall be filed with the Regional Administrator if at the time of application the State in which the new HWM facility is proposed to be located has not received Phase II interim authorization for permitting such facility or final authorization; otherwise it shall be filed with the State Director. Except as provided in paragraph (f)(3) of this section, all applications must be submitted at least 180 days before physical construction is expected to commence.

(3) After November 19, 1980, but prior to the effective date of those standards in Part 264, Subpart I *et seq.*, which are applicable to his facility, a person may begin physical construction of a new HWM facility, except for landfills, injection wells, land treatment facilities or surface impoundments (as defined in 40 CFR 260.10), without having received a finally effective RCRA permit, if prior to beginning physical construction, such person has:

(i) Obtained the Federal, State and local approvals or permits necessary to begin physical construction;

(ii) Submitted Part A of the permit application; and

(iii) Made a commitment to complete physical construction of the facility within a reasonable time. Such persons may continue physical construction of the HWM facility after the effective date of the permitting standards in Part 264, Subpart I *et seq.*, applicable to his facility if he submits Part B of the permit application on or before the effective date of such standards (or on some later date specified by the Administrator). Such person must not operate the HWM facility without having received a finally effective RCRA permit.

(g) *Updating permit applications.* (1) If any owner or operator of a HWM facility has filed Part A of a permit application and has not yet filed Part B, the owner or operator shall file an amended Part A application:

(i) With the Regional Administrator, if the facility is located in a State which has not obtained interim authorization for phase II or final authorization, within six months after the promulgation of revised regulations under Part 261 listing or identifying additional hazardous wastes, if the facility is treating, storing, or disposing of any of those newly listed or identified wastes.

(ii) With the State Director, if the facility is located in a State which has obtained Phase II interim authorization or final authorization, no later than the effective date of regulatory provisions listing or designating wastes as hazardous in that State in addition to those listed or designated under the previously approved State program, if the facility is treating, storing, or disposing of any of those newly listed or designated wastes; or

(iii) As necessary to comply with provisions of § 270.72 for changes during interim status or with the analogous provisions of a State program approved for final authorization or interim authorization for Phase II. Revised Part A applications necessary to comply with the provisions of § 270.72 shall be filed with the Regional Administrator if the State in which the facility in question is located does not have Phase II interim authorization or final authorization; otherwise it shall be filed with the State Director (if the State has an analogous provision).

(2) The owner or operator of a facility who fails to comply with the updating requirements of paragraph (g)(1) of this section does not receive interim status as to the wastes not covered by duly filed Part A applications.

(h) *Reapplications.* Any HWM facility with an effective permit shall submit a new application at least 180 days before the expiration date of the effective permit, unless permission for a later date has been granted by the Director. (The Director shall not grant permission for applications to be submitted later than the expiration date of the existing permit.)

(i) *Recordkeeping.* Applicants shall keep records of all data used to complete permit applications and any supplemental information submitted under §§ 270.10(d), 270.13, 270.14 through 270.21 for a period of at least 3 years from the date the application is signed.

[48 FR 14228, Apr. 1, 1983; 48 FR 30114, June 30, 1983]

§ 270.11 Signatories to permit applications and reports.

(a) *Applications.* All permit applications shall be signed as follows:

(1) *For a corporation:* by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decisionmaking functions for the corporation, or (ii) the manager of one or more manufacturing, production or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding $25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

NOTE: EPA does not require specific assignments or delegations of authority to responsible corporate officers identified in § 270.11(a)(1)(i). The Agency will presume that these responsible corporate officers have the requisite authority to sign permit applications unless the corporation has notified the Director to the contrary. Corporate procedures governing authority to sign permit applications may provide for assignment or delegation to applicable corporate positions under § 270.11(a)(1)(ii) rather than to specific individuals.

(2) *For a partnership or sole proprietorship;* by a general partner or the proprietor, respectively; or

(3) *For a municipality, State, Federal, or other public agency:* by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes: (i) The chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).

(b) *Reports.* All reports required by permits and other information requested by the Director shall be signed by a person described in paragraph (a) of this section, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

(1) The authorization is made in writing by a person described in paragraph (a) of this section;

(2) The authorization specifies either an individual or a position having responsibility for overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, or position of equivalent responsibility. (A duly authorized representative may thus be either a named individual or any individual occupying a named position); and

(3) The written authorization is submitted to the Director.

(c) *Changes to authorization.* If an authorization under paragraph (b) of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph (b) of this section must be

submitted to the Director prior to or together with any reports, information, or applications to be signed by an authorized representative.

(d) *Certification.* Any person signing a document under paragraph (a) or (b) of this section shall make the following certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to be the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

(Clean Water Act (33 U.S.C. 1251 et seq.), Safe Drinking Water Act (42 U.S.C. 300f et seq.), Clean Air Act (42 U.S.C. 7401 et seq.), Resource Conservation and Recovery Act (42 U.S.C. 6901 et seq.))

[48 FR 14228, Apr. 1, 1983, as amended at 48 FR 39622, Sept. 1, 1983]

§ 270.12 Confidentiality of information.

(a) In accordance with 40 CFR Part 2, any information submitted to EPA pursuant to these regulations may be claimed as confidential by the submitter. Any such claim must be asserted at the time of submission in the manner prescribed on the application form or instructions or, in the case of other submissions, by stamping the words "confidential business information" on each page containing such information. If no claim is made at the time of submission, EPA may make the information available to the public without further notice. If a claim is asserted, the information will be treated in accordance with the procedures in 40 CFR Part 2 (Public Information).

(b) Claims of confidentiality for the name and address of any permit applicant or permittee will be denied.

§ 270.13 Contents of Part A of the permit application.

Part A of the RCRA application shall include the following information:

(a) The activities conducted by the applicant which require it to obtain a permit under RCRA.

(b) Name, mailing address, and location, including latitude and longitude of the facility for which the application is submitted.

(c) Up to four SIC codes which best reflect the principal products or services provided by the facility.

(d) The operator's name, address, telephone number, ownership status, and status as Federal, State, private, public, or other entity.

(e) The name, address, and phone number of the owner of the facility.

(f) Whether the facility is located on Indian lands.

(g) An indication of whether the facility is new or existing and whether it is a first or revised application.

(h) For existing facilities, (1) a scale drawing of the facility showing the location of all past, present, and future treatment, storage, and disposal areas; and (2) photographs of the facility clearly delineating all existing structures; existing treatment, storage, and disposal areas; and sites of future treatment, storage, and disposal areas.

(i) A description of the processes to be used for treating, storing, and disposing of hazardous waste, and the design capacity of these items.

(j) A specification of the hazardous wastes listed or designated under 40 CFR Part 261 to be treated, stored, or disposed of at the facility, an estimate of the quantity of such wastes to be treated, stored, or disposed annually, and a general description of the processes to be used for such wastes.

(k) A listing of all permits or construction approvals received or applied for under any of the following programs:

(1) Hazardous Waste Management program under RCRA.

(2) UIC program under the SWDA.

(3) NPDES program under the CWA.

(4) Prevention of Significant Deterioration (PSD) program under the Clean Air Act.

(5) Nonattainment program under the Clean Air Act.

(6) National Emission Standards for Hazardous Pollutants (NESHAPS) preconstruction approval under the Clean Air Act.

(7) Ocean dumping permits under the Marine Protection Research and Sanctuaries Act.

(8) Dredge or fill permits under section 404 of the CWA.

(9) Other relevant environmental permits, including State permits.

(l) A topographic map (or other map if a topographic map is unavailable) extending one mile beyond the property boundaries of the source, depicting the facility and each of its intake and discharge structures; each of its hazardous waste treatment, storage, or disposal facilities; each well where fluids from the facility are injected underground; and those wells, springs, other surface water bodies, and drinking water wells listed in public records or otherwise known to the applicant within ¼ mile of the facility property boundary.

(m) A brief description of the nature of the business.

§ 270.14 Contents of Part B: General requirements.

(a) Part B of the permit application consists of the general information requirements of this section, and the specific information requirements in §§ 270.14 through 270.29 applicable to the facility. The Part B information requirements presented in §§ 270.14 through 270.29 reflect the standards promulgated in 40 CFR Part 264. These information requirements are necessary in order for EPA to determine compliance with the Part 264 standards. If owners and operators of HWM facilities can demonstrate that the information prescribed in Part B can not be provided to the extent required, the Director may make allowance for submission of such information on a case-by-case basis. Information required in Part B shall be submitted to the Director and signed in accordance with requirements in § 270.11. Certain technical data, such as design drawings and specifications, and engineering studies shall be certified by a registered professional engineer.

(b) General information requirements. The following information is required for all HWM facilities, except as § 264.1 provides otherwise:

(1) A general description of the facility.

(2) Chemical and physical analyses of the hazardous waste to be handled at the facility. At a minimum, these analyses shall contain all the information which must be known to treat, store, or dispose of the wastes properly in accordance with Part 264.

(3) A copy of the waste analysis plan required by § 264.13(b) and, if applicable § 264.13(c).

(4) A description of the security procedures and equipment required by § 264.14, or a justification demonstrating the reasons for requesting a waiver of this requirement.

(5) A copy of the general inspection schedule required by § 264.15(b); Include where applicable, as part of the inspection schedule, specific requirements in §§ 264.174, 264.194, 264.226, 264.254, 264.273, and 264.303.

(6) A justification of any request for a waiver(s) of the preparedness and prevention requirements of Part 264, Subpart C.

(7) A copy of the contingency plan required by Part 264, Subpart D. Note: Include, where applicable, as part of the contingency plan, specific requirements in §§ 264.227 and 264.255.

(8) A description of procedures, structures, or equipment used at the facility to:

(i) Prevent hazards in unloading operations (for example, ramps, special forklifts);

(ii) Prevent runoff from hazardous waste handling areas to other areas of the facility or environment, or to prevent flooding (for example, berms, dikes, trenches);

(iii) Prevent contamination of water supplies;

(iv) Mitigate effects of equipment failure and power outages; and

(v) Prevent undue exposure of personnel to hazardous waste (for example, protective clothing).

(9) A description of precautions to prevent accidental ignition or reaction of ignitable, reactive, or incompatible wastes as required to demonstrate compliance with § 264.17 including documentation demonstrating compliance with § 264.17(c).

(10) Traffic pattern, estimated volume (number, types of vehicles) and control (for example, show turns across traffic lanes, and stacking lanes (if appropriate); describe access road surfacing and load bearing capacity; show traffic control signals).

(11) Facility location information:

(i) In order to determine the applicability of the seismic standard [§ 264.18(a)] the owner or operator of a new facility must identify the political jurisdiction (e.g., county, township, or election district) in which the facility is proposed to be located.

[*Comment*: If the county or election district is not listed in Appendix VI of Part 264, no further information is required to demonstrate compliance with § 264.18(a).]

(ii) If the facility is proposed to be located in an area listed in Appendix VI of Part 264, the owner or operator shall demonstrate compliance with the seismic standard. This demonstration may be made using either published geologic data or data obtained from field investigations carried out by the applicant. The information provided must be of such quality to be acceptable to geologists experienced in identifying and evaluating seismic activity. The information submitted must show that either:

(A) No faults which have had displacement in Holocene time are present, or no lineations which suggest the presence of a fault (which have displacement in Holocene time) within 3,000 feet of a facility are present, based on data from:

(*1*) Published geologic studies,

(*2*) Aerial reconnaissance of the area within a five-mile radius from the facility.

(*3*) An analysis of aerial photographs covering a 3,000 foot radius of the facility, and

(*4*) If needed to clarify the above data, a reconnaissance based on walking portions of the area within 3,000 feet of the facility, or

(B) If faults (to include lineations) which have had displacement in Holocene time are present within 3,000 feet of a facility, no faults pass with 200 feet of the portions of the facility where treatment, storage, or disposal of hazardous waste will be conducted, based on data from a comprehensive geologic analysis of the site. Unless a site analysis is otherwise conclusive concerning the absence of faults within 200 feet of such portions of the facility data shall be obtained from a subsurface exploration (trenching) of the area within a distance no less than 200 feet from portions of the facility where treatment, storage, or disposal of hazardous waste will be conducted. Such trenching shall be performed in a direction that is perpendicular to known faults (which have had displacement in Holocene time) passing within 3,000 feet of the portions of the facility where treatment, storage, or disposal of hazardous waste will be conducted. Such investigation shall document with supporting maps and other analyses, the location of faults found.

[*Comment*: The Guidance Manual for the Location Standards provides greater detail on the content of each type of seismic investigation and the appropriate conditions under which each approach or a combination of approaches would be used.]

(iii) Owners and operators of all facilities shall provide an identification of whether the facility is located within a 100-year floodplain. This identification must indicate the source of data for such determination and include a copy of the relevant Federal Insurance Administration (FIA) flood map, if used, or the calculations and maps used where an FIA map is not available. Information shall also be provided identifying the 100-year flood level and any other special flooding factors (e.g., wave action) which must be considered in designing, constructing, operating, or maintaining the facility to withstand washout from a 100-year flood.

[*Comment*: Where maps for the National Flood Insurance Program produced by the Federal Insurance Administration (FIA) of the Federal Emergency Management Agency are available, they will normally be determinative of whether a facility is located within or outside of the 100-year floodplain. However, where the FIA map excludes an area (usually areas of the floodplain less than 200 feet in width), these areas must be considered and a determination made as to whether they are in the 100-year floodplain. Where FIA maps are not available for a proposed facility location, the owner or operator must use equivalent mapping techniques to determine whether the facility is within the 100-year floodplain, and if so located, what the 100-year flood elevation would be.]

(iv) Owners and operators of facilities located in the 100-year floodplain must provide the following information:

(A) Engineering analysis to indicate the various hydrodynamic and hydrostatic forces expected to result at the site as consequence of a 100-year flood.

(B) Structural or other engineering studies showing the design of operational units (e.g., tanks, incinerators) and flood protection devices (e.g., floodwalls, dikes) at the facility and how these will prevent washout.

(C) If applicable, and in lieu of paragraphs (b)(11)(iv) (A) and (B) of this section, a detailed description of procedures to be followed to remove hazardous waste to safety before the facility is flooded, including:

(*1*) Timing of such movement relative to flood levels, including estimated time to move the waste, to show that such movement can be completed before floodwaters reach the facility.

(*2*) A description of the location(s) to which the waste will be moved and demonstration that those facilities will be eligible to receive hazardous waste in accordance with the regulations under Parts 270, 271, 124, and 264 through 266 of this chapter.

(*3*) The planned procedures, equipment, and personnel to be used and the means to ensure that such resources will be available in time for use.

(*4*) The potential for accidental discharges of the waste during movement.

(v) Existing facilities NOT in compliance with § 264.18(b) shall provide a plan showing how the facility will be brought into compliance and a schedule for compliance.

(12) An outline of both the introductory and continuing training programs by owners or operators to prepare persons to operate or maintain the HWM facility in a safe manner as required to demonstrate compliance with § 264.16. A brief description of how training will be designed to meet actual job tasks in accordance with requirements in § 264.16(a)(3).

(13) A copy of the closure plan and, where applicable, the post-closure plan required by §§ 264.112 and 264.118. Include, where applicable, as part of the plans, specific requirements in §§ 264.178, 264.197, 264.228, 264.258, 264.280, 264.310, and 264.351.

(14) For existing facilities, documentation that a notice has been placed in the deed or appropriate alternate instrument as required by § 264.120.

(15) The most recent closure cost estimate for the facility prepared in accordance with § 264.142 plus a copy of the financial assurance mechanism adopted in compliance with § 264.143.

(16) Where applicable, the most recent post-closure cost estimate for the facility prepared in accordance with § 264.144 plus a copy of the financial assurance mechanism adopted in compliance with § 264.145.

(17) Where applicable, a copy of the insurance policy or other documentation which comprises compliance with the requirements of § 264.147. For a new facility, documentation showing the amount of insurance meeting the specification of § 264.147(a) and, if applicable, § 264.147(b), that the owner or operator plans to have in effect before initial receipt of hazardous waste for treatment, storage, or disposal. A request for a variance in the amount of required coverage, for a new or existing facility, may be submitted as specified in § 264.147(c).

(18) Where appropriate, proof of coverage by a State financial mechanism in compliance with § 264.149 or § 264.150.

(19) A topographic map showing a distance of 1000 feet around the facility at a scale of 2.5 centimeters (1 inch) equal to not more than 61.0 meters (200 feet). Contours must be shown on the map. The contour interval must be sufficient to clearly show the pattern of surface water flow in the vicinity of and from each operational unit of the facility. For example, contours with an interval of 1.5 meters (5 feet), if relief is greater than 6.1 meters (20 feet), or an interval of 0.6 meters (2 feet), if relief is less than 6.1 meters (20 feet). Owners and operators of HWM facilities located in mountainous areas

should use large contour intervals to adequately show topographic profiles of facilities. The map shall clearly show the following:

(i) Map scale and date.

(ii) 100-year floodplain area.

(iii) Surface waters including intermittant streams.

(iv) Surrounding land uses (residential, commercial, agricultural, recreational).

(v) A wind rose (i.e., prevailing windspeed and direction).

(vi) Orientation of the map (north arrow).

(vii) Legal boundaries of the HWM facility site.

(viii) Access control (fences, gates).

(ix) Injection and withdrawal wells both on-site and off-site.

(x) Buildings; treatment, storage, or disposal operations; or other structure (recreation areas, runoff control systems, access and internal roads, storm, sanitary, and process sewerage systems, loading and unloading areas, fire control facilities, etc.)

(xi) Barriers for drainage or flood control.

(xii) Location of operational units within the HWM facility site, where hazardous waste is (or will be) treated, stored, or disposed (include equipment cleanup areas).

[NOTE: For large HWM facilities the Agency will allow the use of other scales on a case-by-case basis.]

(20) Applicants may be required to submit such information as may be necessary to enable the Regional Administrator to carry out his duties under other Federal laws as required in § 270.3 of this part.

(c) *Additional information requirements.* The following additional information regarding protection of ground water is required from owners or operators of hazardous waste surface impoundments, piles, land treatment units, and landfills except as otherwise provided in § 264.90(b):

(1) A summary of the ground-water monitoring data obtained during the interim status period under §§ 265.90-265.94, where applicable.

(2) Identification of the uppermost aquifer and aquifers hydraulically interconnected beneath the facility property, including ground-water flow direction and rate, and the basis for such identification (i.e., the information obtained from hydrogeologic investigations of the facility area).

(3) On the topographic map required under paragraph (b)(19) of this section, a delineation of the waste management area, the property boundary, the proposed "point of compliance" as defined under § 264.95, the proposed location of ground-water monitoring wells as required under § 264.97, and, to the extent possible, the information required in paragraph (c)(2) of this section.

(4) A description of any plume of contamination that has entered the ground water from a regulated unit at the time that the application was submitted that:

(i) Delineates the extent of the plume on the topographic map required under paragraph (b)(19) of this section;

(ii) Identifies the concentration of each Appendix VIII, of Part 261 of this chapter, constituent throughout the plume or identifies the maximum concentrations of each Appendix VIII constituent in the plume.

(5) Detailed plans and an engineering report describing the proposed ground water monitoring program to be implemented to meet the requirements of § 264.97.

(6) If the presence of hazardous constituents has *not* been detected in the ground water at the time of permit application, the owner or operator must submit sufficient information, supporting data, and analyses to establish a detection monitoring program which meets the requirements of § 264.98. This submission must address the following items specified under § 264.98:

(i) A proposed list of indicator parameters, waste constituents, or reaction products that can provide a reliable indication of the presence of hazardous constituents in the ground water;

(ii) A proposed ground-water monitoring system;

(iii) Background values for each proposed monitoring parameter or constituent, or procedures to calculate such values; and

(iv) A description of proposed sampling, analysis and statistical comparison procedures to be utilized in evaluating ground-water monitoring data.

(7) If the presence of hazardous constituents has been detected in the ground water at the point of compliance at the time of permit application, the owner or operator must submit sufficient information, supporting data, and analyses to establish a compliance monitoring program which meets the requirements of § 264.99. The owner or operator must also submit an engineering feasibility plan for a corrective action program necessary to meet the requirements of § 264.100, except as provided in § 264.98(h)(5). To demonstrate compliance with § 264.99, the owner or operator must address the following items:

(i) A description of the wastes previously handled at the facility;

(ii) A characterization of the contaminated ground water, including concentrations of hazardous constituents;

(iii) A list of hazardous constituents for which compliance monitoring will be undertaken in accordance with §§ 264.97 and 264.99;

(iv) Proposed concentration limits for each hazardous constituent, based on the criteria set forth in § 264.94(a), including a justification for establishing any alternate concentration limits;

(v) Detailed plans and an engineering report describing the proposed ground-water monitoring system, in accordance with the requirements of § 264.97; and

(vi) A description of proposed sampling, analysis and statistical comparison procedures to be utilized in evaluating ground-water monitoring data.

(8) If hazardous constituents have been measured in the ground water which exceed the concentration limits established under § 264.94 Table 1, or if ground water monitoring conducted at the time of permit application under §§ 265.90 through 265.94 at the waste boundary indicates the presence of hazardous constituents from the facility in ground water over background concentrations, the owner or operator must submit sufficient information, supporting data, and analyses to establish a corrective action program which meets the requirements of § 264.100. However, an owner or operator is not required to submit information to establish a corrective action program if he demonstrates to the Regional Administrator that alternate concentration limits will protect human health and the environment after considering the criteria listed in § 264.94(b). An owner or operator who is not required to establish a corrective action program for this reason must instead submit sufficient information to establish a compliance monitoring program which meets the requirements of § 264.99 and paragraph (c)(6) of this section. To demonstrate compliance with § 264.100, the owner or operator must address, at a minimum, the following items:

(i) A characterization of the contaminated ground water, including concentrations of hazardous constituents;

(ii) The concentration limit for each hazardous constituent found in the ground water as set forth in § 264.94;

(iii) Detailed plans and an engineering report describing the corrective action to be taken; and

(iv) A description of how the groundwater monitoring program will demonstrate the adequacy of the corrective action.

[48 FR 14228, Apr. 1, 1983; 48 FR 30114, June 30, 1983]

§ 270.15 Specific Part B information requirements for containers.

Except as otherwise provided in § 264.170, owners or operators of facilities that store containers of hazardous waste must provide the following additional information:

(a) A description of the containment system to demonstrate compliance with § 264.175. Show at least the following:

(1) Basic design parameters, dimensions, and materials of construction.

(2) How the design promotes drainage or how containers are kept from contact with standing liquids in the containment system.

(3) Capacity of the containment system relative to the number and volume of containers to be stored.

(4) Provisions for preventing or managing run-on.

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(5) How accumulated liquids can be analyzed and removed to prevent overflow.

(b) For storage areas that store containers holding wastes that do not contain free liquids, a demonstration of compliance with § 264.175(c), including:

(1) Test procedures and results or other documentation or information to show that the wastes do not contain free liquids; and

(2) A description of how the storage area is designed or operated to drain and remove liquids or how containers are kept from contact with standing liquids.

(c) Sketches, drawings, or data demonstrating compliance with § 264.176 (location of buffer zone and containers holding ignitable or reactive wastes) and § 264.177(c) (location of incompatible wastes), where applicable.

(d) Where incompatible wastes are stored or otherwise managed in containers, a description of the procedures used to ensure compliance with §§ 264.177 (a) and (b), and 264.17 (b) and (c).

[48 FR 14228, Apr. 1, 1983; 48 FR 30114, June 30, 1983]

§ 270.16 Specific Part B information requirements for tanks.

Except as otherwise provided in § 264.190, owners and operators of facilities that use tanks to store or treat hazardous waste must provide a description of design and operation procedures which demonstrate complaince with the requirements of §§ 264.191, 264.192, 264.198 and 264.199 including:

(a) References to design standards or other available information used (or to be used) in design and construction of the tank.

(b) A description of design specifications including identification of construction materials and lining materials (include pertinent characteristics such as corrosion or erosion resistance).

(c) Tank dimensions, capacity, and shell thickness.

(d) A diagram of piping, instrumentation, and process flow.

(e) Description of feed systems, safety cutoff, bypass systems, and pressure controls (e.g., vents).

(f) Description of procedures for handling incompatible ignitable, or reactive wastes, including the use of buffer zones.

[48 FR 14228, Apr. 1, 1983; 48 FR 30114, June 30, 1983]

§ 270.17 Specific Part B information requirements for surface impoundments.

Except as otherwise provided in § 264.1, owners and operators of facilities that store, treat or dispose of hazardous waste in surface impoundments must provide the following additional information:

(a) A list of the hazardous wastes placed or to be placed in each surface impoundment;

(b) Detailed plans and an engineering report describing how the surface impoundment is or will be designed, constructed, operated and maintained to meet the requirements of § 264.221. This submission must address the following items as specified in § 264.221:

(1) The liner system (except for an existing portion of a surface impoundment). If an exemption from the requirement for a liner is sought as provided by § 264.221(b), submit detailed plans and engineering and hydrogeologic reports, as appropriate, describing alternate design and operating practices that will, in conjunction with location aspects, prevent the migration of any hazardous constituents into the ground water or surface water at any future time;

(2) Prevention of overtopping; and

(3) Structural integrity of dikes;

(c) If any exemption from Subpart F of Part 264 is sought, as provided by § 264.222(a), detailed plans and an engineering report explaining the location of the saturated zone in relation to the surface impoundment, and the design of a double-liner system that incorporates a leak detection system between the liners;

(d) A description of how each surface impoundment, including the liner and cover systems and appurtenances for control of overtopping, will be inspected in order to meet the requirements of § 264.226(a) and (b). This information should be included in the inspection plan submitted under § 270.14(b)(5);

(e) A certification by a qualified engineer which attests to the structural integrity of each dike, as required under § 264.226(c). For new units, the owner or operator must submit a statement by a qualified engineer that he will provide such a certification upon completion of construction in accordance with the plans and specifications;

(f) A description of the procedure to be used for removing a surface impoundment from service, as required under § 264.227(b) and (c). This information should be included in the contingency plan submitted under § 270.14(b)(7);

(g) A description of how hazardous waste residues and contaminated materials will be removed from the unit at closure, as required under § 264.228(a)(1). For any wastes not to be removed from the unit upon closure, the owner or operator must submit detailed-plans and an engineering report describing how § 264.228(a)(2) and (b) will be complied with. This information should be included in the closure plan and, where applicable, the post-closure plan submitted under § 270.14(b)(13);

(h) If ignitable or reactive wastes are to be placed in a surface impoundment, an explanation of how § 264.229 will be complied with;

(i) If incompatible wastes, or incompatible wastes and materials will be placed in a surface impoundment, an explanation of how § 264.230 will be complied with.

§ 270.18 Specific Part B information requirements for waste piles.

Except as otherwise provided in § 264.1, owners and operators of facilities that store or treat hazardous waste in waste piles must provide the following additional information:

(a) A list of hazardous wastes placed or to be placed in each waste pile;

(b) If an exemption is sought to § 264.251, and Subpart F of Part 264 as provided by § 264.250(c), an explanation of how the standards of § 264.250(c) will be complied with;

(c) Detailed plans and an engineering report describing how the pile is or will be designed, constructed, operated and maintained to meet the requirements of § 264.251. This submission must address the following items as specified in § 264.251:

(1) The liner system (except for an existing portion of a pile). If an exemption from the requirement for a liner is sought, as provided by § 264.252(b), the owner or operator must submit detailed plans and engineering and hydrogeologic reports, as applicable, describing alternate design and operating practices that will, in conjunction with location aspects, prevent the migration of any hazardous constituents into the ground water or surface water at any future time;

(2) Control of run-on;

(3) Control of run-off;

(4) Management of collection and holding units associated with run-on and run-off control systems; and

(5) Control of wind dispersal of particulate matter, where applicable;

(d) If an exemption from Subpart F of Part 264 is sought as provided by § 264.252 or § 264.253, submit detailed plans and an engineering report describing how the requirements of § 264.252(a) or § 264.253(a) will be complied with;

(e) A description of how each waste pile, including the liner and appurtenances for control of run-on and run-off, will be inspected in order to meet the requirements of § 264.254 (a) and (b). This information should be included in the inspection plan submitted under § 270.14(b)(5). If an exemption is sought to Subpart F of Part 264 pursuant to § 264.253, describe in the inspection plan how the inspection requirements of § 264.253(a)(3) will be complied with;

(f) If treatment is carried out on or in the pile, details of the process and equipment used, and the nature and quality of the residuals;

(g) If ignitable or reactive wastes are to be placed in a waste pile, an explanation of how the requirements of § 264.256 will be complied with;

(h) If incompatible wastes, or incompatible wastes and materials will be place in a waste pile, an explanation of how § 264.257 will be complied with;

(i) A description of how hazardous waste residues and contaminated ma-

terials will be removed from the waste pile at closure, as required under § 264.258(a). For any waste not to be removed from the waste pile upon closure, the owner or operator must submit detailed plans and an engineering report describing how § 264.310 (a) and (b) will be complied with. This information should be included in the closure plan and, where applicable, the post-closure plan submitted under § 270.14(b)(13).

§ 270.19 Specific Part B information requirements for incinerators.

Except as § 264.340 of this chapter provides otherwise, owners and operators of facilities that incinerate hazardous waste must fulfill the requirements of (a), (b), or (c) of this section.

(a) When seeking an exemption under § 264.340 (b) or (c) of this chapter (Ignitable, corrosive, or reactive wastes only):

(1) Documentation that the waste is listed as a hazardous waste in Part 261, Subpart D of this chapter, solely because it is ignitable (Hazard Code I) or corrosive (Hazard Code C) or both; or

(2) Documentation that the waste is listed as a hazardous waste in Part 261, Subpart D of this chapter, solely because it is reactive (Hazard Code R) for characteristics other than those listed in § 261.23(a) (4) and (5) of this chapter, and will not be burned when other hazardous wastes are present in the combustion zone; or

(3) Documentation that the waste is a hazardous waste solely because it possesses the characteristic of ignitability, corrosivity, or both, as determined by the tests for characteristics of hazardous waste under Part 261, Subpart C of this chapter; or

(4) Documentation that the waste is a hazardous waste solely because it possesses the reactivity characteristics listed in § 261.23(a) (1), (2), (3), (6), (7), or (8) of this chapter, and that it will not be burned when other hazardous wastes are present in the combustion zone; or

(b) Submit a trial burn plan or the results of a trial burn, including all required determinations, in accordance with § 270.62; or

(c) In lieu of a trial burn, the applicant may submit the following information:

(1) An analysis of each waste or mixture of wastes to be burned including:

(i) Heat value of the waste in the form and composition in which it will be burned.

(ii) Viscosity (if applicable), or description of physical form of the waste.

(iii) An identification of any hazardous organic constituents listed in Part 261, Appendix VIII, of this chapter, which are present in the waste to be burned, except that the applicant need not analyze for constituents listed in Part 261, Appendix VIII, of this chapter which would reasonably not be expected to be found in the waste. The constituents excluded from analysis must be identified and the basis for their exclusion stated. The waste analysis must rely on analytical techniques specified in "Test methods for the evaluation of Solid Waste, Physical/Chemical Methods" (incorporated by reference, see § 270.6 and referenced in 40 CFR Part 261, Appendix III), or their equivalent.

(iv) An approximate quantification of the hazardous constituents identified in the waste, within the precision produced by the analytical methods specified in "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods" (incorporated by reference, see § 270.6).

(v) A quantification of those hazardous constituents in the waste which may be designated as POHC's based on data submitted from other trial or operational burns which demonstrate compliance with the performance standards in § 264.343 of this chapter.

(2) A detailed engineering description of the incinerator, including:

(i) Manufacturer's name and model number of incinerator.

(ii) Type of incinerator.

(iii) Linear dimension of incinerator unit including cross sectional area of combustion chamber.

(iv) Decription of auxiliary fuel system (type/feed).

(v) Capacity of prime mover.

(vi) Description of automatic waste feed cutoff system(s).

(vii) Stack gas monitoring and pollution control monitoring system.

(viii) Nozzle and burner design.

(ix) Construction materials.

(x) Location and description of temperature, pressure, and flow indicating devices and control devices.

(3) A description and analysis of the waste to be burned compared with the waste for which data from operational or trial burns are provided to support the contention that a trial burn is not needed. The data should include those items listed in paragraph (c)(1) of this section. This analysis should specify the POHC's which the applicant has idenitified in the waste for which a permit is sought, and any differeneces from the POHC's in the waste for which burn data are provided.

(4) The design and operating conditions of the incinerator unit to be used, compared with that for which comparative burn data are available.

(5) A description of the results submitted from any previously conducted trial burn(s) including:

(i) Sampling and analysis techniques used to calculate performance standards in § 264.343 of this chapter,

(ii) Methods and results of monitoring temperatures, waste feed rates, carbon monoxide, and an appropriate indicator of combustion gas velocity (including a statement concerning the precision and accuracy of this measurement),

(6) The expected incinerator operation information to demonstrate compliance with §§ 264.343 and 264.345 of this chapter including:

(i) Expected carbon monoxide (CO) level in the stack exhaust gas.

(ii) Waste feed rate.

(iii) Combustion zone temperature.

(iv) Indication of combustion gas velocity.

(v) Expected stack gas volume, flow rate, and temperature.

(vi) Computed residence time for waste in the combustion zone.

(vii) Expected hydrochloric acid removal efficiency.

(viii) Expected fugitive emissions and their control procedures.

(ix) Proposed waste feed cut-off limits based on the identified significant operating parameters.

(7) Such supplemental information as the Director finds necessary to achieve the purposes of this paragraph.

(8) Waste analysis data, including that submitted in paragraph (c)(1) of this section, sufficient to allow the Director to specify as permit Principal Organic Hazardous Constituents (permit POHC's) those constituents for which destruction and removal efficiencies will be required.

(d) The Director shall approve a permit application without a trial burn if he finds that:

(1) The wastes are sufficiently similar; and

(2) The incinerator units are sufficiently similar, and the data from other trial burns are adequate to specify (under § 264.345 of this chapter) operating conditions that will ensure that the performance standards in § 264.343 of this chapter will be met by the incinerator.

§ 270.20 Specific Part B information requirements for land treatment facilities.

Except as otherwise provided in § 264.1, owners and operators of facilities that use land treatment to dispose of hazardous waste must provide the following additional information:

(a) A description of plans to conduct a treatment demonstration as required under § 264.272. The description must include the following information;

(1) The wastes for which the demonstration will be made and the potential hazardous constituents in the waste;

(2) The data sources to be used to make the demonstration (*e.g.*, literature, laboratory data, field data, or operating data);

(3) Any specific laboratory or field test that will be conducted, including:

(i) The type of test (*e.g.*, column leaching, degradation);

(ii) Materials and methods, including analytical procedures;

(iii) Expected time for completion;

(iv) Characteristics of the unit that will be simulated in the demonstration, including treatment zone characteristics, climatic conditions, and operating practices.

(b) A description of a land treatment program, as required under § 264.271. This information must be submitted with the plans for the treatment demonstration, and updated following the treatment demonstration. The land treatment program must address the following items:

(1) The wastes to be land treated;

(2) Design measures and operating practices necessary to maximize treatment in accordance with § 264.273(a) including:

(i) Waste application method and rate;

(ii) Measures to control soil pH;

(iii) Enhancement of microbial or chemical reactions;

(iv) Control of moisture content;

(3) Provisions for unsaturated zone monitoring, including:

(i) Sampling equipment, procedures, and frequency;

(ii) Procedures for selecting sampling locations;

(iii) Analytical procedures;

(iv) Chain of custody control;

(v) Procedures for establishing background values;

(vi) Statistical methods for interpreting results;

(vii) The justification for any hazardous constituents recommended for selection as principal hazardous constituents, in accordance with the criteria for such selection in § 264.278(a);

(4) A list of hazardous constituents reasonably expected to be in, or derived from, the wastes to be land treated based on waste analysis performed pursuant to § 264.13;

(5) The proposed dimensions of the treatment zone;

(c) A description of how the unit is or will be designed, constructed, operated, and maintained in order to meet the requirements of § 264.273. This submission must address the following items:

(1) Control of run-on;

(2) Collection and control of run-off;

(3) Minimization of run-off of hazardous constituents from the treatment zone;

(4) Management of collection and holding facilities associated with run-on and run-off control systems;

(5) Periodic inspection of the unit. This information should be included in the inspection plan submitted under § 270.14(b)(5);

(6) Control of wind dispersal of particulate matter, if applicable;

(d) If food-chain crops are to be grown in or on the treatment zone of the land treatment unit, a description of how the demonstration required under § 264.276(a) will be conducted including:

(1) Characteristics of the food-chain crop for which the demonstration will be made.

(2) Characteristics of the waste, treatment zone, and waste application method and rate to be used in the demonstration;

(3) Procedures for crop growth, sample collection, sample analysis, and data evaluation;

(4) Characteristics of the comparison crop including the location and conditions under which it was or will be grown;

(e) If food-chain crops are to be grown, and cadmium is present in the land-treated waste, a description of how the requirements of § 264.276(b) will be complied with;

(f) A description of the vegetative cover to be applied to closed portions of the facility, and a plan for maintaining such cover during the post-closure care period, as required under § 264.280(a)(8) and § 264.280(c)(2). This information should be included in the closure plan and, where applicable, the post-closure care plan submitted under § 270.14(b)(13);

(g) If ignitable or reactive wastes will be placed in or on the treatment zone, an explanation of how the requirements of § 264.281 will be complied with;

(h) If incompatible wastes, or incompatible wastes and materials, will be placed in or on the same treatment zone, an explanation of how § 264.282 will be complied with.

[48 FR 14228, Apr. 1, 1983; 48 FR 30114, June 30, 1983]

§ 270.21 Specific Part B information requirements for landfills.

Except as otherwise provided in § 264.1, owners and operators of facilities that dispose of hazardous waste in landfills must provide the following additional information:

(a) A list of the hazardous wastes placed or to be placed in each landfill or landfill cell;

(b) Detailed plans and an engineering report describing how the landfill is or will be designed, constructed, operated and maintained to comply with the requirements of § 264.301. This submission must address the following items as specified in § 264.301:

(1) The liner system and leachate collection and removal system (except for an existing portion of a landfill). If an exemption from the requirements for a liner and a leachate collection and removal system is sought as provided by § 264.301(b), submit detailed plans and engineering and hydrogeologic reports, as appropriate, describing alternate design and operating practices that will, in conjunction with location aspects, prevent the migration of any hazardous constituent into the ground water or surface water at any future time;

(2) Control of run-on;

(3) Control of run-off;

(4) Management of collection and holding facilities associated with run-on and run-off control systems; and

(5) Control of wind dispersal of particulate matter, where applicable;

(c) If an exemption from Subpart F of Part 264 is sought, as provided by § 264.302(a), the owner or operator must submit detailed plans and an engineering report explaining the location of the saturated zone in relation to the landfill, the design of a double-liner system that incorporates a leak detection system between the liners, and a leachate collection and removal system above the liners;

(d) A description of how each landfill, including the liner and cover systems, will be inspected in order to meet the requirements of § 264.303 (a) and (b). This information should be included in the inspection plan submitted under § 270.14(b)(5).

(e) Detailed plans and an engineering report describing the final cover which will be applied to each landfill or landfill cell at closure in accordance with § 264.310(a), and a description of how each landfill will be maintained and monitored after closure in accordance with § 264.310(b). This information should be included in the closure and post-closure plans submitted under § 270.14(b)(13).

(f) If ignitable or reactive wastes will be landfilled, an explanation of how the standards of § 264.312 will be complied with;

(g) If incompatible wastes, or incompatible wastes and materials will be landfilled, an explanation of how § 264.313 will be complied with;

(h) If bulk or non-containerized liquid waste or wastes containing free liquids is to be landfilled, an explanation of how the requirements of § 264.314 will be complied with;

(i) If containers of hazardous waste are to be landfilled, an explanation of how the requirements of § 264.315 or § 264.316, as applicable, will be complied with.

[48 FR 14228, Apr. 1, 1983; 48 FR 30114, June 30, 1983]

§§ 270.22—270.29 [Reserved]

Subpart C—Permit Conditions

§ 270.30 Conditions applicable to all permits.

The following conditions apply to all RCRA permits, and shall be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to these regulations (or the corresponding approved State regulations) must be given in the permit.

(a) *Duty to comply.* The permittee must comply with all conditions of this permit, except that the permittee need not comply with the conditions of this permit to the extent and for the duration such noncompliance is authorized in an emergency permit. (See § 270.61). Any permit noncompliance, except under the terms of an emergency permit, constitutes a violation of the appropriate Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

(b) *Duty to reapply.* If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee

must apply for and obtain a new permit.

(c) *Need to halt or reduce activity not a defense.* It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(d) In the event of noncompliance with the permit, the permittee shall take all reasonable steps to minimize releases to the environment, and shall carry out such measures as are reasonable to prevent significant adverse impacts on human health or the environment.

(e) *Proper operation and maintenance.* The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the opration of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

(f) *Permit actions.* This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

(g) *Property rights.* The permit does not convey any property rights of any sort, or any exclusive privilege.

(h) *Duty to provide information.* The permittee shall furnish to the Director, within a reasonable time, any relevant information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.

(i) *Inspection and entry.* The permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by law to:

(1) Enter at reasonable times upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;

(2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

(3) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

(4) Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by RCRA, any substances or parameters at any location.

(j) *Monitoring and records.* (1) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

(2) The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period may be extended by request of the Director at any time. The permittee shall maintain records from all ground-water monitoring wells and associated ground-water surface elevations, for the active life of the facility, and for disposal facilities for the post-closure care period as well.

(3) Records for monitoring information shall include:

(i) The date, exact place, and time of sampling or measurements;

(ii) The individual(s) who performed the sampling or measurements;

(iii) The date(s) analyses were performed;

(iv) The individual(s) who performed the analyses;

(v) The analytical techniques or methods used; and

(vi) The results of such analyses.

(k) *Signatory requirements.* All applications, reports, or information submitted to the Director shall be signed and certified (See § 270.11.)

(l) *Reporting requirements.* (1) *Planned changes.* The permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility.

(2) *Anticipated noncompliance.* The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. For a new facility, the permittee may not treat, store, or dispose of hazardous waste; and for a facility being modified, the permittee may not treat, store, or dispose of hazardous waste in the modified portion of the facility, until:

(i) The permittee has submitted to the Director by certified mail or hand delivery a letter signed by the permittee and a registered professional engineer stating that the facility has been constructed or modified in compliance with the permit; and

(ii)(A) The Director has inspected the modified or newly constructed facility and finds it is in compliance with the conditions of the permit; or

(B) Within 15 days of the date of submission of the letter in paragraph (l)(2)(i) of this section, the permittee has not received notice from the Director of his or her intent to inspect, prior inspection is waived and the permittee may commence treatment, storage, or disposal of hazardous waste.

(3) *Transfers.* This permit is not transferable to any person except after notice to the Director. The Director may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under RCRA. (See § 270.40)

(4) *Monitoring reports.* Monitoring results shall be reported at the intervals specified elsewhere in this permit.

(5) *Compliance schedules.* Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

(6) *Twenty-four hour reporting.* (i) The permittee shall report any noncompliance which may endanger health or the environment orally within 24 hours from the time the permittee becomes aware of the circumstances, including:

(A) Information concerning release of any hazardous waste that may cause an endangerment to public drinking water supplies.

(B) Any information of a release or discharge of hazardous waste or of a fire or explosion from the HWM facility, which could threaten the environment or human health outside the facility.

(ii) The description of the occurrence and its cause shall include:

(A) Name, address, and telephone number of the owner or operator;

(B) Name, address, and telephone number of the facility;

(C) Date, time, and type of incident;

(D) Name and quantity of material(s) involved;

(E) The extent of injuries, if any;

(F) An assessment of actual or potential hazards to the environment and human health outside the facility, where this is applicable; and

(G) Estimated quantity and disposition of recovered material that resulted from the incident.

(iii) A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. The Director may waive the five day written notice requirement in favor of a written report within fifteen days.

(7) *Manifest discrepancy report:* If a significant discrepancy in a manifest is

discovered, the permittee must attempt to reconcile the discrepancy. If not resolved within fifteen days, the permittee must submit a letter report, including a copy of the manifest, to the Director. (See 40 CFR 264.72.)

(8) *Unmanifested waste report:* This report must be submitted to the Director within 15 days of receipt of unmanifested waste. (See 40 CFR § 264.76)

(9) *Biennial report:* A biennial report must be submitted covering facility activities during odd numbered calendar years. (See 40 CFR 264.75.)

(10) *Other noncompliance.* The permittee shall report all instances of noncompliance not reported under paragraphs (l)(4), (5), and (6) of this section, at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph (l)(6) of this section.

(11) *Other information.* Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, it shall promptly submit such facts or information.

(Clean Water Act (33 U.S.C. 1251 et seq.), Safe Drinking Water Act (42 U.S.C. 300f et seq.), Clean Air Act (42 U.S.C. 7401 et seq.), Resource Conservation and Recovery Act (42 U.S.C. 6901 et seq.))

[48 FR 14228, Apr. 1, 1983, as amended at 48 FR 30114, June 30, 1983; 48 FR 39622, Sept. 1, 1983]

§ 270.31 Requirements for recording and reporting of monitoring results.

All permits shall specify:

(a) Requirements concerning the proper use, maintenance, and installation, when appropriate, of monitoring equipment or methods (including biological monitoring methods when appropriate);

(b) Required monitoring including type, intervals, and frequency sufficient to yield data which are representative of the monitored activity including, when appropriate, continuous monitoring;

(c) Applicable reporting requirements based upon the impact of the regulated activity and as specified in Parts 264, 266 and 267. Reporting shall be no less frequent than specified in the above regulations.

§ 270.32 Establishing permit conditions.

(a) In addition to conditions required in all permits (§ 270.30), the Director shall establish conditions, as required on a case-by-case basis, in permits under §§ 270.50 (duration of permits), 270.33(a) (schedules of compliance), 270.31 (monitoring), and for EPA issued permits only, 270.33(b) (alternate schedules of compliance) and 270.3 (considerations under Federal law).

(b) Each RCRA permit shall include permit conditions necessary to achieve compliance with the Act and regulations, including each of the applicable requirements specified in 40 CFR Parts 264, 266, and 267. In satisfying this provision, the Director may incorporate applicable requirements of 40 CFR Parts 264, 266, and 267 directly into the permit or establish other permit conditions that are based on these parts.

(c) For a State issued permit, an applicable requirement is a State statutory or regulatory requirement which takes effect prior to final administrative disposition of a permit. For a permit issued by EPA, an applicable requirement is a statutory or regulatory requirement (including any interim final regulation) which takes effect prior to the issuance of the permit (except as provided in § 124.86(c) for RCRA permits being processed under Subparts E or F of Part 124). Section 124.14 (reopening of comment period) provides a means for reopening EPA permit proceedings at the discretion of the Director where new requirements become effective during the permitting process and are of sufficient magnitude to make additional proceedings desirable. For State and EPA administered programs, an applicable requirement is also any requirement which takes effect prior to the modification or revocation and reissuance of a permit, to the extent allowed in § 270.41.

(d) New or reissued permits, and to the extent allowed under § 270.41, modified or revoked and reissued permits, shall incorporate each of the applicable requirements referenced in this section and in 40 CFR 270.31.

(e) *Incorporation.* All permit conditions shall be incorporated either expressly or by reference. If incorporated by reference, a specific citation to the applicable regulations or requirements must be given in the permit.

§ 270.33 Schedules of compliance.

(a) The permit may, when appropriate, specify a schedule of compliance leading to compliance with the Act and regulations.

(1) *Time for compliance.* Any schedules of compliance under this section shall require compliance as soon as possible.

(2) *Interim dates.* Except as provided in paragraph (b)(1)(ii) of this section, if a permit establishes a schedule of compliance which exceeds 1 year from the date of permit issuance, the schedule shall set forth interim requirements and the dates for their achievement.

(i) The time between interim dates shall not exceed 1 year.

(ii) If the time necessary for completion of any interim requirement is more than 1 year and is not readily divisible into stages for completion, the permit shall specify interim dates for the submission of reports of progress toward completion of the interim requirements and indicate a projected completion date.

(3) *Reporting.* The permit shall be written to require that no later than 14 days following each interim date and the final date of compliance, the permittee shall notify the Director in writing, of its compliance or noncompliance with the interim or final requirements.

(b) *Alternative schedules of compliance.* An RCRA permit applicant or permittee may cease conducting regulated activities (by receiving a terminal volume of hazardous waste and, for treatment and storage HWM facilities, closing pursuant to applicable requirements; and, for disposal HWM facilities, closing and conducting post-closure care pursuant to applicable requirements) rather than continue to operate and meet permit requirements as follows:

(1) If the permittee decides to cease conducting regulated activities at a given time within the term of a permit which has already been issued:

(i) The permit may be modified to contain a new or additional schedule leading to timely cessation of activities; or

(ii) The permittee shall cease conducting permitted activities before noncompliance with any interim or final compliance schedule requirement already specified in the permit.

(2) If the decision to cease conducting regulated activities is made before issuance of a permit whose term will include the termination date, the permit shall contain a schedule leading to termination which will ensure timely compliance with applicable requirements.

(3) If the permittee is undecided whether to cease conducting regulated activities, the Director may issue or modify a permit to contain two schedules as follows:

(i) Both schedules shall contain an identical interim deadline requiring a final decision on whether to cease conducting regulated activities no later than a date which ensures sufficient time to comply with applicable requirements in a timely manner if the decision is to continue conducting regulated activities;

(ii) One schedule shall lead to timely compliance with applicable requirements;

(iii) The second schedule shall lead to cessation of regulated activities by a date which will ensure timely compliance with applicable requirements;

(iv) Each permit containing two schedules shall include a requirement that after the permittee has made a final decision under paragraph (b)(3)(i) of this section it shall follow the schedule leading to compliance if the decision is to continue conducting regulated activities, and follow the schedule leading to termination if the decision is to cease conducting regulated activities.

(4) The applicant's or permittee's decision to cease conducting regulated activities shall be evidenced by a firm public commitment satisfactory to the Director, such as resolution of the board of directors of a corporation.

[48 FR 14228, Apr. 1, 1983, as amended at 48 FR 30114, June 30, 1983]

§§ 270.34—270.39 [Reserved]

Subpart D—Changes to Permit

§ 270.40 Transfer of permits.

Transfers by modification. A permit may be transferred by the permittee to a new owner or operator only if the permit has been modified or revoked and reissued (under § 270.41(b)(2)), or a minor modification made (under § 270.42(d)), to identify the new permittee and incorporate such other requirements as may be necessary under the appropriate Act.

§ 270.41 Major modification or revocation and reissuance of permits.

When the Director receives any information (for example, inspects the facility, receives information submitted by the permittee as required in the permit (see § 270.30)), receives a request for modification or revocation and reissuance under § 124.5, or conducts a review of the permit file) he or she may determine whether or not one or more of the causes listed in paragraphs (a) and (b) of this section for modification, or revocation and reissuance or both exist. If cause exists, the Director may modify or revoke and reissue the permit accordingly, subject to the limitations of paragraphs (c) of this section, and may request an updated application if necessary. When a permit is modified, only the conditions subject to modification are reopened. If a permit is revoked and reissued, the entire permit is reopened and subject to revision and the permit is reissued for a new term. See 40 CFR 124.5(c)(2). If cause does not exist under this section or 40 CFR 270.42, the Director shall not modify or revoke and reissue the permit. If a permit modification satisfies the criteria in 40 CFR 270.42 for a minor modification, the permit may be modified without a draft permit or public review. Otherwise, a draft permit must be prepared and other procedures in Part 124 (or procedures of an approved State program) followed.

(a) *Causes for modification.* The following are causes for modification, but not revocation and reissuance, of permits; the following may be causes for revocation and reissuance, as well as modification, when the permittee requests or agrees.

(1) *Alterations.* There are material and substantial alterations or additions to the permitted facility or activity which occurred after permit issuance which justify the application of permit conditions that are different or absent in the existing permit.

(2) *Information.* The Director has received information. Permits may be modified during their terms for this cause only if the information was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and would have justified the application of different permit conditions at the time of issuance.

(3) *New regulations.* The standards or regulations on which the permit was based have been changed by promulgation of amended standards or regulations or by judicial decision after the permit was issued. Permits may be modified during their terms for this cause only as follows:

(i) For promulgation of amended standards or regulations, when:

(A) The permit condition requested to be modified was based on a promulgated Parts 260—266 regulation; and

(B) EPA has revised, withdrawn, or modified that portion of the regulation on which the permit condition was based; and

(C) A permittee requests modification in accordance with § 124.5 within ninety (90) days after FEDERAL REGISTER notice of the action on which the request is based.

(ii) For judicial decisions, a court of competent jurisdiction has remanded and stayed EPA promulgated regulations if the remand and stay concern that portion of the regulations on which the permit condition was based and a request is filed by the permittee in accordance with § 124.5 within ninety (90) days of judicial remand.

(4) *Compliance schedules.* The Director determines good cause exists for modification of a compliance schedule, such as an act of God, strike, flood, or materials shortage or other events over which the permittee has little or

no control and for which there is no reasonably available remedy.

(5) The Director may also modify a permit:

(i) When modification of a closure plan is required under § 264.112(b) or § 264.118(b).

(ii) After the Director receives the notification of expected closure under § 264.113, when the Director determines that extension of the 90 to 180 day periods under § 264.113, modification of the 30-year post-closure period under § 264.117(a), continuation of security requirements under § 264.117(b), or permission to disturb the integrity of the containment system under § 264.117(c) are unwarranted.

(iii) When the permittee has filed a request under § 264.147(c) for a variance to the level of financial responsibility or when the Director demonstrates under § 264.147(d) that an upward adjustment of the level of financial responsibility is required.

(iv) When the corrective action program specified in the permit under § 264.100 has not brought the regulated unit into compliance with the ground-water protection standard within a reasonable period of time.

(v) To include a detection monitoring program meeting the requirements of § 264.98, when the owner or operator has been conducting a compliance monitoring program under § 264.99 or a corrective action program under § 264.100 and compliance period ends before the end of the post-closure care period for the unit.

(vi) When a permit requires a compliance monitoring program under § 264.99, but monitoring data collected prior to permit issuance indicate that the facility is exceeding the groundwater protection standard.

(vii) To include conditions applicable to units at a facility that were not previously included in the facility's permit.

(viii) When a land treatment unit is not achieving complete treatment of hazardous constituents under its current permit conditions.

(b) *Causes for modification or revocation and reissuance.* The following are causes to modify or, alternatively, revoke and reissue a permit:

(1) Cause exists for termination under § 270.43, and the Director determines that modification or revocation and reissuance is appropriate.

(2) The Director has received notification (as required in the permit, see § 270.30(l)(3)) of a proposed transfer of the permit.

(c) *Facility siting.* Suitability of the facility location will not be considered at the time of permit modification or revocation and reissuance unless new information or standards indicate that a threat to human health or the environmental exists which was unknown at the time of permit issuance.

[48 FR 14228, Apr. 1, 1983, as amended at 48 FR 30114, June 30, 1983]

§ 270.42 Minor modifications of permits.

Upon the consent of the permittee, the Director may modify a permit to make the corrections or allowances for changes in the permitted activity listed in this section, without following the procedures of Part 124. Any permit modification not processed as a minor modification under this section must be made for cause and with Part 124 draft permit and public notice as required in § 270.41. Minor modifications may only:

(a) Correct typographical errors;

(b) Require more frequent monitoring or reporting by the permittee;

(c) Change an interim compliance date in a schedule of compliance, provided the new date is not more than 120 days after the date specified in the existing permit and does not interfere with attainment of the final compliance date requirement;

(d) Allow for a change in ownership or operational control of a facility where the Director determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittees has been submitted to the Director;

(e) Change the lists of facility emergency coordinators or equipment in the permit's contingency plan;

(f) Change estimates of maximum inventory under § 264.112(a)(2);

(g) Change estimates of expected year of closure or schedules for final closure under § 264.112(a)(4);

(h) Approve periods longer than 90 days or 180 days under § 264.113 (a) and (b);

(i) Change the ranges of the operating requirements set in the permit to reflect the results of the trial burn, provided that the change is minor;

(j) Change the operating requirements set in the permit for conducting a trial burn, provided that the change is minor;

(k) Grant one extension of the time period for determining operational readiness following completion of construction, for up to 720 hours operating time for treatment of hazardous waste;

(l) Change the treatment program requirements for land treatment units under § 264.271 to improve treatment of hazardous constituents, provided that the change is minor;

(m) Change any conditions specified in the permit for land treatment units to reflect the results of field tests or laboratory analyses used in making a treatment demonstration in accordance with § 270.63, provided that the change is minor; and

(n) Allow a second treatment demonstration for land treatment to be conducted when the results of the first demonstration have not shown the conditions under which the waste or wastes can be treated completely as required by § 264.272(a), provided that the conditions for the second demonstration are substantially the same as the conditions for the first demonstration.

§ 270.43 Termination of permits.

(a) The following are causes for terminating a permit during its term, or for denying a permit renewal application:

(1) Noncompliance by the permittee with any condition of the permit;

(2) The permittee's failure in the application or during the permit issuance process to disclose fully all relevant facts, or the permittee's misrepresentation of any relevant facts at any time; or

(3) A determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination.

(b) The Director shall follow the applicable procedures in Part 124 or State procedures in terminating any permit under this section.

§§ 270.44—270.49 [Reserved]

Subpart E—Expiration and Continuation of Permits

§ 270.50 Duration of permits.

(a) RCRA permits shall be effective for a fixed term not to exceed 10 years.

(b) Except as provided in § 270.51, the term of a permit shall not be extended by modification beyond the maximum duration specified in this section.

(c) The Director may issue any permit for a duration that is less than the full allowable term under this section.

§ 270.51 Continuation of expiring permits.

(a) *EPA permits.* When EPA is the permit-issuing authority, the conditions of an expired permit continue in force under 5 U.S.C. 558(c) until the effective date of a new permit (see § 124.15) if:

(1) The permittee has submitted a timely application under § 270.14 and the applicable sections in §§ 270.15—270.29 which is a complete (under § 270.10(c)) application for a new permit; and

(2) The Regional Administrator through no fault of the permittee, does not issue a new permit with an effective date under § 124.15 on or before the expiration date of the previous permit (for example, when issuance is impracticable due to time or resource constraints).

(b) *Effect.* Permits continued under this section remain fully effective and enforceable.

(c) *Enforcement.* When the permittee is not in compliance with the conditions of the expiring or expired permit, the Regional Administrator may choose to do any or all of the following:

(1) Initiate enforcement action based upon the permit which has been continued;

(2) Issue a notice of intent to deny the new permit under § 124.6. If the permit is denied, the owner or operator would then be required to cease the activities authorized by the continued permit or be subject to enforcement action for operating without a permit;

(3) Issue a new permit under Part 124 with appropriate conditions; or

(4) Take other actions authorized by these regulations.

(d) *State continuation.* In a State with an hazardous waste program authorized under 40 CFR Part 271, if a permittee has submitted a timely and complete application under applicable State law and regulations, the terms and conditions of an EPA-issued RCRA permit continue in force beyond the expiration date of the permit, but only until the effective date of the State's issuance or denial of a State RCRA permit.

(Clean Water Act (33 U.S.C. 1251 et seq.), Safe Drinking Water Act (42 U.S.C. 300f et seq.), Clean Air Act (42 U.S.C. 7401 et seq.), Resource Conservation and Recovery Act (42 U.S.C. 6901 et seq.))

[48 FR 14228, Apr. 1, 1983, as amended at 48 FR 39622, Sept. 1, 1983]

§§ 270.52—270.59 [Reserved]

Subpart F—Special Forms of Permits

§ 270.60 Permits by rule.

Notwithstanding any other provision of this part or Part 124, the following shall be deemed to have a RCRA permit if the conditions listed are met:

(a) *Ocean disposal barges or vessels.* The owner or operator of a barge or other vessel which accepts hazardous waste for ocean disposal, if the owner or operator:

(1) Has a permit for ocean dumping issued under 40 CFR Part 220 (Ocean Dumping, authorized by the Marine Protection, Research, and Sanctuaries Act, as amended, 33 U.S.C. 1420 *et seq.*);

(2) Complies with the conditions of that permit; and

(3) Complies with the following hazardous waste regulations:

(i) 40 CFR 264.11, Identification number;

(ii) 40 CFR 264.71, Use of manifest system;

(iii) 40 CFR 264.72, Manifest discrepancies;

(iv) 40 CFR 264.73(a) and (b)(1), Operating record;

(v) 40 CFR 264.75, Biennial report; and

(vi) 40 CFR 264.76, Unmanifested waste report.

(b) *Injection wells.* The owner or operator of an injection well disposing of hazardous waste, if the owner or operator:

(1) Has a permit for underground injection issued under Part 144 or 145; and

(2) Complies with the conditions of that permit and the requirements of § 144.14 (requirements for wells managing hazardous waste).

(c) *Publicly owned treatment works.* The owner or operator of a POTW which accepts for treatment hazardous waste, if the owner or operator:

(1) Has an NPDES permit;

(2) Complies with the conditions of that permit; and

(3) Complies with the following regulations:

(i) 40 CFR 264.11, Identification number;

(ii) 40 CFR 264.71, Use of manifest system;

(iii) 40 CFR 264.72, Manifest discrepancies;

(iv) 40 CFR 264.73(a) and (b)(1), Operating record;

(v) 40 CFR 264.75, Biennial report;

(vi) 40 CFR 264.76, Unmanifested waste report; and

(4) If the waste meets all Federal, State, and local pretreatment requirements which would be applicable to the waste if it were being discharged into the POTW through a sewer, pipe, or similar conveyance.

§ 270.61 Emergency permits.

(a) Notwithstanding any other provision of this part or Part 124, in the event the Director finds an imminent and substantial endangerment to human health or the environment the Director may issue a temporary emergency permit: (1) To a non-permitted

facility to allow treatment, storage, or disposal of hazardous waste or (2) to a permitted facility to allow treatment, storage, or disposal of a hazardous waste not covered by an effective permit.

(b) This emergency permit:

(1) May be oral or written. If oral, it shall be followed in five days by a written emergency permit;

(2) Shall not exceed 90 days in duration;

(3) Shall clearly specify the hazardous wastes to be received, and the manner and location of their treatment, storage, or disposal;

(4) May be terminated by the Director at any time without process if he or she determines that termination is appropriate to protect human health and the environment;

(5) Shall be accompanied by a public notice published under § 124.11(b) including:

(i) Name and address of the office granting the emergency authorization;

(ii) Name and location of the permitted HWM facility;

(iii) A brief description of the wastes involved;

(iv) A brief description of the action authorized and reasons for authorizing it; and

(v) Duration of the emergency permit; and

(6) Shall incorporate, to the extent possible and not inconsistent with the emergency situation, all applicable requirements of this part and 40 CFR Parts 264 and 266.

[48 FR 14228, Apr. 1, 1983, as amended at 48 FR 30114, June 30, 1983]

§ 270.62 Hazardous waste incinerator permits.

(a) For the purposes of determining operational readiness following completion of physical construction, the Director must establish permit conditions, including but not limited to allowable waste feeds and operating conditions, in the permit to a new hazardous waste incinerator. These permit conditions will be effective for the minimum time required to bring the incinerator to a point of operational readiness to conduct a trial burn, not to exceed 720 hours operating time for treatment of hazardous waste. The Director may extend the duration of this operational period once, for up to 720 additional hours, at the request of the applicant when good cause is shown. The permit may be modified to reflect the extension according to § 270.42 (Minor modifications of permits) of this chapter.

(1) Applicants must submit a statement, with part B of the permit application, which suggests the conditions necessary to operate in compliance with the performance standards of § 264.343 of this chapter during this period. This statement should include, at a minimum, restrictions on waste constituents, waste feed rates and the operating parameters identified in § 264.345 of this chapter.

(2) The Director will review this statement and any other relevant information submitted with Part B of the permit application and specify requirements for this period sufficient to meet the performance standards of § 264.343 of this chapter based on his engineering judgment.

(b) For the purposes of determining feasibility of compliance with the performance standards of § 264.343 of this chapter and of determining adequate operating conditions under § 264.345 of this chapter, the Director must establish conditions in the permit for a new hazardous waste incinerator to be effective during the trial burn.

(1) Applicants must propose a trial burn plan, prepared under paragraph (b)(2) of this section with a Part B of the permit application.

(2) The trial burn plan must include the following information:

(i) An analysis of each waste or mixture of wastes to be burned which includes:

(A) Heat value of the waste in the form and composition in which it will be burned.

(B) Viscosity (if applicable), or description of the physical form of the waste.

(C) An identification of any hazardous organic constituents listed in Part 261, Appendix VIII of this chapter, which are present in the waste to be burned, except that the applicant need not analyze for constituents listed in Part 261, Appendix VIII, of this chapter which would reasonably not be expected to be found in the waste. The constituents excluded from analysis must be identified, and the basis for the exclusion stated. The waste analysis must rely on analytical techniques specified in "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods" (incorporated by reference, see § 270.6), or other equivalent.

(D) An approximate quantification of the hazardous constituents identified in the waste, within the precision produced by the analytical methods specified in "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods," (incorporated by reference, see § 270.6), or their equivalent.

(ii) A detailed engineering description of the incinerator for which the permit is sought including:

(A) Manufacturer's name and model number of incinerator (if available).

(B) Type of incinerator.

(C) Linear dimensions of the incinerator unit including the cross sectional area of combustion chamber.

(D) Description of the auxiliary fuel system (type/feed).

(E) Capacity of prime mover.

(F) Description of automatic waste feed cut-off system(s).

(G) Stack gas monitoring and pollution control equipment.

(H) Nozzle and burner design.

(I) Construction materials.

(J) Location and description of temperature, pressure, and flow indicating and control devices.

(iii) A detailed description of sampling and monitoring procedures, including sampling and monitoring locations in the system, the equipment to be used, sampling and monitoring frequency, and planned analytical procedures for sample analysis.

(iv) A detailed test schedule for each waste for which the trial burn is planned including date(s), duration, quantity of waste to be burned, and other factors relevant to the Director's decision under paragraph (b)(5) of this section.

(v) A detailed test protocol, including, for each waste identified, the ranges of temperature, waste feed rate, combustion gas velocity, use of auxiliary fuel, and any other relevant parameters that will be varied to affect the destruction and removal efficiency of the incinerator.

(vi) A description of, and planned operating conditions for, any emission control equipment which will be used.

(vii) Procedures for rapidly stopping waste feed, shutting down the incinerator, and controlling emissions in the event of an equipment malfunction.

(viii) Such other information as the Director reasonably finds necessary to determine whether to approve the trial burn plan in light of the purposes of this paragraph and the criteria in paragraph (b)(5) of this section.

(3) The Director, in reviewing the trial burn plan, shall evaluate the sufficiency of the information provided and may require the applicant to supplement this information, if necessary, to achieve the purposes of this paragraph.

(4) Based on the waste analysis data in the trial burn plan, the Director will specify as trial Principal Organic Hazardous Constituents (POHCs), those constituents for which destruction and removal efficiencies must be calculated during the trial burn. These trial POHCs will be specified by the Director based on his estimate of the difficulty of incineration of the constituents identified in the waste analysis, their concentration or mass in the waste feed, and, for wastes listed in Part 261, Subpart D, of this chapter, the hazardous waste organic constituent or constituents identified in Appendix VII of that part as the basis for listing.

(5) The Director shall approve a trial burn plan if he finds that:

(i) The trial burn is likely to determine whether the incinerator performance standard required by § 264.343 of this chapter can be met;

(ii) The trial burn itself will not present an imminent hazard to human health or the environment;

(iii) The trial burn will help the Director to determine operating requirements to be specified under § 264.345 of this chapter; and

(iv) The information sought in paragraphs (b)(5) (i) and (ii) of this section cannot reasonably be developed through other means.

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(6) During each approved trial burn (or as soon after the burn as is practicable), the applicant must make the following determinations:

(i) A quantitative analysis of the trial POHCs in the waste feed to the incinerator.

(ii) A quantitative analysis of the exhaust gas for the concentration and mass emissions of the trial POHCs, oxygen (O_2) and hydrogen chloride (HCl).

(iii) A quantitative analysis of the scrubber water (if any), ash residues, and other residues, for the purpose of estimating the fate of the trial POHCs.

(iv) A computation of destruction and removal efficiency (DRE), in accordance with the DRE formula specified in § 264.343(a) of this chapter.

(v) If the HCl emission rate exceeds 1.8 kilograms of HCl per hour (4 pounds per hour), a computation of HCl removal efficiency in accordance with § 264.343(b) of this chapter.

(vi) A computation of particulate emissions, in accordance with § 264.343(c) of this chapter.

(vii) An identification of sources of fugitive emissions and their means of control.

(viii) A measurement of average, maximum, and minimum temperatures and combustion gas velocity.

(ix) A continuous measurement of carbon monoxide (CO) in the exhaust gas.

(x) Such other information as the Director may specify as necessary to ensure that the trial burn will determine compliance with the performance standards in § 264.343 of this chapter and to establish the operating conditions required by § 264.345 of this chapter as necessary to meet that performance standard.

(7) The applicant must submit to the Director a certification that the trial burn has been carried out in accordance with the approved trial burn plan, and must submit the results of all the determinations required in paragraph (b)(6). This submission shall be made within 90 days of completion of the trial burn, or later if approved by the Director.

(8) All data collected during any trial burn must be submitted to the Director following the completion of the trial burn.

(9) All submissions required by this paragraph must be certified on behalf of the applicant by the signature of a person authorized to sign a permit application or a report under § 270.11.

(10) Based on the results of the trial burn, the Director shall set the operating requirements in the final permit according to § 264.345 of this chapter. The permit modification shall proceed as a minor modification according to § 270.42.

(c) For the purposes of allowing operation of a new hazardous waste incinerator following completion of the trial burn and prior to final modification of the permit conditions to reflect the trial burn results, the Director may establish permit conditions, including but not limited to allowable waste feeds and operating conditions sufficient to meet the requirements of § 264.345 of this chapter, in the permit to a new hazardous waste incinerator. These permit conditions will be effective for the minimum time required to complete sample analysis, data computation and submission of the trial burn results by the applicant, and modification of the facility permit by the Director.

(1) Applicants must submit a statement, with Part B of the permit application, which identifies the conditions necessary to operate in compliance with the performance standards of § 264.343 of this chapter, during this period. This statement should include, at a minimum, restrictions on waste constituents, waste feed rates, and the operating parameters in § 264.345 of this chapter.

(2) The Director will review this statement and any other relevant information submitted with Part B of the permit application and specify those requirements for this period most likely to meet the performance standards of § 264.343 of this chapter based on his engineering judgment.

(d) For the purposes of determining feasibility of compliance with the performance standards of § 264.343 of this chapter and of determining adequate operating conditions under § 264.345 of this chapter, the applicant for a permit to an existing hazardous waste

incinerator may prepare and submit a trial burn plan and perform a trial burn in accordance with paragraphs (b)(2) through (b)(9) of this section. Applicants who submit trial burn plans and receive approval before submission of a permit application must complete the trial burn and submit the results, specified in paragraph (b)(6), with Part B of the permit application. If completion of this process conflicts with the date set for submission of the Part B application, the applicant must contact the Director to establish a later date for submission of the Part B application or the trial burn results. If the applicant submits a trial burn plan with Part B of the permit application, the trial burn must be conducted and the results submitted within a time period to be specified by the Director.

§ 270.63 Permits for land treatment demonstrations using field test or laboratory analyses.

(a) For the purpose of allowing an owner or operator to meet the treatment demonstration requirements of § 264.272 of this chapter, the Director may issue a treatment demonstration permit. The permit must contain only those requirements necessary to meet the standards in § 264.272(c). The permit may be issued either as a treatment or disposal permit covering only the field test or laboratory analyses, or as a two-phase facility permit covering the field tests, or laboratory analyses, and design, construction operation and maintenance of the land treatment unit.

(1) The Director may issue a two-phase facility permit if he finds that, based on information submitted in Part B of the application, substantial, although incomplete or inconclusive, information already exists upon which to base the issuance of a facility permit.

(2) If the Director finds that not enough information exists upon which he can establish permit conditions to attempt to provide for compliance with all of the requirements of Subpart M, he must issue a treatment demonstration permit covering only the field test or laboratory analyses.

(b) If the Director finds that a phased permit may be issued, he will establish, as requirements in the first phase of the facility permit, conditions for conducting the field tests or laboratory analyses. These permit conditions will include design and operating parameters (including the duration of the tests or analyses and, in the case of field tests, the horizontal and vertical dimensions of the treatment zone), monitoring procedures, post-demonstration clean-up activities, and any other conditions which the Director finds may be necessary under § 264.272(c). The Director will include conditions in the second phase of the facility permit to attempt to meet all Subpart M requirements pertaining to unit design, construction, operation, and maintenance. The Director will establish these conditions in the second phase of the permit based upon the substantial but incomplete or inconclusive information contained in the Part B application.

(1) The first phase of the permit will be effective as provided in § 124.15(b) of this chapter.

(2) The second phase of the permit will be effective as provided in paragraph (d) of this section.

(c) When the owner or operator who has been issued a two-phase permit has completed the treatment demonstration, he must submit to the Director a certification, signed by a person authorized to sign a permit application or report under § 270.11, that the field tests or laboratory analyses have been carried out in accordance with the conditions specified in phase one of the permit for conducting such tests or analyses. The owner or operator must also submit all data collected during the field tests or laboratory analyses within 90 days of completion of those tests or analyses unless the Director approves a later date.

(d) If the Director determines that the results of the field tests or laboratory analyses meet the requirements of § 264.272 of this chapter, he will modify the second phase of the permit to incorporate any requirements necessary for operation of the facility in compliance with Part 264, Subpart M, of this chapter, based upon the results

of the field tests or laboratory analyses.

(1) This permit modification may proceed as a minor modification under § 270.42, provided any such change is minor, or otherwise will proceed as a modification under § 270.41(a)(2).

(2) If no modifications of the second phase of the permit are necessary, or if only minor modifications are necessary and have been made, the Director will give notice of his final decision to the permit applicant and to each person who submitted written comments on the phased permit or who requested notice of the final decision on the second phase of the permit. The second phase of the permit then will become effective as specified in § 124.15(b).

(3) If modifications under § 270.41(a)(2) are necessary, the second phase of the permit will become effective only after those modifications have been made.

§ 270.64 Interim permits for UIC wells.

The Director may issue a permit under this part to any Class I UIC well (see § 144.6) injecting hazardous wastes within a State in which no UIC program has been approved or promulgated. Any such permit shall apply and insure compliance with all applicable requirements of 40 CFR Part 264, Subpart R (RCRA standards for wells), and shall be for a term not to exceed two years. No such permit shall be issued after approval or promulgation of a UIC program in the State. Any permit under this section shall contain a condition providing that it will terminate upon final action by the Director under a UIC program to issue or deny a UIC permit for the facility.

[48 FR 14228, Apr. 1, 1983; 48 FR 30114, June 30, 1983]

§§ 270.65—270.69 [Reserved]

Subpart G—Interim Status

§ 270.70 Qualifying for interim status.

(a) Any person who owns or operates an "existing HWM facility" shall have interim status and shall be treated as having been issued a permit to the extent he or she has:

(1) Complied with the requirements of Section 3010(a) of RCRA pertaining to notification of hazardous waste activity.

[*Comment:* Some existing facilities may not be required to file a notification under Section 3010(a) of RCRA. These facilities may qualify for interim status by meeting paragraph (a)(2) of this section.]

(2) Complied with the requirements of § 270.10 governing submission of Part A applications;

(b) Failure to qualify for interim status. If EPA has reason to believe upon examination of a Part A application that it fails to meet the requirements of § 270.13, it shall notify the owner or operator in writing of the apparent deficiency. Such notice shall specify the grounds for EPA's belief that the application is deficient. The owner or operator shall have 30 days from receipt to respond to such a notification and to explain or cure the alleged deficiency in his Part A application. If, after such notification and opportunity for response, EPA determines that the application is deficient it may take appropriate enforcement action.

[48 FR 14228, Apr. 1, 1983, as amended at 49 FR 17718, Apr. 24, 1984]

EFFECTIVE DATE NOTE: At 49 FR 17718, Apr. 24, 1984, § 270.70(b) was revised, effective October 24, 1984. For the convenience of the user, the superseded text is set out below.

§ 270.70 Qualifying for interim status.

* * * * *

(b) When EPA determines on examination or reexamination of a Part A application that it fails to meet the standards of these regulations, it may notify the owner or operator that the application is deficient and that the owner or operator is therefore not entitled to interim status. The owner or operator will then be subject to EPA enforcement for operating without a permit.

§ 270.71 Operation during interim status.

(a) During the interim status period the facility shall not:

(1) Treat, store, or dispose of hazardous waste not specified in Part A of the permit application;

(2) Employ processes not specified in Part A of the permit application; or

(3) Exceed the design capacities specified in Part A of the permit application.

(b) Interim status standards. During interim status, owners or operators shall comply with the interim status standards at 40 CFR Part 265.

§ 270.72 Changes during interim status.

(a) New hazardous wastes not previously identified in Part A of the permit application may be treated, stored, or disposed of at a facility if the owner or operator submits a revised Part A permit application prior to such a change;

(b) Increases in the design capacity of processes used at a facility may be made if the owner or operator submits a revised Part A permit application prior to such a change (along with a justification explaining the need for the change) and the Director approves the change because of a lack of available treatment, storage, or disposal capacity at other hazardous waste management facilities;

(c) Changes in the processes for the treatment, storage, or disposal of hazardous waste may be made at a facility or additional processes may be added if the owner or operator submits a revised Part A permit application prior to such a change (along with a justification explaining the need for the change) and the Director approves the change because:

(1) It is necessary to prevent a threat to human health or the environment because of an emergency situation, or

(2) It is necessary to comply with Federal regulations (including the interim status standards at 40 CFR Part 265) or State or local laws.

(d) Changes in the ownership or operational control of a facility may be made if the new owner or operator submits a revised Part A permit application no later than 90 days prior to the scheduled change. When a transfer of ownership or operational control of a facility occurs, the old owner or operator shall comply with the requirements of 40 CFR Part 265, Subpart H (financial requirements), until the new owner or operator has demonstrated to the Director that it is complying with that subpart. All other interim status duties are transferred effective immediately upon the date of the change of ownership or operational control of the facility. Upon demonstration to the Director by the new owner or operator of compliance with that Subpart, the Director shall notify the old owner or operator in writing that it no longer needs to comply with that part as of the date of demonstration.

(e) In no event shall changes be made to an HWM facility during interim status which amount to reconstruction of the facility. Reconstruction occurs when the capital investment in the changes to the facility exceeds fifty percent of the capital cost of a comparable entirely new HWM facility.

§ 270.73 Termination of interim status.

Interim status terminates when:

(a) Final administrative disposition of a permit application is made; or

(b) Interim status is terminated as provided in § 270.10(e)(5).

§§ 270.74—270.79 [Reserved]

PART 271—REQUIREMENTS FOR AUTHORIZATION OF STATE HAZARDOUS WASTE PROGRAMS

Subpart A—Requirements for Final Authorization

Sec.

date the notice of the Administrator's order is first published.

(3) *Disposition.* Leave to intervene may be granted only if the movant demonstrates that (*i*) his presence in the proceeding would not unduly prolong or otherwise prejudice that adjudication of the rights of the original parties; (*ii*) the movant will be adversely affected by a final order; and (*iii*) the interests of the movant are not being adequately represented by the original parties. The intervenor shall become a full party to the proceeding upon the granting of leave to intervene.

(4) *Amicus curiae.* Persons not parties to the proceeding who wish to file briefs may so move. The motion shall identify the interest of the applicant and shall state the reasons why the proposed amicus brief is desirable. If the motion is granted, the Presiding Officer or Administrator shall issue an order setting the time for filing such brief. An amicus curiae is eligible to participate in any briefing after his motion is granted, and shall be served with all briefs, reply briefs, motions, and orders relating to issues to be briefed.

(D) *Motions—(1) General.* All motions, except those made orally on the record during a hearing, shall (*i*) be in writing; (*ii*) state the grounds therefor with particularity; (*iii*) set forth the relief or order sought; and (*iv*) be accompanied by any affidavit, certificate, other evidence, or legal memorandum relied upon. Such motions shall be served as provided by (b)(4) of this section.

(2) *Response to motions.* A party's response to any written motion must be filed within ten (10) days after service of such motion, unless additional time is allowed for such response. The response shall be accompanied by any affidavit, certificate, other evidence, or legal memorandum relied upon. If no response is filed within the designated period, the parties may be deemed to have waived any objection to the granting of the motion. The Presiding Officer, Regional Administrator, or Administrator, as appropriate, may set a shorter time for response, or make such other orders concerning the disposition of motions as they deem appropriate.

(3) *Decision.* The Administrator shall rule on all motions filed or made after service of the recommended decision upon the parties. The Presiding Officer shall rule on all other motions. Oral argument on motions will be permitted where the Presiding Officer, Regional Administrator, or the Administrator considers it necessary or desirable.

(4) *Record of proceedings.* (i) The hearing shall be either stenographically reported verbatim or tape recorded, and thereupon transcribed by an official reporter designated by the Presiding Officer;

(ii) All orders issued by the Presiding Officer, transcripts of testimony, written statements of position, stipulations, exhibits, motions, briefs, and other written material of any kind submitted in the hearing shall be a part of the record and shall be available for inspection or copying in the Office of the Hearing Clerk, upon payment of costs. Inquiries may be made at the Office of the Administrative Law Judges, Hearing Clerk, 401 M Street, S.W., Washington, D.C. 20460;

(iii) Upon notice to all parties the Presiding Officer may authorize corrections to the transcript which involves matters of substance;

(iv) An original and two (2) copies of all written submissions to the hearing shall be filed with the Hearing Clerk;

(v) A copy of each submission shall be served by the person making the submission upon the Presiding Officer and each party of record. Service under this paragraph shall take place by mail or personal delivery;

(vi) Every submission shall be accompanied by an acknowledgement of service by the person served or proof of service in the form of a statement of the date, time, and manner of service and the names of the persons served, certified by the person who made service, and;

(vii) The Hearing Clerk shall maintain and furnish to any person upon request, a list containing the name, service address, and telephone number of all parties and their attorneys or duly authorized representatives.

(5) *Participation by a person not a party.* A person who is not a party may, in the discretion of the Presiding Officer, be permitted to make a limited appearance by making oral or written statement of his/her position on the issues within such limits and on such conditions as may be fixed by the Presiding Officer, but he/she may not otherwise participate in the proceeding.

(6) *Rights of parties.* (i) All parties to the proceeding may:

(A) Appear by counsel or other representative in all hearing and prehearing proceedings;

(B) Agree to stipulations of facts which shall be made a part of the record.

(7) *Recommended decision.* (i) Within 30 days after the filing of proposed findings and conclusions, and reply briefs, the Presiding Officer shall evaluate the record before him/her, the proposed findings and conclusions and any briefs filed by the parties and shall prepare a recommended decision, and shall certify the entire record, including the recommended decision, to the Administrator.

(ii) Copies of the recommended decision shall be served upon all parties.

(iii) Within 20 days after the certification and filing of the record and recommended decision, all parties may file with the Administrator exceptions to the recommended decision and a supporting brief.

(8) *Decision by Administrator.* (i) Within 60 days after the certification of the record and filing of the Presiding Officer's recommeded decision, the Administrator shall review the record before him and issue his own decision.

(ii) If the Administrator concludes that the State has administered the program in conformity with the appropriate Act and regulations his decision shall constitute "final agency action" within the meaning of 5 U.S.C. 704.

(iii) If the Administrator concludes that the State has not administered the program in conformity with the appropriate Act and regulations he shall list the deficiencies in the program and provide the State a reasonable time, not to exceed 90 days, to take such appropriate corrective action as the Administrator determines necessary.

(iv) Within the time prescribed by the Administrator the State shall take such appropriate corrective action as required by the Administrator and shall file with the Administrator and all parties a statement certified by the State Director that such appropriate corrective action has been taken.

(v) The Administrator may require a further showing in addition to the certified statement that corrective action has been taken.

(vi) If the State fails to take such appropriate corrective action and file a certified statement thereof within the time prescribed by the Administrator, the Administrator shall issue a supplementary order withdrawing approval of the State program. If the State takes such appropriate corrective action, the Administrator shall issue a supplementary order stating that approval of authority is not withdrawn.

(vii) The Administrator's supplementary order shall constitute final Agency action within the meaning of 5 U.S.C. 704.

(viii) Withdrawal of authorization under this section and the appropriate Act does not relieve any person from complying with the requirements of State law, nor does it affect the validity of actions by the State prior to withdrawal.

PART 124—PROCEDURES FOR DECISIONMAKING

Subpart A—General Program Requirements

33-128 O—84——9

Authority: Resource Conservation and Recovery Act, 42 U.S.C. 6901 *et seq.*; Safe Drinking Water Act, 42 U.S.C. 300(f) *et seq.*; Clean Water Act, 33 U.S.C. 1251 *et seq.*; and Clean Air Act, 42 U.S.C. 1857 *et seq.*

Source: 48 FR 14264, Apr. 1, 1983, unless otherwise noted.

Subpart A—General Program Requirements

§ 124.1 Purpose and scope.

(a) This part contains EPA procedures for issuing, modifying, revoking and reissuing, or terminating all RCRA, UIC, PSD and NPDES "permits" other than RCRA and UIC "emergency permits" (see §§ 270.61 and 144.34) and RCRA "permits by rule" (§ 270.60). The latter kinds of permits are governed by Part 270. RCRA interim status and UIC authorization by rule are not "permits" and are covered by specific provisions in Parts 144, Subpart C, and 270. This part also does not apply to permits issued, modified, revoked and reissued or terminated by the Corps of Engineers. Those procedures are specified in 33 CFR Parts 320–327.

(b) Part 124 is organized into six subparts. Subpart A contains general procedural requirements applicable to all permit programs covered by these regulations. Subparts B through F supplement these general provisions with requirements that apply to only one or more of the programs. Subpart A describes the steps EPA will follow in receiving permit applications, preparing draft permits, issuing public notice, inviting public comment and holding public hearings on draft permits. Subpart A also covers assembling an administrative record, responding to comments, issuing a final permit decision, and allowing for administrative appeal of the final permit decision. Subpart B is reserved for specific procedural requirements for RCRA permits. There are none of these at present but they may be added in the future. Subpart C contains definitions and specific procedural requirements for PSD permits. Subpart D applies to NPDES permits until an evidentiary hearing begins, when Subpart E procedures take over for EPA-issued NPDES permits and EPA-terminated RCRA permits. Subpart F, which is based on the "initial licensing" provisions of the Administrative Procedure Act (APA), can be used instead of Subparts A through E in appropriate cases.

(c) Part 124 offers an opportunity for three kinds of hearings: A public hearing under Subpart A, an evidentiary hearing under Subpart E, and a panel hearing under Subpart F. This chart describes when these hearings are available for each of the five permit programs.

Hearings Available Under This Part

Programs	Subpart (A) Public hearing	Subpart (E) Evidentiary hearing	Subpart (F) Panel hearing
RCRA	On draft permit, at Director's discretion or on request (§ 124.12).	(1) Permit termination (RCRA section 3008). (2) With NPDES evidentiary hearing (§ 124.74(b)(2)).	(1) At RA's discretion in lieu of public hearing (§§ 124.12 and 124.111(a)(3)). (2) When consolidated with NPDES draft permit processed under Subpart F (§ 124.111(a)(1)(i)).
UIC	On draft permit, at Director's discretion or on request (§ 124.12).	With NPDES evidentiary hearing (§ 124.74(b)(2)).	(1) At RA's discretion in lieu of public hearing (§§ 124.12 and 124.111(a)(3)). (2) When consolidated with NPDES draft permit processed under Subpart F (§ 124.111(a)(1)(i)).
PSD	On draft permit, at Director's discretion or on request (§ 124.12).	Not available (§ 124.71(c))	When consolidated with NPDES draft permit processed under Subpart F if RA determines that CAA one year deadline will not be violated.
NPDES (other than general permit).	On draft permit, at Director's discretion or on request (§ 124.12).	(1) On request to challenge any permit condition or variance (§ 124.74).	(1) At RA's discretion when first decision on permit or variance request (§ 124.111).

HEARINGS AVAILABLE UNDER THIS PART—Continued

Programs	Subpart		
	(A)	(E)	(F)
	Public hearing	Evidentiary hearing	Panel hearing
		(2) At RA's discretion for any 301(h) request (§ 124.64(b)).	(2) At RA's discretion when request for evidentiary hearing is granted under § 124.75(a)(2) (§§ 124.74(c)(8) and 124.111(a)(2)). (3) At RA's discretion for any 301(h) request (§ 124.64(b)).
NPDES (general permit).	On draft permit, at Director's discretion or on request (§ 124.12).	Not available (§ 124.71(a))	At RA's discretion in lieu of public hearing (§ 124.111(a)(3)).
404	On draft permit or on application when no draft permit, at Director's discretion or on request (§ 124.12).	Not available (§ 124.71)	Not available (§ 124.111).

(d) This part is designed to allow permits for a given facility under two or more of the listed programs to be processed separately or together at the choice of the Regional Administrator. This allows EPA to combine the processing of permits only when appropriate, and not necessarily in all cases. The Regional Administrator may consolidate permit processing when the permit applications are submitted, when draft permits are prepared, or when final permit decisions are issued. This part also allows consolidated permits to be subject to a single public hearing under § 124.12, a single evidentiary hearing under § 124.75, or a single non-adversary panel hearing under § 124.120. Permit applicants may recommend whether or not their applications should be consolidated in any given case.

(e) Certain procedural requirements set forth in Part 124 must be adopted by States in order to gain EPA approval to operate RCRA, UIC, NPDES, and 404 permit programs.These requirements are listed in §§ 123.25 (NPDES), 145.11 (UIC), 233,26 (404), and 271.14 (RCRA) and signaled by the following words at the end of the appropriate Part 124 section or paragraph heading: (*applicable to State programs see §§ 123.25 (NPDES), 145.11 (UIC), 233.26 (404), and 271.14 (RCRA)*). Part 124 does not apply to PSD permits issued by an approved State.

(f) To coordinate decisionmaking when different permits will be issued by EPA and approved State programs, this part allows applications to be jointly processed, joint comment periods and hearings to be held, and final permits to be issued on a cooperative basis whenever EPA and a State agree to take such steps in general or in individual cases. These joint processing agreements may be provided in the Memorandum of Agreement developed under §§ 123.24 (NPDES), 145.24 (UIC), 233.24 (404), and 271.8 (RCRA).

§ 124.2 Definitions.

(a) In addition to the definitions given in §§ 122.2 and 123.2 (NPDES), 144.3 and 145.2 (UIC); 233.3 (404), and 270.2 and 271.2 (RCRA), the definitions listed below apply to this part, except for PSD permits which are governed by the definitions in §124.41. Terms not defined in this section have the meaning given by the appropriate Act.

Administrator means the Administrator of the U.S. Environmental Protection Agency, or an authorized representative.

Applicable standards and limitations (NPDES) means all State, interstate, and Federal standards and limitations to which a "discharge" or a related activity in subject under the CWA, including "effluent limitations," water quality standards, standards of performance, toxic effluent standards or prohibitions, "best management practices," and pretreatment standards under sections 301, 302, 303, 304, 306, 307, 308, 403, and 405 of CWA.

Application means the EPA standard national forms for applying for a permit, including any additions, revisions or modifications to the forms; or forms approved by EPA for use in "approved States," including any approved modifications or revisions. For RCRA, application also includes the information required by the Director under §§ 270.14 through 270.29 [contents of Part B of the RCRA application].

Appropriate Act and regulations means the Clean Water Act (CWA); the Solid Waste Disposal Act, as amended by the Resource Conservation Recovery Act (RCRA); or Safe Drinking Water Act (SDWA), whichever is applicable; and applicable regulations promulgated under those statutes. In the case of an "approved State program" appropriate Act and regulations includes program requirements.

Consultation with the Regional Administrator (§124.62(a)(2)) means review by the Regional Administrator following evaluation by a panel of the technical merits of all 301(k) applications approved by the Director. The panel (to be appointed by the Director of the Office of Water Enforcement and Permits) will consist of Headquarters, Regional, and State personnel familiar with the industrial category in question.

CWA means the Clean Water Act (formerly referred to as the Federal Water Pollution Control Act of Federal Pollution Control Act Amendments of 1972) Pub. L. 92-500, as amended by Pub. L. 95-217 and Pub. L. 95-576; 33 U.S.C. 1251 *et seq.*

Director means the Regional Administrator or the State Director, as the context requires, or an authorized representative. When there is no "approved State program," and there is an EPA administered program, "Director"means the Regional Administrator. When there is an approved State program, "Director" normally means the State Director. In some circumstances, however, EPA retains the authority to take certain actions even when there is an approved State program. (For example, when EPA has issued an NPDES permits prior to the approval of a State program, EPA may retain jurisdiction over that permit after program approval; see § 123.1) In such cases, the term "Director means the Regional Administrator and not the State Director.

Draft permit means a document prepared under §124.6 indicating the Director's tentative decision to issue or deny, modify, revoke and reissue, terminate, or reissue a "permit." A notice of intent to terminate a permit and a notice of intent to deny a permit as discussed in § 124.5, are types of "draft permits." A denial of a request for modification, revocation and reissuance or termination, as discussed in §124.5, is not a "draft permit." A "proposal permit" is not a "draft permit."

EPA ("EPA") means the United States "Environmental Protection Agency."

Facility or activity means any "HWM facility," UIC "injection well," NPDES "point source," or State 404 dredge or fill activity, or any other facility or activity (including land or appurtenances thereto) that is subject to regulation under the RCRA, UIC, NPDES, or 404 programs.

General permit (NPDES and 404) means an NPDES or 404 "permit" authorizing a category of discharges under the CWA within a geographical area. For NPDES, a general permit means a permit issued under § 122.28. For 404, a general permit means a permit issued under § 233.37.

Interstate agency means an agency of two or more States established by or under an agreement or compact approved by the Congress, or any other agency of two or more States having substantial powers or duties pertaining to the control of pollution as determined and approved by the Administrator under the "appropriate Act and regulations."

Major facility means any RCRA, UIC, NPDES, or 404 "facility or activity" classified as such by the Regional Administrator, or, in the case of "approved State programs," the Regional Administrator in conjunction with the State Director.

NPDES means National Pollutant Discharge Elimination System.

Owner or operator means owner or operator of any "facility or activity" subject to regulation under the RCRA,UIC, NPDES, or 404 programs.

Permit means an authorization, license, or equivalent control document issued by EPA or an "approved State" to implement the requirements of this part and Parts 122, 123, 144, 145, 233, 270, and 271. "Permit" includes RCRA "permit by rule" (§ 270.60), UIC area permit (§ 144.33), NPDES or 404 "general permit" (§§ 270.61, 144.34, and 233.38). Permit does not include RCRA interim status (§ 270.70), UIC authorization by rule (§ 144.21), or any permit which has not yet been the subject of final agency action, such as a "draft permit" or a "proposed permit."

Person means an individual, association, partnership, corporation, municipality, State or Federal agency, or an agency or employee thereof.

RCRA means the Solid Waste Disposal Act as amended by the Resource Conservation and Recovery Act of 1976 (Pub. L. 94-580, as amended by Pub. L. 95-609, 42 U.S.C. 6901 *et seq*).

Regional Administrator means the Regional Administrator of the appropriate Regional Office of the Environmental Protection Agency or the authorized representative of the Regional Administrator.

Schedule of compliance means a schedule of remedial measures included in a "permit," including an enforceable sequence of interim requirements (for example, actions, operations, or milestone events) leading to compliance with the "appropriate Act and regulations."

SDWA means the Safe Drinking Water Act (Pub. L. 95-523, as amended by Pub. L. 95-1900; 42 U.S.C. 300f *et seq*).

Section 404 program or State 404 program or 404 means an "approved State program" to regulate the "discharge of dredged material" and the "discharge of fill material" under section 404 of the Clean Water Act in "State regulated waters."

Site means the land or water area where any "facility or activity" is physically located or conducted, including adjacent land used in connection with the facility or activity.

State means any of the 50 states, the District of Columbia, Guam, the Commonwealth of Puerto Rico, the Virgin Islands, American Samoa, the Trust Territory of the Pacific Islands (except in the case of RCRA), and the Commonwealth Northern Mariana Islands (except in the case of CWA).

State Director means the chief administrative officer of any State or interstate agency operating an "approved program," or the delegated representative of the state Director. If responsibility is divided among two or more State or interstate agencies, "State Director" means the chief administrative officer of the State or interstate agency authorized to perform the particular procedure or function to which reference is made.

UIC means the Underground Injection Control program under Part C of the Safe Drinking Water Act, including an "approved program."

Variance (NPDES) means any mechanism or provision under section 301 or 316 of CWA or under 40 CFR Part 125, or in the applicable "effluent limitations guidelines" which allows modification to or waiver of the generally applicable effluent limitation requirements or time deadlines of CWA. This includes provisions which allow the establishment of alternative limitations based on fundamentally different factors or on sections 301(c), 301(g), 301(h), 301(i), or 316(a) of CWA.

(b) For the purposes of Part 124, the term "Director" means the State Director or Regional Administrator and is used when the accompanying provision is required of EPA-administered programs and of State programs under §§ 123.25 (NPDES), 145.11 (UIC), 233.26 (404), and 271.14 (RCRA). The term "Regional Administrator" is used when the accompanying provision applies exclusively to EPA-issued permits and is not applicable to State programs under these sections. While States are not required to implement these latter provisions, they are not precluded from doing so, notwithstanding use of the term "Regional Administrator."

(c) The term "formal hearing" means any evidentiary hearing under Subpart E or any panel hearing under Subpart F but does not mean a public hearing conducted under § 124.12.

[48 FR 14264, Apr. 1, 1983; 48 FR 30115, June 30, 1983, as amended at 49 FR 25981, June 25, 1984]

EFFECTIVE DATE NOTE: At 49 FR 25981, June 25, 1984, § 124.2(a) was amended by adding the definition "*Consultation with the Regional Administrator*", effective August 8, 1984.

§ 124.3 Application for a permit.

(a) *Applicable to State programs, see §§ 123.25 (NPDES), 145.11 (UIC), 233.26 (404), and 271.14 (RCRA).* (1) Any person who requires a permit under the RCRA, UIC, NPDES, or PSD programs shall complete, sign, and submit to the Director an application for each permit required under §§ 270.1 (RCRA), 144.1 (UIC), 40 CFR 52.21 (PSD), and 122.1 (NPDES). Applications are not required for RCRA permits by rule (§ 270.60), underground injections authorized by rules (§§ 144.21 through 144.26), NPDES general permits (§ 122.28) and 404 general permits (§ 233.37).

(2) The Director shall not begin the processing of a permit until the applicant has fully complied with the application requirements for that permit. See §§ 270.10, 270.13 (RCRA), 144.31 (UIC), 40 CFR 52.21 (PSD), and 122.21 (NPDES).

(3) Permit applications (except for PSD permits) must comply with the signature and certification requirements of §§ 122.22 (NPDES), 144.32 (UIC), 233.6 (404), and 270.11 (RCRA).

(b) [Reserved]

(c) The Regional Administrator shall review for completeness every application for an EPA-issued permit. Each application for an EPA-issued permit submitted by a new HWM facility, a new UIC injection well, a major PSD stationary source or major PSD modification, or an NPDES new source or NPDES new discharger should be reviewed for completeness by the Regional Administrator within 30 days of its receipt. Each application for an EPA-issued permit submitted by an existing HWM facility (both Parts A and B of the application), existing injection well or existing NPDES source should be reviewed for completeness within 60 days of receipt. Upon completing the review, the Regional Administrator shall notify the applicant in writing whether the application is complete. If the application is incomplete, the Regional Administrator shall list the information necessary to make the application complete. When the application is for an existing HWM facility, an existing UIC injection well or an existing NPDES source, the Regional Administrator shall specify in the notice of deficiency a date for submitting the necessary information. The Regional Administrator shall notify the applicant that the application is complete upon receiving this information. After the application is completed, the Regional Administrator may request additional information from an applicant but only when necessary to clarify, modify, or supplement previously submitted material. Requests for such additional information will not render an application incomplete.

(d) If an applicant fails or refuses to correct deficiencies in the application, the permit may be denied and appropriate enforcement actions may be taken under the applicable statutory provision including RCRA section 3008, SDWA sections 1423 and 1424, CAA section 167, and CWA sections 308, 309, 402(h), and 402(k).

(e) If the Regional Administrator decides that a site visit is necessary for any reason in conjunction with the processing of an application, he or she shall notify the applicant and a date shall be scheduled.

(f) The effective date of an application is the date on which the Regional Administrator notifies the applicant that the application is complete as provided in paragraph (c) of this section.

(g) For each application from a major new HWM facility, major new UIC injection well, major NPDES new source, major NPDES new discharger, or a permit to be issued under provisions of § 122.28(c), the Regional Administrator shall, no later than the effective date of the application, prepare and mail to the applicant a project decision schedule. (This paragraph does not apply to PSD permits.) The schedule shall specify target dates by which the Regional Administrator intends to:

(1) Prepare a draft permit;

(2) Give public notice;

(3) Complete the public comment period, including any public hearing;

(4) Issue a final permit; and

(5) In the case of an NPDES permit, complete any formal proceedings under Subparts E or F.

(Clean Water Act (33 U.S.C. 1251 *et seq.*), Safe Drinking Water Act (42 U.S.C. 300f *et seq.*), Clean Air Act (42 U.S.C. 7401 *et seq.*), Resource Conservation and Recovery Act (42 U.S.C. 6901 *et seq.*))

[48 FR 14264, Apr. 1, 1983, as amended at 48 FR 39620, Sept. 1, 1983]

§ 124.4 Consolidation of permit processing.

(a)(1) Whenever a facility or activity requires a permit under more than one statute covered by these regulations, processing of two or more applications for those permits may be consolidated. The first step in consolidation is to prepare each draft permit at the same time.

(2) Whenever draft permits are prepared at the same time, the statements of basis (required under § 124.7 for EPA-issued permits only) or fact sheets (§ 124.8), administrative records (required under § 124.9 for EPA-issued permits only), public comment periods (§ 124.10), and any public hearings (§ 124.12) on those permits should also be consolidated. The final permits may be issued together. They need not be issued together if in the judgment of the Regional Administrator or State Director(s), joint processing would result in unreasonable delay in the issuance of one or more permits.

(b) Whenever an existing facility or activity requires additional permits under one or more of the statutes covered by these regulations, the permitting authority may coordinate the expiration date(s) of the new permit(s) with the expiration date(s) of the existing permit(s) so that all permits expire simultaneously. Processing of the subsequent applications for renewal permits may then be consolidated.

(c) Processing of permit applications under paragraph (a) or (b) of this section may be consolidated as follows:

(1) The Director may consolidate permit processing at his or her discretion whenever a facility or activity requires all permits either from EPA or from an approved State.

(2) The Regional Administrator and the State Director(s) may agree to consolidate draft permits whenever a facility or activity requires permits from both EPA and an approved State.

(3) Permit applicants may recommend whether or not the processing of their applications should be consolidated.

(d) Whenever permit processing is consolidated and the Regional Administrator invokes the "initial licensing" provisions of Subpart F for an NPDES, RCRA, or UIC permit, any permit(s) with which that NPDES, RCRA or UIC permit was consolidated shall likewise be processed under Subpart F.

(e) Except with the written consent of the permit applicant, the Regional Administrator shall not consolidate processing a PSD permit with any other permit under paragraphs (a) or (b) of this section or process a PSD permit under Subpart F as provided in paragraph (d) of this section when to do so would delay issuance of the PSD permit more than one year from the effective date of the application under § 124.3(f).

§ 124.5 Modification, revocation and reissuance, or termination of permits.

(a) (*Applicable to State programs, see §§ 123.25 (NPDES), 145.11 (UIC), 233.26 (404), and 271.14 (RCRA)*). Permits (other than PSD permits) may be modified, revoked and reissued, or terminated either at the request of any interested person (including the permittee) or upon the Director's initiative. However, permits may only be modified, revoked and reissued, or terminated for the reasons specified in §§ 122.62 or 122.64 (NPDES), 144.39 or 144.40 (UIC), 233.14 or 233.15 (404), and 270.41 or 270.43 (RCRA). All requests shall be in writing and shall contain facts or reasons supporting the request.

(b) If the Director decides the request is not justified, he or she shall send the requester a brief written response giving a reason for the decision. Denials of requests for modification, revocation and reissuance, or termination are not subject to public notice,

comment, or hearings. Denials by the Regional Administrator may be informally appealed to the Administrator by a letter briefly setting forth the relevant facts. The Administrator may direct the Regional Administrator to begin modification, revocation and reissuance, or termination proceedings under paragraph (c) of this section. The appeal shall be considered denied if the Administrator takes no action on the letter within 60 days after receiving it. This informal appeal is, under 5 U.S.C. 704, a prerequisite to seeking judicial review of EPA action in denying a request for modification, revocation and reissuance, or termination.

(c) (*Applicable to State programs, see §§ 123.25 (NPDES), 145.11 (UIC), 233.26 (404), and 271.14 (RCRA)*). (1) If the Director tentatively decides to modify or revoke and reissue a permit under §§ 122.62 (NPDES), 144.39 (UIC), 233.14 (404), or 270.41 (RCRA), he or she shall prepare a draft permit under § 124.6 incorporating the proposed changes. The Director may request additional information and, in the case of a modified permit, may require the submission of an updated application. In the case of revoked and reissued permits, the Director shall require the submission of a new application.

(2) In a permit modification under this section, only those conditions to be modified shall be reopened when a new draft permit is prepared. All other aspects of the existing permit shall remain in effect for the duration of the unmodified permit. When a permit is revoked and reissued under this section, the entire permit is reopened just as if the permit had expired and was being reissued. During any revocation and reissuance proceeding the permittee shall comply with all conditions of the existing permit until a new final permit is reissued.

(3) "Minor modifications" as defined in §§ 122.63 (NPDES), 144.41 (UIC), 233.16 (404), and 270.42 (RCRA) are not subject to the requirements of this section.

(d) (*Applicable to State programs, see §§ 123.25 (NPDES), 145.11 (UIC), 233.26 (404), and 271.14 (RCRA)*). If the Director tentatively decides to terminate a permit under §§ 122.64 (NPDES), 144.40 (UIC), 233.15 (404), or 270.43 (RCRA), he or she shall issue a notice of intent to terminate. A notice of intent to terminate is a type of draft permit which follows the same procedures as any draft permit prepared under § 124.6. In the case of EPA-issued permits, a notice of intent to terminate shall not be issued if the Regional Administrator and the permittee agree to termination in the course of transferring permit responsibility to an approved State under §§ 123.24(b)(1) (NPDES), 145.24(b)(1) (UIC), or 271.8(b)(6) (RCRA).

(e) When EPA is the permitting authority, all draft permits (including notices of intent to terminate) prepared under this section shall be based on the administrative record as defined in § 124.9.

(f) (*Applicable to State programs, see § 233.26 (404)*). Any request by the permittee for modification to an existing 404 permit (other than a request for a minor modification as defined in § 233.16 (404)) shall be treated as a permit application and shall be processed in accordance with all requirements of § 124.3.

(g)(1) (Reserved for PSD Modification Provisions)

(2) PSD permits may be terminated only by rescission under § 52.21(w) or by automatic expiration under § 52.21(r). Applications for rescission shall be precessed under § 52.21(w) and are not subject to this part.

§ 124.6 Draft permits.

(a) (*Applicable to State programs, see §§ 123.25 (NPDES), 145.11 (UIC), 233.26 (404), and 271.14 (RCRA).*) Once an application is complete, the Director shall tentatively decide whether to prepare a draft permit (except in the case of State section 404 permits for which no draft permit is required under § 233.39) or to deny the application.

(b) If the Director tentatively decides to deny the permit application, he or she shall issue a notice of intent to deny. A notice of intent to deny the permit application is a type of draft permit which follows the same procedures as any draft permit prepared

under this section. See § 124.6(c). If the Director's final decision (§ 124.15) is that the tentative decision to deny the permit application was incorrect, he or she shall withdraw the notice of intent to deny and proceed to prepare a draft permit under paragraph (d) of this section.

(c) (*Applicable to State programs, see §§ 123.25 (NPDES) and 233.26 (404).*) If the Director tentatively decides to issue an NPDES or 404 general permit, he or she shall prepare a draft general permit under paragraph (d) of this section.

(d) (*Applicable to State programs, see §§ 123.25 (NPDES), 145.11 (UIC), 233.26 (404), and 271.14 (RCRA).*) If the Director decides to prepare a draft permit, he or she shall prepare a draft permit that contains the following information:

(1) All conditions under § 122.41 and 122.43 (NPDES), 144.51 and 144.42 (UIC, 233.7 and 233.8 (404, or 270.30 and 270.32 (RCRA) (except for PSD permits)));

(2) All compliance schedules under §§ 122.47 (NPDES), 144.53 (UIC), 233.10 (404), or 270.33 (RCRA) (except for PSD permits);

(3) All monitoring requirements under §§ 122.48 (NPDES), 144.54 (UIC), 233.11 (404), or 270.31 (RCRA) (except for PSD permits); and

(4) For:

(i) RCRA permits, standards for treatment, storage, and/or disposal and other permit conditions under § 270.30;

(ii) UIC permits, permit conditions under § 144.52;

(iii) PSD permits, permit conditions under 40 CFR § 52.21;

(iv) 404 permits, permit conditions under §§ 233.7 and 233.8;

(v) NPDES permits, effluent limitations, standards, prohibitions and conditions under §§ 122.41 and 122.42, including when applicable any conditions certified by a State agency under § 124.55, and all variances that are to be included under § 124.63.

(e) (*Applicable to State programs, see §§ 123.25 (NPDES), 145.11 (UIC), 233.26 (404), and 271.14 (RCRA).*) All draft permits prepared by EPA under this section shall be accompanied by a statement of basis (§ 124.7) or fact sheet (§ 124.8), and shall be based on the administrative record (§ 124.9), publicly noticed (§ 124.10) and made available for public comment (§ 124.11). The Regional Administrator shall give notice of opportunity for a public hearing (§ 124.12), issue a final decision (§ 124.15) and respond to comments (§ 124.17). For RCRA, UIC or PSD permits, an appeal may be taken under § 124.19 and, for NPDES permits, an appeal may be taken under § 124.74. Draft permits prepared by a State shall be accompanied by a fact sheet if required under § 124.8.

§ 124.7 Statement of basis.

EPA shall prepare a statement of basis for every draft permit for which a fact sheet under § 124.8 is not prepared. The statement of basis shall briefly describe the derivation of the conditions of the draft permit and the reasons for them or, in the case of notices of intent to deny or terminate, reasons supporting the tentative decision. The statement of basis shall be sent to the applicant and, on request, to any other person.

§ 124.8 Fact sheet.

(*Applicable to State programs, see §§ 123.25 (NPDES), 145.11 (UIC), 233.26 (404), and 271.14 (RCRA).*)

(a) A fact sheet shall be prepared for every draft permit for a major HWM, UIC, 404, or NPDES facility or activity, for every 404 and NPDES general permit (§§ 233.37 and 122.28), for every NPDES draft permit that incorporates a variance or requires an explanation under § 124.56(b), and for every draft permit which the Director finds is the subject of widespread public interest or raises major issues. The fact sheet shall briefly set forth the principal facts and the significant factual, legal, methodological and policy questions considered in preparing the draft permit. The Director shall send this fact sheet to the applicant and, on request, to any other person.

(b) The fact sheet shall include, when applicable:

(1) A brief description of the type of facility or activity which is the subject of the draft permit;

(2) The type and quantity of wastes, fluids, or pollutants which are proposed to be or are being treated, stored, disposed of, injected, emitted, or discharged.

(3) For a PSD permit, the degree of increment consumption expected to result from operation of the facility or activity.

(4) A brief summary of the basis for the draft permit conditions including references to applicable statutory or regulatory provisions and appropriate supporting references to the administrative record required by § 124.9 (for EPA-issued permits);

(5) Reasons why any requested variances or alternatives to required standards do or do not appear justified;

(6) A description of the procedures for reaching a final decision on the draft permit including:

(i) The beginning and ending dates of the comment period under § 124.10 and the address where comments will be received;

(ii) Procedures for requesting a hearing and the nature of that hearing; and

(iii) Any other procedures by which the public may participate in the final decision.

(7) Name and telephone number of a person to contact for additional information.

(8) For NPDES permits, provisions satisfying the requirements of § 124.56.

§ 124.9 Administrative record for draft permits when EPA is the permitting authority.

(a) The provisions of a draft permit prepared by EPA under § 124.6 shall be based on the administrative record defined in this section.

(b) For preparing a draft permit under § 124.6, the record shall consist of:

(1) The application, if required, and any supporting data furnished by the applicant;

(2) The draft permit or notice of intent to deny the application or to terminate the permit;

(3) The statement of basis (§ 124.7) or fact sheet (§ 124.8);

(4) All documents cited in the statement of basis or fact sheet; and

(5) Other documents contained in the supporting file for the draft permit.

(6) For NPDES new source draft permits only, any environmental assessment, environmental impact statement (EIS), finding of no significant impact, or environmental information document and any supplement to an EIS that may have been prepared. NPDES permits other than permits to new sources as well as all RCRA, UIC and PSD permits are not subject to the environmental impact statement provisions of section 102(2)(C) of the National Environmental Policy Act, 42 U.S.C. 4321.

(c) Material readily available at the issuing Regional Office or published material that is generally available, and that is included in the administrative record under paragraphs (b) and (c) of this section, need not be physically included with the rest of the record as long as it is specifically referred to in the statement of basis or the fact sheet.

(d) This section applies to all draft permits when public notice was given after the effective date of these regulations.

§ 124.10 Public notice of permit actions and public comment period.

(a) *Scope.* (1) The Director shall give public notice that the following actions have occurred:

(i) A permit application has been tentatively denied under § 124.6(b);

(ii) (*Applicable to State programs, see §§ 123.25 (NPDES), 145.11 (UIC), 233.26 (404), and 271.14 (RCRA).*) A draft permit has been prepared under § 124.6(d);

(iii) (*Applicable to State programs, see §§ 123.25 (NPDES), 145.11 (UIC), 233.26 (404) and 271.14 (RCRA).*) A hearing has been scheduled under § 124.12, Subpart E, or Subpart F;

(iv) An appeal has been granted under § 124.19(c);

(v) (*Applicable to State programs, see § 233.26 (404).*) A State section 404 application has been received in cases when no draft permit will be prepared (see § 233.39); or

(vi) An NPDES new source determination has been made under § 122.29.

(2) No public notice is required when a request for permit modification, revocation and reissuance, or termination is denied under § 124.5(b). Written notice of that denial shall be given to the requester and to the permittee.

(3) Public notices may describe more than one permit or permit actions.

(b) *Timing (applicable to State programs, see §§ 123.25 (NPDES), 145.11 (UIC), 233.26 (404, and 271.14 (RCRA)).* (1) Public notice of the preparation of a draft permit (including a notice of intent to deny a permit application) required under paragraph (a) of this section shall allow at least 30 days for public comment. For RCRA permits only, public notice shall allow at least 45 days for public comment. For EPA-issued permits, if the Regional Administrator determines under 40 CFR Part 6, Subpart F that an Environmental Impact Statement (EIS) shall be prepared for an NPDES new source, public notice of the draft permit shall not be given until after a draft EIS is issued.

(2) Public notice of a public hearing shall be given at least 30 days before the hearing. (Public notice of the hearing may be given at the same time as public notice of the draft permit and the two notices may be combined.)

(c) *Methods (applicable to State programs, see §§ 123.25 (NPDES), 145.11 (UIC), 233.26 (404), and 271.14 (RCRA)).* Public notice of activities described in paragraph (a)(1) of this section shall be given by the following methods:

(1) By mailing a copy of a notice to the following persons (any person otherwise entitled to receive notice under this paragraph may waive his or her rights to receive notice for any classes and categories of permits);

(i) The applicant (except for NPDES and 404 general permits when there is no applicant);

(ii) Any other agency which the Director knows has issued or is required to issue a RCRA, UIC, PSD, NPDES or 404 permit for the same facility or activity (including EPA when the draft permit is prepared by the State);

(iii) Federal and State agencies with jurisdiction over fish, shellfish, and wildlife resources and over coastal zone management plans, the Advisory Council on Historic Preservation, State Historic Preservation Officers, and other appropriate government authorities, including any affected States;

(iv) For NPDES and 404 permits only, any State agency responsible for plan development under CWA section 208(b)(2), 208(b)(4) or 303(e) and the U.S. Army Corps of Engineers, the U.S. Fish and Wildlife Service and the National Marine Fisheries Service;

(v) For NPDES permits only, any user identified in the permit application of a privately owned treatment works;

(vi) For 404 permits only, any reasonably ascertainable owner of property adjacent to the regulated facility or activity and the Regional Director of the Federal Aviation Administration if the discharge involves the construction of structures which may affect aircraft operations or for purposes associated with seaplane operations;

(vii) For PSD permits only, affected State and local air pollution control agencies, the chief executives of the city and county where the major stationary source or major modification would be located, any comprehensive regional land use planning agency and any State, Federal Land Manager, or Indian Governing Body whose lands may be affected by emissions from the regulated activity;

(viii) Persons on a mailing list developed by:

(A) Including those who request in writing to be on the list;

(B) Soliciting persons for "area lists" from participants in past permit proceedings in that area; and

(C) Notifying the public of the opportunity to be put on the mailing list through periodic publication in the public press and in such publications as Regional and State funded newsletters, environmental bulletins, or State law journals. (The Director may update the mailing list from time to time by requesting written indication of continued interest from those listed. The Director may delete from the list the name of any person who fails to respond to such a request.)

(ix)(A) To any unit of local government having jurisdiction over the area where the facility is proposed to be located; and (B) To each State agency having any authority under State law with respect to the construction or operation of such facility.

(2)(i) For major permits and NPDES and 404 general permits, publication of a notice in a daily or weekly newspaper within the area affected by the facility or activity; and for EPA-issued NPDES general permits, in the FEDERAL REGISTER;

NOTE: The Director is encouraged to provide as much notice as possible of the NPDES of 404 draft general permit to the facilities or activities to be covered by the general permit.

(ii) for all RCRA permits, publication of a notice in a daily or weekly major local newspaper of general circulation and broadcast over local radio stations.

(3) When the program is being administered by an approved State, in a manner constituting legal notice to the public under State law; *and*

(4) Any other method reasonably calculated to give actual notice of the action in question to the persons potentially affected by it, including press releases or any other forum or medium to elicit public participation.

(d) *Contents (applicable to State programs, see §§ 123.25 (NPDES), 145.11 (UIC), 233.26 (404), and 271.14 (RCRA)).* (1) *All public notices.* All public notices issued under this Part shall contain the following minimum information:

(i) Name and address of the office processing the permit action for which notice is being given;

(ii) Name and address of the permittee or permit applicant and, if different, of the facility or activity regulated by the permit, except in the case of NPDES and 404 draft general permits under §§ 122.28 and 233.37;

(iii) a brief description of the business conducted at the facility or activity described in the permit application or the draft permit, for NPDES or 404 general permits when there is no application.

(iv) Name, address and telephone number of a person from whom interested persons may obtain further information, including copies of the draft permit or draft general permit, as the case may be, statement of basis or fact sheet, and the application; and

(v) A brief description of the comment procedures required by §§ 124.11 and 124.12 and the time and place of any hearing that will be held, including a statement of procedures to request a hearing (unless a hearing has already been scheduled) and other procedures by which the public may participate in the final permit decision.

(vi) For EPA-issued permits, the location of the administrative record required by § 124.9, the times at which the record will be open for public inspection, and a statement that all data submitted by the applicant is available as part of the administrative record.

(vii) For NPDES permits only, a general description of the location of each existing or proposed discharge point and the name of the receiving water. For draft general permits, this requirement will be satisfied by a map or description of the permit area. For EPA-issued NPDES permits only, if the discharge is from a new source, a statement as to whether an environmental impact statement will be or has been prepared.

(viii) For 404 permits only,

(A) The purpose of the proposed activity (including, in the case of fill material, activities intended to be conducted on the fill), a description of the type, composition, and quantity of materials to be discharged and means of conveyance; and any proposed conditions and limitations on the discharge;

(B) The name and water quality standards classification, if applicable, of the receiving waters into which the discharge is proposed, and a general discription of the site of each proposed discharge and the portions of the site and the discharges which are within State regulated waters;

(C) A description of the anticipated environmental effects of activities conducted under the permit;

(D) References to applicable statutory or regulatory authority; and

(E) Any other available information which may assist the public in evaluating the likely impact of the proposed

activity upon the integrity of the receiving water.

(ix) Any additional information considered necessary or proper.

(2) *Public notices for hearings.* In addition to the general public notice described in paragraph (d)(1) of this section, the public notice of a hearing under § 124.12, Subpart E, or Subpart F shall contain the following information:

(i) Reference to the date of previous public notices relating to the permit;

(ii) Date, time, and place of the hearing;

(iii) A brief description of the nature and purpose of the hearing, including the applicable rules and procedures; and

(iv) For 404 permits only, a summary of major issues raised to date during the public comment period.

(e) (*Applicable to State programs, see §§ 123.25 (NPDES), 145.11 (UIC), 233.26 (404), and 271.14 (RCRA)*). In addition to the general public notice described in paragraph (d)(1) of this section, all persons identified in paragraphs (c)(1) (i), (ii), (iii), and (iv) of this section shall be mailed a copy of the fact sheet or statement of basis (for EPA-issued permits), the permit application (if any) and the draft permit (if any).

[48 FR 14264, Apr. 1, 1983; 48 FR 30115, June 30, 1983]

§ 124.11 Public comments and requests for public hearings.

(*Applicable to State programs, see §§ 123.25 (NPDES), 145.11 (UIC), 233.26 (404), and 271.14 (RCRA).*)

During the public comment period provided under § 124.10, any interested person may submit written comments on the draft permit or the permit application for 404 permits when no draft permit is required (see § 233.39) and may request a public hearing, if no hearing has already been scheduled. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. All comments shall be considered in making the final decision and shall be answered as provided in § 124.17.

§ 124.12 Public hearings.

(a) (*Applicable to State programs, see §§ 123.25 (NPDES), 145.11 (UIC), 233.26 (404), and 271.14 (RCRA).*) (1) The Director shall hold a public hearing whenever he or she finds, on the basis of requests, a significant degree of public interest in a draft permit(s);

(2) The Director may also hold a public hearing at his or her discretion, whenever for instance, such a hearing might clarify one or more issues involved in the permit decision;

(3) For RCRA permits only, (i) the Director shall hold a public hearing whenever he or she receives written notice of opposition to a draft permit and a request for a hearing within 45 days of public notice under § 124.10(b)(1); (ii) whenever possible the Director shall schedule a hearing under this section at a location convenient to the nearest population center to the proposed facility;

(4) Public notice of the hearing shall be given as specified in § 124.10.

(b) Whenever a public hearing will be held and EPA is the permitting authoriy, the Regional Administrator shall designate a Presiding Officer for the hearing who shall be responsible for its scheduling and orderly conduct.

(c) Any person may submit oral or written statements and data concerning the draft permit. Reasonable limits may be set upon the time allowed for oral statements, and the submission of statements in writing may be required. The public comment period under § 124.10 shall automatically be extended to the close of any public hearing under this section. The hearing officer may also extend the comment period by so stating at the hearing.

(d) A tape recording or written transcript of the hearing shall be made available to the public.

(e)(1) At his or her discretion, the Regional Administrator may specify that RCRA or UIC permits be processed under the procedures in Subpart F.

(2) For initial RCRA permits for existing HWM facilities, the Regional Administrator shall have the discretion to provide a hearing under the procedures in Subpart F. The permit

applicant may request such a hearing pursuant to § 124.114 no one or more issues, if the applicant explains in his request why he or she believes those issues: (i) Are genuine issues to material fact; and (ii) determine the outcome of one or more contested permit conditions identified as such in the applicant's request, that would require extensive changes to the facility ("contested major permit conditions"). If the Regional Administrator decides to deny the request, he or she shall send to the applicant a brief written statement of his or her reasons for concluding that no such determinative issues have been presented for resolution in such a hearing.

[48 FR 14264, Apr. 1, 1983, as amended at 49 FR 17718, Apr. 24, 1984]

EFFECTIVE DATE NOTE: At 49 FR 17718, Apr. 24, 1984, paragraph (e) of § 124.12 was revised, effective October 24, 1984. For the convenience of the user, the superseded text appears as follows.

§ 124.12 Public hearings.

* * * * *

(e) At his or her discretion, the Regional Administrator may specify that RCRA and UIC permits be processed under the procedures in Subpart F.

§ 124.13 Obligation to raise issues and provide information during the public comment period.

All persons, including applicants, who believe any condition of a draft permit is inappropriate or that the Director's tentative decision to deny an application, terminate a permit, or prepare a draft permit is inappropriate, must raise all reasonably ascertainable issues and submit all reasonably available arguments and factual grounds supporting their position, including all supporting material, by the close of the public comment period (including any public hearing) under § 124.10. All supporting materials shall be included in full and may not be incorporated by reference, unless they are already part of the administrative record in the same proceeding, or consist of State or Federal statutes and regulations, EPA documents of general applicability, or other generally available reference materials. Commenters shall make supporting material not already included in the administrative record available to EPA as directed by the Regional Administrator. (A comment period longer than 30 days will often be necessary in complicated proceedings to give commenters a reasonable opportunity to comply with the requirements of this section. Commenters may request longer comment periods and they should be freely established under § 124.10 to the extent they appear necessary.)

§ 124.14 Reopening of the public comment period.

(a) If any data information or arguments submitted during the public comment period, including information or arguments required under § 124.13, appear to raise substantial new questions concerning a permit, the Regional Administrator may take one or more of the following actions:

(1) Prepare a new draft permit, appropriately modified, under § 124.6;

(2) Prepare a revised statement of basis under § 124.7, a fact sheet or revised fact sheet under § 124.8 and reopen the comment period under § 124.14; or

(3) Reopen or extend the comment period under § 124.10 to give interested persons an opportunity to comment on the information or arguments submitted.

(b) Comments filed during the reopened comment period shall be limited to the substantial new questions that caused its reopening. The public notice under § 124.10 shall define the scope of the reopening.

(c) For RCRA, UIC, or NPDES permits, the Regional Administrator may also, in the circumstances described above, elect to hold further proceedings under Subpart F. This decision may be combined with any of the actions enumerated in paragraph (a) of this section.

(d) Public notice of any of the above actions shall be issued under § 124.10.

§ 124.15 Issuance and effective date of permit.

(a) After the close of the public comment period under § 124.10 on a draft permit, the Regional Administrator

shall issue a final permit decision. The Regional Administrator shall notify the applicant and each person who has submitted written comments or requested notice of the final permit decision. This notice shall include reference to the procedures for appealing a decision on a RCRA, UIC, or PSD permit or for contesting a decision on an NPDES permit or a decision to terminate a RCRA permit. For the purposes of this section, a final permit decision means a final decision to issue, deny, modify, revoke and reissue, or terminate a permit.

(b) A final permit decision shall become effective 30 days after the service of notice of the decision under paragraph (a) of this section, unless:

(1) A later effective date is specified in the decision; or

(2) Review is requested under § 124.19 (RCRA, UIC, and PSD permits) or an evidentiary hearing is requested under § 124.74 (NPDES permit and RCRA permit terminations); or

(3) No comments requested a change in the draft permit, in which case the permit shall become effective immediately upon issuance.

§ 124.16 Stays of contested permit conditions.

(a) *Stays.* (1) If a request for review of a RCRA or UIC permit under § 124.19 or an NPDES permit under § 124.74 or § 124.114 is granted or if conditions of a RCRA or UIC permit are consolidated for reconsideration in an evidentiary hearing on an NPDES permit under §§ 124.74, 124.82 or 124.114, the effect of the contested permit conditions shall be stayed and shall not be subject to judicial review pending final agency action. (No stay of a PSD permit is available under this section.) If the permit involves a new facility or new injection well, new source, new discharger or a recommencing discharger, the applicant shall be without a permit for the proposed new facility, injection well, source or discharger pending final agency action. See also § 124.60.

(2) Uncontested conditions which are not serverable from those contested shall be stayed together with the contested conditions. Stayed provisions of permits for existing facilities, injection wells, and sources shall be identified by the Regional Administrator. All other provisions of the permit for the existing facility, injection well, or source shall remain fully effective and enforceable.

(b) *Stays based on cross effects.* (1) A stay may be granted based on the grounds that an appeal to the Administrator under § 124.19 of one permit may result in changes to another EPA-issued permit only when each of the permits involved has been appealed to the Administrator and he or she has accepted each appeal.

(2) No stay of an EPA-issued RCRA, UIC, or NPDES permit shall be granted based on the staying of any State-issued permit except at the discretion of the Regional Administrator and only upon written request from the State Director.

(c) Any facility or activity holding an existing permit must:

(1) Comply with the conditions of that permit during any modification or revocation and reissuance proceeding under § 124.5; and

(2) To the extent conditions of any new permit are stayed under this section, comply with the conditions of the existing permit which correspond to the stayed conditions, unless compliance with the existing conditions would be technologically incompatible with compliance with other conditions of the new permit which have not been stayed.

§ 124.17 Response to comments.

(a) (*Applicable to State programs, see §§ 123.25 (NPDES), 145.11 (UIC), 233.26 (404), and 271.14 (RCRA).*) At the time that any final permit decision is issued under § 124.15, the Director shall issue a response to comments. States are only required to issue a response to comments when a final permit is issued. This response shall:

(1) Specify which provisions, if any, of the draft permit have been changed in the final permit decision, and the reasons for the change; and

(2) Briefly describe and respond to all significant comments on the draft permit or the permit application (for section 404 permits only) raised during the public comment period, or during any hearing.

(b) For EPA-issued permits, any documents cited in the response to comments shall be included in the administrative record for the final permit decision as defined in § 124.18. If new points are raised or new material supplied during the public comment period, EPA may document its response to those matters by adding new materials to the administrative record.

(c) (*Applicable to State programs, see §§ 123.25 (NPDES), 145.11 (UIC), 233.26 (404), and 271.14 (RCRA).*) The response to comments shall be available to the public.

§ 124.18 Administrative record for final permit when EPA is the permitting authority.

(a) The Regional Administrator shall base final permit decisions under § 124.15 on the administrative record defined in this section.

(b) The administrative record for any final permit shall consist of the administrative record for the draft permit and:

(1) All comments received during the public comment period provided under § 124.10 (including any extension or reopening under § 124.14);

(2) The tape or transcript of any hearing(s) held under § 124.12;

(3) Any written materials submitted at such a hearing;

(4) The response to comments required by § 124.17 and any new material placed in the record under that section;

(5) For NPDES new source permits only, final environmental impact statement and any supplement to the final EIS;

(6) Other documents contained in the supporting file for the permit; and

(7) The final permit.

(c) The additional documents required under paragraph (b) of this section should be added to the record as soon as possible after their receipt or publication by the Agency. The record shall be complete on the date the final permit is issued.

(d) This section applies to all final RCRA, UIC, PSD, and NPDES permits when the draft permit was subject to the administrative record requirements of § 124.9 and to all NPDES permits when the draft permit was included in a public notice after October 12, 1979.

(e) Material readily available at the issuing Regional Office, or published materials which are generally available and which are included in the administrative record under the standards of this section or of § 124.17 ("Response to comments"), need not be physically included in the same file as the rest of the record as long as it is specifically referred to in the statement of basis or fact sheet or in the response to comments.

§ 124.19 Appeal of RCRA, UIC, and PSD permits.

(a) Within 30 days after a RCRA, UIC, or PSD final permit decision has been issued under § 124.15, any person who filed comments on that draft permit or participated in the public hearing may petition the Administrator to review any condition of the permit decision. Any person who failed to file comments or failed to participate in the public hearing on the draft permit may petition for administrative review only to the extent of the changes from the draft to the final permit decision. The 30-day period within which a person may request review under this section begins with the service of notice of the Regional Administrator's action unless a later date is specified in that notice. The petition shall include a statement of the reasons supporting that review, including a demonstration that any issues being raised were raised during the public comment period (including any public hearing) to the extent required by these regulations and when appropriate, a showing that the condition in question is based on:

(1) A finding of fact or conclusion of law which is clearly erroneous, or

(2) An exercise of discretion or an important policy consideration which the Administrator should, in his or her discretion, review.

(b) The Administrator may also decide on his or her initiative to review any condition of any RCRA, UIC, or PSD permit issued under this part. The Administrator must act

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under this paragraph within 30 days of the service date of notice of the Regional Administrator's action.

(c) Within a reasonable time following the filing of the petition for review, the Administrator shall issue an order either granting or denying the petition for review. To the extent review is denied, the conditions of the final permit decision become final agency action. Public notice of any grant of review by the Administrator under paragraph (a) or (b) of this section shall be given as provided in § 124.10. Public notice shall set forth a briefing schedule for the appeal and shall state that any interested person may file an amicus brief. Notice of denial of review shall be sent only to the person(s) requesting review.

(d) The Administrator may defer consideration of an appeal of a RCRA or UIC permit under this section until the completion of formal proceedings under Subpart E or F relating to an NPDES permit issued to the same facility or activity upon concluding that:

(1) The NPDES permit is likely to raise issues relevant to a decision of the RCRA or UIC appeals;

(2) The NPDES permit is likely to be appealed; and

(3) Either: (i) The interests of both the facility or activity and the public are not likely to be materially adversely affected by the deferral; or

(ii) Any adverse effect is outweighed by the benefits likely to result from a consolidated decision on appeal.

(e) A petition to the Administrator under paragraph (a) of this section is, under 5 U.S.C. 704, a prerequisite to the seeking of judicial review of the final agency action.

(f)(1) For purposes of judicial review under the appropriate Act, final agency action occurs when a final RCRA, UIC, or PSD permit is issued or denied by EPA and agency review procedures are exhausted. A final permit decision shall be issued by the Regional Administrator: (i) When the Administrator issues notice to the parties that review has been denied; (ii) when the Administrator issues a decision on the merits of the appeal and the decision does not include a remand of the proceedings; or (iii) upon the completion of remand proceedings if the proceedings are remanded, unless the Administrator's remand order specifically provides that appeal of the remand decision will be required to exhaust administrative remedies.

(2) Notice of any final agency action regarding a PSD permit shall promptly be published in the FEDERAL REGISTER.

§ 124.20 Computation of time.

(a) Any time period scheduled to begin on the occurrence of an act or event shall begin on the day after the act or event.

(b) Any time period scheduled to begin before the occurrence of an act or event shall be computed so that the period ends on the day before the act or event.

(c) If the final day of any time period falls on a weekend or legal holiday, the time period shall be extended to the next working day.

(d) Whenever a party or interested person has the right or is required to act within a prescribed period after the service of notice or other paper upon him or her by mail, 3 days shall be added to the prescribed time.

§ 124.21 Effective date of Part 124.

(a) Except for paragraph (b) and (c) of this section, Part 124 will become effective July 18, 1980. Because this effective date will precede the processing of any RCRA or UIC permits, Part 124 will apply in its entirety to all RCRA and UIC permits.

(b) All provisions of Part 124 pertaining to the RCRA program will become effective on November 19, 1980.

(c) All provisions of Part 124 pertaining to the UIC program will become effective July 18, 1980, but shall not be implemented until the effective date of 40 CFR Part 146.

(d) This part does not significantly change the way in which NPDES permits are processed. Since October 12, 1979, NPDES permits have been the subject to almost identical requirements in the revised NPDES regulations which were promulgated on June 7, 1979. See *44 FR 32948*. To the extent this part changes the revised NPDES permit regulations, those

changes will take effect as to all permit proceedings in progress on July 3, 1980.

(e) This part also does not significantly change the way in which PSD permits are processed. For the most part, these regulations will also apply to PSD proceedings in progress on July 18, 1980. However, because it would be disruptive to require retroactively a formal administrative record for PSD permits issued without one, §§ 124.9 and 124.18 will apply to PSD permits for which draft permits were prepared after the effective date of these regulations.

Subpart B—Specific Procedures Applicable to RCRA Permits—[Reserved]

Subpart C—Specific Procedures Applicable to PSD Permits

§ 124.41 Definitions applicable to PSD permits.

Whenever PSD permits are processed under this part, the following terms shall have the following meanings:

"Administrator," "EPA," and "Regional Administrator" shall have the meanings set forth in § 124.2, except when EPA has delegated authority to administer those regulations to another agency under the applicable subsection of 40 CFR § 52.21, the term "EPA" shall mean the delegate agency and the term "Regional Administrator" shall mean the chief administrative officer of the delegate agency.

"Application" means an application for a PSD permit.

"Appropriate Act and Regulations" means the Clean Air Act and applicable regulations promulgated under it.

"Approved program" means a State implementation plan providing for issuance of PSD permits which has been approved by EPA under the Clean Air Act and 40 CFR Part 51. An "approved State" is one administering an "approved program." "State Director" as used in § 124.4 means the person(s) responsible for issuing PSD permits under an approved program, or that person's delegated representative.

"Construction" has the meaning given in 40 CFR 52.21.

"Director" means the Regional Administrator.

"Draft permit" shall have the meaning set forth in § 124.2.

"Facility or activity" means a "major PSD stationary source" or "major PSD modification."

"Federal Land Manager" has the meaning given in 40 CFR 52.21.

"Indian Governing Body" has the meaning given in 40 CFR 52.21.

"Major PSD modification" means a "major modification" as defined in 40 CFR 52.21.

"Major PSD stationary source" means a "major stationary source" as defined in 40 CFR 52.21(b)(1).

"Owner or operator" means the owner or operator of any facility or activity subject to regulation under 40 CFR 52.21 or by an approved State.

"Permit" or "PSD permit" means a permit issued under 40 CFR 52.21 or by an approved State.

"Person" includes an individual, corporation, partnership, association, State, municipality, political subdivision of a State, and any agency, department, or instrumentality of the United States and any officer, agent or employee thereof.

"Regulated activity" or "activity subject to regulation" means a "major PSD stationary source" or "major PSD modification."

"Site" means the land or water area upon which a "major PSD stationary source" or "major PSD modification" is physically located or conducted, including but not limited to adjacent land used for utility systems; as repair, storage, shipping or processing areas; or otherwise in connection with the "major PSD stationary source" or "major PSD modification."

"State" means a State, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, and American Samoa and includes the Commonwealth of the Northern Mariana Islands.

§ 124.42 Additional procedures for PSD permits affecting Class I areas.

(a) The Regional Administrator shall provide notice of any permit application for a proposed major PSD stationary source or major PSD modi-

ATTACHMENT VI
Agenda Item No. D
6/7/85 EQC Meeting

Thursday
December 20, 1984

Part VII

Environmental Protection Agency

40 CFR Part 262

Hazardous Waste Management System; Standards Applicable to Generators of Hazardous Waste; Final Rule

Title 40 of the Code of Federal Regulations Part 262 is amended as follows:

PART 262—STANDARDS APPLICABLE TO GENERATORS OF HAZARDOUS WASTE

1. The authority citation for Part 262 reads as follows:

Authority: Secs. 1006, 2002, 3002, 3003, 3004 and 3005 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended, (RCRA), 42 U.S.C. 6905, 6912, 6922, 6923, 6924, 6925.

2. In § 262.34, paragraph (c) is added to read as follows:

§ 262.34 Accumulation time.

* * * * *

(c)(1) A generator may accumulate as much as 55 gallons of hazardous waste or one quart of acutely hazardous waste listed in § 261.33(e) in containers at or near any point of generation where wastes initially accumulate, which is under the control of the operator of the process generating the waste, without a permit or interim status and without complying with paragraph (a) of this section provided he:

(i) Complies with §§ 265.171, 265.172, and 265.173(a) of this chapter; and

(ii) Marks his containers either with the words "Hazardous Waste" or with other words that identify the contents of the containers.

(2) A generator who accumulates either hazardous waste or acutely hazardous waste listed in § 261.33(e) in excess of the amounts listed in paragraph (c)(1) of this section at or near any point of generation must, with respect to that amount of excess waste, comply within three days with paragraph (a) of this section or other applicable provisions of this chapter. During the three day period the generator must continue to comply with paragraphs (c)(1)(i)–(ii) of this section. The generator must mark the container holding the excess accumulation of hazardous waste with the date the excess amount began accumulating.

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Friday
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Part III

Environmental Protection Agency

40 CFR Parts 260, 261, 264, 265, and 266 Hazardous Waste Management System; Definition of Solid Waste; Final Rule

APPENDIX B.—DEFINITION OF A SOLID WASTE DAMAGE INCIDENTS—ADDITIONS LIST—Continued

Damage Incident	Source
13. The NL Industries site (Salem County, New Jersey) recovers lead from spent automotive batteries and separates the plastic from the rubber casings. As a result of improper storage of batteries on the site and other factors relating to their processing, ground water, surface water, and soils are extensively contaminated with various heavy metals.	National Priorities List Aug. 1983.
14. Scientific Chemical Processing, Inc. (Carlstadt, New Jersey) recovered and recycled various chemical wastes. As a result of a State Order, the company ceased operations in 1980. About 375,000 gallons of hazardous substances are stored on the site in tanks, drums, and tank trailers. Soils are extensively contaminated, run-off from the site is contaminated, and ground water contamination is likely.	Do.
15. In 1983, the State of Indiana filed suit against Norman Poer, an individual who contracted with Inmont Corporation to purchase what he was told was paint and solvent, in an attempt to recycle them to produce low grade paint. When Mr. Poer was unable to sell or give away the paint, he abandoned it on a 5-acre field he owned in Jackson Township, Indiana. Ground water samples indicate that the well on site contains hazardous levels of arsenic and lead. In addition, further tests have indicated that the paint waste has elevated levels of lead and chromium and that the ignitability of the waste classifies it as hazardous. The barrels remain on site, leaking contents onto the ground.	National Priorities List Update, July 1984.

For the reasons set out in the preamble, Title 40 of the Code of Federal Regulations is amended as follows:

PART 260—HAZARDOUS WASTE MANAGEMENT SYSTEM: GENERAL

1. The authority citation for Part 260 reads as follows:

Authority: Secs. 1006, 2002(a), 3001 through 3007, and 3010 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended [42 U.S.C. 6905, 6912(a), 6921 through 6927, and 6930].

2. Section 261.10 is amended by adding new definitions for "Boiler" and "Industrial Furnace" to appear alphabetically and by revising the definitions of "Designated facility" and "Incinerator."

§ 260.10 Definitions

* * * * *

"Boiler" means an enclosed device using controlled flame combustion and having the following characteristics:

(1) (i) The unit must have physical provisions for recovering and exporting thermal energy in the form of steam, heated fluids, or heated gases; and

(ii) The unit's combustion chamber and primary energy recovery sections(s) must be of integral design. To be of integral design, the combustion chamber and the primary energy recovery section(s) (such as waterwalls and superheaters) must be physically formed into one manufactured or assembled unit. A unit in which the combustion chamber and the primary energy recovery section(s) are joined only by ducts or connections carrying flue gas is not integrally designed; however, secondary energy recovery equipment (such as economizers or air preheaters) need not be physically formed into the same unit as the combustion chamber and the primary energy recovery section. The following units are not precluded from being boilers solely because they are not of integral design: process heaters (units that transfer energy directly to a process stream), and fluidized bed combustion units; and

(iii) While in operation, the unit must maintain a thermal energy recovery efficiency of at least 60 percent, calculated in terms of the recovered energy compared with the thermal value of the fuel; and

(iv) The unit must export and utilize at least 75 percent of the recovered energy, calculated on an annual basis. In this calculation, no credit shall be given for recovered heat used internally in the same unit. (Examples of internal use are the preheating of fuel or combustion air, and the driving of induced or forced draft fans or feedwater pumps); or

(2) The unit is one which the Regional Administrator has determined, on a case-by-case basis, to be a boiler, after considering the standards in § 260.32.

"Designated facility" means a hazardous waste treatment, storage, or disposal facility which has received an EPA permit (or a facility with interim status) in accordance with the requirements of Parts 270 and 124 of this Chapter, a permit from a State authorized in accordance with Part 271 of this Chapter, or that is regulated under § 261.6(c)(2) or Subpart F of Part 266 of this Chapter, and that has been designated on the manifest by the generator pursuant to § 262.20.

* * * * *

"Incinerator" means any enclosed device using controlled flame combustion that neither meets the criteria for classification as a boiler nor is listed as an industrial furnace.

"Industrial furnace" means any of the following enclosed devices that are integral components of manufacturing processes and that use controlled flame devices to accomplish recovery of materials or energy:

(1) Cement kilns
(2) Lime kilns
(3) Aggregate kilns
(4) Phosphate kilns
(5) Coke ovens
(6) Blast furnaces
(7) Smelting, melting and refining furnaces (including pyrometallurgical devices such as cupolas, reverberator furnaces, sintering machine, roasters, and foundry furnaces)
(8) Titanium dioxide chloride process oxidation reactors
(9) Methane reforming furnaces
(10) Pulping liquor recovery furnaces
(11) Combustion devices used in the recovery of sulfur values from spent sulfuric acid
(12) Such other devices as the Administrator may, after notice and comment, add to this list on the basis of one or more of the following factors:

(i) The design and use of the device primarily to accomplish recovery of material products;

(ii) The use of the device to burn or reduce raw materials to make a material product;

(iii) The use of the device to burn or reduce secondary materials as effective substitutes for raw materials, in processes using raw materials as principal feedstocks;

(iv) The use of the device to burn or reduce secondary materials as ingredients in an industrial process to make a material product;

(v) The use of the device in common industrial practice to produce a material product; and

(vi) Other factors, as appropriate.

* * * * *

3. In Subpart C of Part 260, add the following § 260.30:

§ 260.30 Variances from classification as a solid waste.

In accordance with the standards and criteria in § 260.31 and the procedures in § 260.33, the Regional Administrator may determine on a case-by-case basis that the following recycled materials are not solid wastes:

(a) Materials that are accumulated speculatively without sufficient amounts being recycled (as defined in § 261.1(c)(8)(B) of this Chapter);

(b) Materials that are reclaimed and then reused within the original primary production process in which they were generated;

(c) Materials that have been reclaimed but must be reclaimed further before the materials are completely recovered.

4. In Subpart C of Part 260, add the following § 260.31:

§ 260.31 Standards and criteria for variances from classification as a solid waste.

(a) The Regional Administrator may grant requests for a variance from classifying as a solid waste those materials that are accumulated speculatively without sufficient amounts being recycled if the applicant demonstrates that sufficient amounts of the material will be recycled or transferred for recycling in the following year. If a variance is granted, it is valid only for the following year, but can be renewed, on an annual basis, by filing a new application. The Regional Administrator's decision will be based on the following standards and criteria:

(1) The manner in which the material is expected to be recycled, when the material is expected to be recycled, and whether this expected disposition is likely to occur (for example, because of past practice, market factors, the nature of the material, or contractual arrangements for recycling);

(2) The reason that the applicant has accumulated the material for one or more years without recycling 75 percent of the volume accumulated at the beginning of the year;

(3) The quantity of material already accumulated and the quantity expected to be generated and accumulated before the material is recycled;

(4) The extent to which the material is handled to minimize loss;

(5) Other relevant factors.

(b) The Regional Administrator may grant requests for a variance from classifying as a solid waste those materials that are reclaimed and then reused as feedstock within the original primary production process in which the materials were generated if the reclamation operation is an essential part of the production process. This determination will be based on the following criteria:

(1) How economically viable the production process would be if it were to use virgin materials, rather than reclaimed materials;

(2) The prevalence of the practice on an industry-wide basis;

(3) The extent to which the material is handled before reclamation to minimize loss;

(4) The time periods between generating the material and its reclamation, and between reclamation and return to the original primary production process;

(5) The location of the reclamation operation in relation to the production process;

(6) Whether the reclaimed material is used for the purpose for which it was originally produced when it is returned to the original process, and whether it is returned to the process in substantially its original form;

(7) Whether the person who generates the material also reclaims it;

(8) Other relevant factors.

(c) The Regional Administrator may grant requests for a variance from classifying as a solid waste those materials that have been reclaimed but must be reclaimed further before recovery is completed if, after initial reclamation, the resulting material is commodity-like (even though it is not yet a commercial product, and has to be reclaimed further). This determination will be based on the following factors:

(1) The degree of processing the material has undergone and the degree of further processing that is required;

(2) The value of the material after it has been reclaimed;

(3) The degree to which the reclaimed material is like an analogous raw material;

(4) The extent to which an end market for the reclaimed material is guaranteed;

(5) The extent to which the reclaimed material is handled to minimize loss;

(6) Other relevant factors.

5. In Subpart C of Part 260, add the following § 260.32:

§ 260.32 Variance to be classified as a boiler.

In accordance with the standards and criteria in § 260.10 (definition of "boiler"), and the procedures in § 260.33, the Regional Administrator may determine on a case-by-case basis that certain enclosed devices using controlled flame combustion are boilers, even though they do not otherwise meet the definition of boiler contained in § 260.10, after considering the following criteria:

(a) The extent to which the unit has provisions for recovering and exporting thermal energy in the form of steam, heated fluids, or heated gases; and

(b) The extent to which the combustion chamber and energy recovery equipment are of integral design; and

(c) The efficiency of energy recovery, calculated in terms of the recovered energy compared with the thermal value of the fuel; and

(d) The extent to which exported energy is utilized; and

(e) The extent to which the device is in common and customary use as a "boiler" functioning primarily to produce steam, heated fluids, or heated gases; and

(f) Other factors, as appropriate.

6. In Subpart C of Part 260, add the following § 260.33:

§ 260.33 Procedures for variances from classification as a solid waste or to be classified as a boiler.

The Regional Administrator will use the following procedures in evaluating applications for variances from classification as a solid waste or applications to classify particular enclosed flame combustion devices as boilers:

(a) The applicant must apply to the Regional Administrator in the region where the recycler is located. The application must address the relevant criteria contained in § 260.31 or § 260.32 of this Part.

(b) The Regional Administrator will evaluate the application and issue a draft notice tentatively granting or denying the application. Notification of this tentative decision will be provided by newspaper advertisement and radio broadcast in the locality where the recycler is located. The Regional Administrator will accept comment on the tentative decision for 30 days, and may also hold a public hearing upon request or at his discretion. The Regional Administrator will issue a final decision after receipt of comments and after the hearing (if any), and this decision may not be appealed to the Administrator.

7. In Subpart C of Part 260, add the following § 260.40:

§ 260.40 Additional regulation of certain hazardous waste recycling activities on a case-by-case basis.

(a) The Regional Administrator may decide on a case-by-case basis that persons accumulating or storing the recyclable materials described in § 261.6(a)(2)(iv) of this Chapter should be regulated under § 261.6 (b) and (c) of this Chapter. The basis for this decision is that the materials are being accumulated or stored in a manner that does not protect human health and the environment because the materials or their toxic constituents have not been adequately contained, or because the materials being accumulated or stored together are incompatible. In making this decision, the Regional Administrator will consider the following factors:

(1) The types of materials accumulated or stored and the amounts accumulated or stored;

(2) The method of accumulation or storage;

(3) The length of time the materials have been accumulated or stored before being reclaimed;

(4) Whether any contaminants are being released into the environment, or are likely to be so released; and

(5) Other relevant factors.

The procedures for this decision are set forth in §260.41 of this Chapter.

8. In Subpart C of Part 260, add the following § 260.41:

§260.41 Procedures for case-by-case regulation of hazardous waste recycling activities.

The Regional Administrator will use the following procedures when determining whether to regulate hazardous waste recycling activities described in § 261.6(a)(2)(iv) under the provisions of § 261.6 (b) and (c), rather than under the provisions of Subpart F of Part 266 of this Chapter.

(a) If a generator is accumulating the waste, the Regional Administrator will issue a notice setting forth the factual basis for the decision and stating that the person must comply with the applicable requirements of Subparts A, C, D, and E of Part 262 of this Chapter. The notice will become final within 30 days, unless the person served requests a public hearing to challenge the decision. Upon receiving such a request, the Regional Administrator will hold a public hearing. The Regional Administrator will provide notice of the hearing to the public and allow public participation at the hearing. The Regional Administrator will issue a final order after the hearing stating whether or not compliance with Part 262 is required. The order becomes effective 30 days after service of the decision unless the Regional Administrator specifies a later date or unless review by the Administrator is requested. The order may be appealed to the Administrator by any person who participated in the public hearing. The Administrator may choose to grant or to deny the appeal. Final Agency action occurs when a final order is issued and Agency review procedures are exhausted.

(b) If the person is accumulating the recyclable material as a storage facility, the notice will state that the person must obtain a permit in accordance with all applicable provisions of Parts 270 and 124 of this Chapter. The owner or operator of the facility must apply for a permit within no less than 60 days and no more than six months of notice, as specified in the notice. If the owner or operator of the facility wishes to challenge the Regional Administrator's decision, he may do so in his permit application, in a public hearing held on the draft permit, or in comments filed on the draft permit or on the notice of intent to deny the permit. The fact sheet accompanying the permit will specify the reasons for the Agency's determination. The question of whether the Regional Administrator's decision was proper will remain open for consideration during the public comment period discussed under § 124.11 of this Chapter and in any subsequent hearing.

PART 261—IDENTIFICATION AND LISTING OF HAZARDOUS WASTE

9. The authority citation for Part 261 reads as follows:

Authority: Secs. 1006, 2002(a), 3001, and 3002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended [42 U.S.C. 6905, 6912(a), 6921, and 6922].

10. In § 261.1, paragraph (c) is added and paragraph (b) is revised to read as follows:

§ 261.1 Purpose and scope.

* * * * *

(b)(1) The definition of solid waste contained in this Part applies only to wastes that also are hazardous for purposes of the regulations implementing Subtitle C of RCRA. For example, it does not apply to materials (such as non-hazardous scrap, paper, textiles, or rubber) that are not otherwise hazardous wastes and that are recycled.

(2) This Part identifies only some of the materials which are solid wastes and hazardous wastes under Sections 3007, 3013, and 7003 of RCRA. A material which is not defined as a solid waste in this Part, or is not a hazardous waste identified or listed in this Part, is still a solid waste and a hazardous waste for purposes of these sections if:

(i) In the case of Sections 3007 and 3013, EPA has reason to believe that the material may be a solid waste within the meaning of Section 1004(27) of RCRA and a hazardous waste within the meaning of Section 1004(5) of RCRA; or

(ii) In the case of Section 7003, the statutory elements are established.

(c) For the purposes of Sections 261.2 and 261.6:

(1) A "spent material" is any material that has been used and as a result of contamination can no longer serve the purpose for which it was produced without processing;

(2) "Sludge" has the same meaning used in § 260.10 of this Chapter;

(3) A "by-product" is a material that is not one of the primary products of a production process and is not solely or separately produced by the production process. Examples are process residues such as slags or distillation column bottoms. The term does not include a co-product that is produced for the general public's use and is ordinarily used in the form it is produced by the process.

(4) A material is "reclaimed" if it is processed to recover a usable product, or if it is regenerated. Examples are recovery of lead values from spent batteries and regeneration of spent solvents.

(5) A material is "used or reused" if it is either:

(i) Employed as an ingredient (including use as an intermediate) in an industrial process to make a product (for example, distillation bottoms from one process used as feedstock in another process). However, a material will not satisfy this condition if distinct components of the material are recovered as separate end products (as when metals are recovered from metal-containing secondary materials); or

(ii) Employed in a particular function or application as an effective substitute for a commercial product (for example, spent pickle liquor used as phosphorous precipitant and sludge conditioner in wastewater treatment).

(6) "Scrap metal" is bits and pieces of metal parts (*e.g.*,) bars, turnings, rods, sheets, wire) or metal pieces that may be combined together with bolts or soldering (*e.g.*, radiators, scrap automobiles, railroad box cars), which when worn or superfluous can be recycled.

(7) A material is "recycled" if it is used, reused, or reclaimed.

(8) A material is "accumulated speculatively" if it is accumulated before being recycled. A material is not accumulated speculatively, however, if the person accumulating it can show that the material is potentially recyclable and has a feasible means of being recycled; and that—during the calendar year (commencing on January 1)—the amount of material that is recycled, or transferred to a different site for recycling, equals at least 75 percent by weight or volume of the amount of that material accumulated at the beginning of the period. In calculating the percentage of turnover, the 75 percent requirement is to be applied to each material of the same type (*e.g.*, slags from a single smelting process) that is recycled in the same way (*i.e.*, from which the same material is recovered or that is used in the same way). Materials accumulating in units that would be exempt from regulation under § 261.4(c) are not be included in making the calculation. (Materials that are already defined as solid wastes also are not to be included in making the

calculation.) Materials are no longer in this category once they are removed from accumulation for recycling, however.

11. Section 261.2 is revised to read as follows:

§ 261.2 Definition of solid waste.

(a)(1) A *solid waste* is any discarded material that is not excluded by § 261.4(a) or that is not excluded by variance granted under §§ 260.30 and 260.31.

(2) A *discarded material* is any material which is:

(i) *Abandoned*, as explained in paragraph (b) of this section; or

(ii) *Recycled*, as explained in paragraph (c) of this section; or

(iii) Considered *inherently waste-like*, as explained in paragraph (d) of this section.

(b) Materials are solid waste if they are *abandoned* by being:

(1) Disposed of; or

(2) Burned or incinerated; or

(3) Accumulated, stored, or treated (but not recycled) before or in lieu of being abandoned by being disposed of, burned, or incinerated.

(c) Materials are solid wastes if they are *recycled*—or accumulated, stored, or treated before recycling—as specified in paragraphs (c)(1) through (c)(4) of this section.

(1) *Used in a manner constituting disposal.* (i) Materials noted with a "*" in Column 1 of Table 1 are solid wastes when they are:

(A) Applied to or placed on the land in a manner that constitutes disposal; or

(B) Contained in products that are applied to the land (in which case the product itself remains a solid waste).

(ii) However, commercial chemical products listed in § 261.33 are not solid wastes if they are applied to the land and that is their ordinary manner of use.

(2) *Burning for energy recovery.* (i) Materials noted with a "*" in column 2 of Table 1 are solid wastes when they are:

(A) Burned to recover energy;

(B) Used to produce a fuel;

(C) Contained in fuels (in which case the fuel itself remains a solid waste).

(ii) However, commercial chemical products listed in § 261.33 are not solid wastes if they are themselves fuels.

(3) *Reclaimed.* Materials noted with a "*" in column 3 of Table 1 are solid wastes when reclaimed.

(4) *Accumulated speculatively.* Materials noted with a "*" in column 4 of Table 1 are solid wastes when accumulated speculatively.

TABLE 1

	Use constituting disposal (261.2(c)(1)) (1)	Energy recovery/ fuel (261.2(c)(2)) (2)	Reclamation (261.2(c)(3)) (3)	Speculative accumulation (261.2(c)(4)) (4)
Spent Materials	(*)	(*)	(*)	(*)
Sludges (listed in 40 CFR Part 261.31 or .32)	(*)	(*)	(*)	(*)
Sludges exhibiting a characteristic of hazardous waste	(*)	(*)		(*)
By-products (listed in 40 CFR Part 261.31 or 261.32)	(*)	(*)	(*)	(*)
By-products exhibiting a characteristic of hazardous waste	(*)	(*)		(*)
Commercial chemical products listed in 40 CFR § 261.33	(*)	(*)		
Scrap metal	(*)	(*)	(*)	(*)

Note.—The terms "spent materials", "sludges", "by-products," and "scrap metal" are defined in § 261.1

(d) *Inherently waste-like materials.* The following materials are solid wastes when they are recycled in any manner:

(1) Hazardous Waste Nos. F020, F021 (unless used as an ingredient to make a product at the site of generation), F022, F023, F026, and F028.

(2) The Administrator will use the following criteria to add wastes to that list:

(i)(A) The materials are ordinarily disposed of, burned, or incinerated; or

(B) The materials contain toxic constituents listed in Appendix VIII of Part 261 and these constituents are not ordinarily found in raw materials or products for which the materials substitute (or are found in raw materials or products in smaller concentrations) and are not used or reused during the recycling process; and

(ii) The material may pose a substantial hazard to human health and the environment when recycled.

(e) *Materials that are not solid waste when recycled.* (1) Materials are not solid wastes when they can be shown to be recycled by being:

(i) Used or reused as ingredients in an industrial process to make a product, provided the materials are not being reclaimed; or

(ii) Used or reused as effective substitutes for commercial products; or

(iii) Returned to the original process from which they are generated, without first being reclaimed. The material must be returned as a substitute for raw material feedstock, and the process must use raw materials as principal feedstocks.

(2) The following materials are solid wastes, even if the recycling involves use, reuse, or return to the original process (described in paragraphs (e)(1)(i)–(iii) of this section:

(i) Materials used in a manner constituting disposal, or used to produce products that are applied to the land; or

(ii) Materials burned for energy recovery, used to produce a fuel, or contained in fuels; or

(iii) Materials accumulated speculatively; or

(iv) Materials listed in paragraph (d)(1) of this section.

(f) *Documentation of claims that materials are not solid wastes or are conditionally exempt from regulation.* Respondents in actions to enforce regulations implementing Subtitle C of RCRA who raise a claim that a certain material is not a solid waste, or is conditionally exempt from regulation, must demonstrate that there is a known market or disposition for the material, and that they meet the terms of the exclusion or exemption. In doing so, they must provide appropriate documentation (such as contracts showing that a second person uses the material as an ingredient in a production process) to demonstrate that the material is not a waste, or is exempt from regulation. In addition, owners or operators of facilities claiming that they actually are recycling materials must show that they have the necessary equipment to do so.

12. Section 261.3 is amended by revising paragraph (c)(2) to read as follows:

§ 261.3 Definition of Hazardous Waste.

* * * * *

(c) * * *

(2) Any solid waste generated from the treatment, storage, or disposal of a hazardous waste, including any sludge, spill residue, ash, emission control dust, or leachate (but not including precipitation run-off), is a hazardous waste. (However, materials that are reclaimed from solid wastes and that are used beneficially are not solid wastes and hence are not hazardous wastes under this provision unless the reclaimed material is burned for energy recovery or used in a manner constituting disposal.)

* * * * *

13. Section 261.4 is revised by adding paragraphs (a)(6) and (a)(7) to read as follows:

§ 261.4 Exclusions.

(a) * * *

* * * * * *

(6) Black liquor that is reclaimed in a Kraft pulping liquor recovery furnace and then reused in the Kraft paper process, unless it is accumulated speculatively as defined in § 261.1(c) of this Chapter;

(7) Spent sulfuric acid used to produce virgin sulfuric acid, unless it is accumulated speculatively as defined in § 261.1(c) of this Chapter.

* * * * *

14. Section 261.5 is amended by revising paragraph (c) to read as follows:

§ 261.5 Special requirements for hazardous waste generated by small quantity generators.

* * * * * *

(c) Hazardous waste that is recycled and that is excluded from regulation under §§ 261.6 (a)(2)(iii) and (v), (a)(3), or 266.36 is not included in the quantity determinations of this section and is not subject to any requirements of this section. Hazardous waste that is subject to the requirements of §§ 261.6 (b) and (c) and Subparts C and D of Part 266 is included in the quantity determination of this section and is subject to the requirements of this section.

* * * * *

15. Section 261.6 is revised to read as follows

§ 261.6 Requirements for recyclable materials.

(a)(1) Hazardous wastes that are recycled are subject to the requirements for generators, transporters, and storage facilities of paragraphs (b) and (c) of this section, except for the materials listed in paragraphs (a)(2) and (a)(3) of this section. Hazardous wastes that are recycled will be known as "recyclable materials."

(2) The following recyclable materials are not subject to the requirements of this section but are regulated under Subparts C through G of Part 266 of this Chapter and all applicable provisions in Parts 270 and 124 of this Chapter:

(i) Recyclable materials used in a manner constituting disposal (Subpart C);

(ii) Hazardous wastes burned for energy recovery in boilers and industrial furnaces that are not regulated under Subpart O of Part 264 or 265 of this Chapter (Subpart D);

(iii) [Reserved for used oil];

(iv) Recyclable materials from which precious metals are reclaimed (Subpart F);

(v) Spent lead-acid batteries that are being reclaimed (Subpart G).

(3) The following recyclable materials are not subject to regulation under Parts 262 through 266 or Parts 270 or 124 of this Chapter, and are not subject to the notification requirements of Section 3010 of RCRA:

(i) Industrial ethyl alcohol that is reclaimed;

(ii) Used batteries (or used battery cells) returned to a battery manufacturer for regeneration;

(iii) Used oil that exhibits one or more of the characteristics of hazardous waste; or

(iv) Scrap metal.

(b) Generators and transporters of recyclable materials are subject to the applicable requirements of Parts 262 and 263 of this Chapter and the notification requirements under Section 3010 of RCRA, except as provided in paragraph (a) of this section.

(c)(1) Owners or operators of facilities that store recyclable materials are regulated under all applicable provisions of Subparts A through L of Parts 264 and 265 and Parts 270 and 124 of this Chapter and the notification requirement under Section 3010 of RCRA, except as provided in paragraph (a) of this section.

(2) Owners or operators of facilities that recycle recyclable materials without storing them before they are recycled are subject to the following requirements, except as provided in paragraph (a) of this section:

(i) Notification requirements under section 3010 of RCRA;

(ii) Sections 265.71 and 265.72 (dealing with the use of the manifest and manifest discrepancies) of this Chapter.

16. Section 261.31 is amended by revising the hazardous waste listings F007, F008, F009, F010, F011, and F012 to read as follows:

§ 261.31 Hazardous waste from non-specific sources.

* * * * * *

Industry and EPA hazardous waste No.	Hazardous waste	Hazard code
Generic:		
F007	Spent cyanide plating bath solutions from electroplating operations.	(R, T)
F008	Plating bath residues from the bottom of plating baths from electroplating operations where cyanides are used in the process.	(R, T)
F009	Spent stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process.	(R, T)
F010	Quenching bath residues from oil baths from metal heat treating operations where cyanides are used in the process.	(R, T)
F011	Spent cyanide solutions from salt bath pot cleaning from metal heat treating operations.	(R, T)
F012	Quenching waste water treatment sludges from metal heat treating operations where cyanides are used in the process.	(T)

* * * * * *

17. Section 261.33 is amended by revising the introductory text to read as follows:

§ 261.33 Discarded commercial chemical products, off-specification species, container residues, and spill residues thereof.

The following materials or items are hazardous wastes when they are discarded or intended to be discarded as described in § 261.2(a)(2)(i), when they are burned for purposes of energy recovery in lieu of their original intended use, when they are used to produce fuels in lieu of their original intended use, when they are applied to the land in lieu of their original intended use, or when they are contained in products that are applied to the land in lieu of their original intended use.

* * * * * *

PART 264—STANDARDS FOR OWNERS AND OPERATORS OF HAZARDOUS WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITIES

18. The authority citation for Part 264 reads as follows:

Authority. Secs. 1006, 2002(a), 3004, and 3005 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C. 6905, 6912(a), 6924, and 6925).

19. In § 264.1, paragraph (g)(2) is revised to read as follows:

§ 264.1 Purpose, scope, and applicability.

* * * * * *

(g) * * *

(2) The owner or operator of a facility managing recyclable materials described in § 261.6(a) (2) and (3) of this Chapter (except to the extent that requirements of this Part are referred to in Subparts C, D, F, or G of Part 266 of this Chapter).

* * * * * *

20. Section 264.340(a) is revised to read as follows:

§ 264.340 Applicability.

(a) The regulations in this Subpart apply to owners or operators of facilities that incinerate hazardous waste, except

as § 264.1 provides otherwise. The following facility owners or operators are considered to incinerate hazardous waste:

(1) Owners or operators of hazardous waste incinerators (as defined in § 260.10 of this Chapter); and

(2) Owners or operators who burn hazardous waste in boilers or in industrial furnaces in order to destroy the wastes.

* * * * *

PART 265—INTERIM STATUS STANDARDS FOR OWNERS AND OPERATORS OF HAZARDOUS WASTE TREATMENT, STORAGE AND DISPOSAL FACILITIES

21. The authority citation for Part 265 reads as follows:

Authority: Secs. 1006, 2002(a), 3004, and 3005 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C. 6905, 6921(a), 6924, and 6925).

22. In § 265.1, paragraph (c)(6) is revised to read as follows:

§ 265.1 Purpose, Scope, and Applicability.

* * * * *

(c) * * *

(6) The owner and operator of a facility managing recyclable materials described in § 261.6 (a) (2) and (3) of this Chapter (except to the extent that requirements of this Part are referred to in Subparts C, D, F, or G of Part 266 of this Chapter).

* * * * *

23. Section 265.340(a) is revised to read as follows:

§ 265.340 Applicability.

(a) The regulations in this Subpart apply to owners or operators of facilities that incinerate hazardous waste, except as § 264.1 provides otherwise. The following facility owners or operators are considered to incinerate hazardous waste:

(1) Owners or operators of hazardous waste incinerators (as defined in § 260.10 of this Chapter); and

(2) Owners or operators who burn hazardous wastes in boilers or in industrial furnaces in order to destroy the wastes.

* * * * *

24. Section 265.370 is revised to read as follows:

§ 265.370 Other thermal treatment.

The regulations in this Subpart apply to owners or operators of facilities that thermally treat hazardous waste in devices other than enclosed devices using controlled flame combustion, except as § 265.1 provides otherwise. Thermal treatment in enclosed devices using controlled flame combustion is subject to the requirements of Subpart O if the unit is an incinerator.

25. Part 266 is added to read as follows:

PART 266—STANDARDS FOR THE MANAGEMENT OF SPECIFIC HAZARDOUS WASTES AND SPECIFIC TYPES OF HAZARDOUS WASTE MANAGEMENT FACILITIES

Subparts A-B—[Reserved]

Subpart C—Recyclable Materials Used in a Manner Constituting Disposal

Sec.

266.20 Applicability.

266.21 Standards applicable to generators and transporters of materials used in a manner that constitute disposal.

266.22 Standards applicable to storers of materials that are to be used in a manner that constitutes disposal who are not the ultimate users.

266.23 Standards applicable to users of materials that are used in a manner that constitutes disposal.

Subpart D—Hazardous Waste Burned for Energy Recovery

266.30 Applicability.

266.31 Prohibitions. [Reserved]

266.32 Standards applicable to generators of hazardous waste fuel.

266.33 Standards applicable to transporters of hazardous waste fuel.

266.34 Standards applicable to marketers of hazardous waste fuel.

266.35 Standards applicable to burners of hazardous waste fuel.

266.36 Conditional exemption for spent materials and byproducts exhibiting a characteristic of hazardous waste.

Subpart E—[Reserved]

Subpart F—Recyclable Materials Utilized for Precious Metal Recovery

266.70 Applicability and requirements.

Subpart G—Spent Lead-acid Batteries Being Reclaimed

266.30 Applicability and requirements.

Authority: Sec. 1006, 2002(a), and 3004 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C. 6905, 6912(a), and 6924).

Subparts A-B—[Reserved]

Subpart C—Recyclable Materials Used in a Manner Constituting Disposal

§ 266.20 Applicability.

(a) The regulations of this Subpart apply to recyclable materials that are applied to or placed on the land:

(1) without mixing with any other substance(s); or

(2) after mixing with any other substance(s), unless the recyclable material undergoes a chemical reaction so as to become inseparable from the other substance(s) by physical means; or

(3) after combination with any other substance(s) if the resulting combined material is not produced for the general public's use. These materials will be referred to throughout this Subpart as "materials used in a manner that constitutes disposal."

(b) Products produced for the general public's use that are used in a manner that constitutes disposal and that contain recyclable materials are not presently subject to regulation if the recyclable materials have undergone a chemical reaction in the course of producing the product so as to become inseparable by physical means. Commercial fertilizers that are produced for the general public's use that contain recyclable materials also are not presently subject to regulation.

§ 266.21 Standards applicable to generators and transporters of materials used in a manner that constitute disposal.

Generators and transporters of materials that are used in a manner that constitutes disposal are subject to the applicable requirements of Parts 262 and 263 of this chapter, and the notification requirement under Section 3010 of RCRA.

§ 266.22 Standards applicable to storers of materials that are to be used in a manner that constitutes disposal who are not the ultimate users.

Owners or operators of facilities that store recyclable materials that are to be used in a manner that constitutes disposal, but who are not the ultimate users of the materials, are regulated under all applicable provisions of Subparts A through L of Parts 264 and 265 and Parts 270 and 124 of this chapter and the notification requirement under Section 3010 of RCRA.

§ 266.23 Standards applicable to users of materials that are used in a manner that constitutes disposal.

Owners or operators of facilities that use recyclable materials in a manner that constitutes disposal are regulated under all applicable provisions of Subparts A through N of Parts 264 and 265 and Parts 270 and 124 of this chapter and the notification requirement under Section 3010 of RCRA. (These requirements do not apply to products which contain these recyclable materials under the provisions of § 266.20(b) of this chapter.)

Subpart D—Hazardous Waste Burned for Energy Recovery

§ 266.30 Applicability.

(a) The regulations of this Subpart apply to hazardous wastes that are burned for energy recovery in any boiler or industrial furnace that is not regulated under Subpart O of Part 264 or 265 of this chapter, except as provided by paragraph (b) of this section. Such hazardous wastes burned for energy recovery are termed "hazardous waste fuel". However, hazardous waste fuels produced from hazardous waste by blending or other treatment by a person who neither generated the waste nor burns the fuel are not subject to regulation at the present time.

(b) The following hazardous wastes are not regulated under this subpart:

(1) Used oil burned for energy recovery that is also a hazardous waste solely because it exhibits a characteristic of hazardous waste identified in Subpart C of Part 261 of this chapter. Such used oil is subject to regulation under Subpart E of Part 266 rather than this subpart; and

(2) Hazardous wastes that are exempt from regulation under the provisions of § 261.4 of this Chapter and hazardous wastes that are subject to the special requirements for small quantity generators under the provisions of § 261.5 of this Chapter.

§ 266.31 Prohibitions. [Reserved]

§ 266.32 Standards applicable to generators of hazardous waste fuel.

(a) Generators of hazardous waste fuel are subject to the requirements of Part 262 of this chapter except that § 266.36 exempts certain spent materials and by-products from these provisions;

(b) Generators who are marketers also must comply with § 266.34;

(c) Generators who are burners also must comply with § 266.35.

§ 266.33 Standards applicable to transporters of hazardous waste fuel.

(a) Transporters of hazardous waste fuel from generator to marketer, or from a generator to a burner are subject to the requirements of Part 263 of this Chapter, except that § 266.36 exempts certain spent materials and by-products from these provisions.

(b) Transporters of hazardous waste fuel from marketers to burners are not presently subject to regulation.

§ 266.34 Standards applicable to marketers of hazardous waste fuel.

Persons who market hazardous waste fuel are called "marketers". Marketers include generators who market hazardous waste fuel directly to a burner, and persons who receive hazardous waste from generators and produce, process, or blend hazardous waste fuel from these hazardous wastes. Persons who distribute but do not process or blend hazardous waste fuel are also marketers, but are not presently subject to regulation. Marketers (other than distributors) are subject to the following requirements: *Prohibitions:*

(a)–(b) [Reserved]

(c) *Storage.* (1) Marketers who are generators are subject to the requirements of § 262.34 of this chapter, or to Subparts A through L of Parts 264 and 265 and Parts 270 and 124 of this chapter, except as provided by § 266.36 of this Subpart for certain spent materials and by-products;

(2) Marketers who receive hazardous wastes from generators, and produce, process, or blend hazardous waste fuel from these hazardous wastes, are subject to regulation under all applicable provisions of Subparts A through L of Parts 264 and 265 and Parts 270 and 124 of this chapter, except as provided by § 266.36 of this subpart for certain spent materials and by-products.

§ 266.35 Standards applicable to burners of hazardous waste fuel.

(a) [Reserved]

(b) *Notification.* [Reserved]

(c) Burners that store hazardous waste fuel prior to burning are subject to the requirements of § 262.34 of this chapter, or to all applicable requirements in Subparts A through L of Part 264 or Part 265 of this chapter with respect to such storage, except as provided by § 266.36 of this subpart for certain spent materials and by-products.

§ 266.36 Conditional exemption for spent materials and by-products exhibiting a characteristic of hazardous waste.

(a) Except as provided in paragraph (b), hazardous waste fuels that are spent materials and by-products and that are hazardous only because they exhibit a characteristic of hazardous waste are not subject to the notification requirements of Section 3010 of RCRA, the generator, transporter, or storage requirements of Parts 262 through 265, 270 and 124 of this chapter.

(b) This exemption does not apply when the spent material or by-product is stored in a surface impoundment prior to burning.

Subpart E—[Reserved]

Subpart F—Recyclable Materials Utilized for Precious Metal Recovery

§ 266.70 Applicability and requirements.

(a) The regulations of this subpart apply to recyclable materials that are reclaimed to recover economically significant amounts of gold, silver, platinum, paladium, irridium, osmium, rhodium, ruthenium, or any combination of these.

(b) Persons who generate, transport, or store recyclable materials that are regulated under this Subpart are subject to the following requirements:

(1) Notification requirements under Section 3010 of RCRA;

(2) Subpart B of Part 262 (for generators), §§ 263.20 and 263.21 (for transporters), and §§ 265.71 and 265.72 (for persons who store) of this chapter;

(c) Persons who store recycled materials that are regulated under this Subpart must keep the following records to document that they are not accumulating these materials speculatively (as defined in § 261.1(c) of this chapter):

(i) Records showing the volume of these materials stored at the beginning of the calendar year;

(ii) The amount of these materials generated or received during the calendar year; and

(iii) the amount of materials remaining at the end of the calendar year.

(d) Recyclable materials that are regulated under this Subpart that are accumulated speculatively (as defined in § 261.1(c) of this chapter) are subject to all applicable provisions of Parts 262 through 265, 270 and 124 of this chapter.

Subpart G—Spent Lead-Acid Batteries Being Reclaimed

§ 266.80 Applicability and requirements.

(a) The regulations of this Subpart apply to persons who reclaim spent lead-acid batteries that are recyclable materials ("spent batteries"). Persons who generate, transport, or collect spent batteries, or who store spent batteries but do not reclaim them are not subject to regulation under Parts 262 through 266 or Parts 270 or 124 of this Chapter, and also are not subject to the requirements of Section 3010 of RCRA.

(b) Owners or operators of facilities that store spent batteries before reclaiming them are subject to the following requirements.

(1) Notification requirements under Section 3010 of RCRA;

(2) All applicable provisions in Subparts A, B (but not § 264.13 (waste analysis)), C, D, E (but not § 264.71 or § 264.72 (dealing with the use of the manifest and manifest discrepancies)), and F through L of Part 264 of this chapter;

(3) All applicable provisions in Subparts A, B (but not § 265.13 (waste analysis)), C, D, E (but not §265.71 and

§ 265.72 (dealing with use of the manifest and manifest discrepancies)), and F through L of Part 265 of this chapter;

(4) All applicable provisions in Parts 270 and 124 of this chapter.

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Part II

Environmental Protection Agency

40 CFR Parts 261, 264, 265, 270, and 775
Hazardous Waste Management System; Dioxin-Containing Wastes; Rule

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XI. List of Subjects

40 CFR Part 261

Hazardous materials, Waste treatment and disposal, Recycling.

40 CFR Part 264

Hazardous materials, Packaging and containers, Reporting and recordkeeping requirements, Security measures, Security bonds, Waste treatment and disposal.

40 CFR Part 265

Hazardous materials, Packaging and containers, Reporting and recordkeeping requirements, Security measures, Security bonds, Waste treatment and disposal, Water supply.

40 CFR Part 270

Administrative practice and procedure, Reporting and recordkeeping requirements, Hazardous materials, Waste treatment and disposal, Water pollution control, Water supply, Confidential business information.

40 CFR Part 775

Environmental protection, Hazardous materials, Pesticides and pests, Waste treatment and disposal.

Dated: December 20, 1984.

Alvin L. Alm,

Acting Administrator.

For the reasons set out in the preamble, Title 40 of the Code of Federal Regulations is amended to read as follows:

PART 261—IDENTIFICATION AND LISTING OF HAZARDOUS WASTE

1. The authority citation for Part 261 reads as follows:

Authority: Secs. 1006, 2002(a), 3001, and 3002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C. 6905, 6912(a), 6921, and 6922).

2. In § 261.5, paragraphs (e)(1) and (e)(2) are revised to read as follows:

§ 261.5 Special requirements for hazardous waste generated by small quantity generators.

* * * * *

(e) * * *

(1) A total of one kilogram of acute hazardous wastes listed in §§ 261.31, 261.32, or 261.33(e).

(2) A total of 100 kilograms of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of any acute hazardous wastes listed in §§ 261.31, 261.32, or 261.33(e).

* * * * *

3. In § 261.7, the introductory text of paragraphs (b)(1) and (b)(3) are revised to read as follows:

§ 261.7 Residues of hazardous waste in empty containers.

* * * * *

(b)(1) A container or an inner liner removed from a container that has held any hazardous waste, except a waste that is a compressed gas or that is identified as an acute hazardous waste listed in §§ 261.31, 261.32, or 261.33(e) of this chapter is empty if:

* * * * *

(3) A container or an inner liner removed from a container that has held an acute hazardous waste listed in §§ 261.31, 261.32, or 261.33(e) is empty if:

* * * * *

4. In § 261.30, paragraph (d) is revised to read as follows:

§ 261.30 General.

* * * * *

(d) The following hazardous wastes listed in § 261.31 or § 261.32 are subject to the exclusion limits for acutely hazardous wastes established in § 261.5: EPA Hazardous Wastes Nos. FO20, FO21, FO22, FO23, FO26, and FO27.

* * * * *

5. In § 261.31, add the following waste streams:

§ 261.31 Hazardous waste from nonspecific sources.

Industry	EPA hazardous waste No.	Hazardous waste	Hazard code
Generic	FO20	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tri- or tetrachlorophenol, or of intermediates used to produce their pesticide derivatives. (This listing does not include wastes from the production of Hexachlorophene from highly purified 2,4,5-trichlorophenol.).	(H).
	FO21	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of pentachlorophenol, or of intermediates used to produce its derivatives.	(H).
	FO22	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or hexachlorobenzenes under alkaline conditions.	(H).
	FO23	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tri- and tetrachlorophenols. (This listing does not include wastes from equipment used only for the production or use of Hexachlorophene from highly purified 2,4,5-trichlorophenol.).	(H).
	FO26	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or hexachlorobenzene under alkaline conditions.	(H).
	FO27	Discarded unused formulations containing tri-, tetra-, or pentachlorophenol or discarded unused formulations containing compounds derived from these chlorophenols. (This listing does not include formulations containing Hexachlorophene sythesized from prepurified 2,4,5-trichlorophenol as the sole component.).	(H).
	FO28	Residues resulting from the incineration or thermal treatment of soil contaminated with EPA Hazardous Waste Nos. FO20, FO21, FO22, FO23, FO26, and FO27.	(T).

6. § 261.33(f) is amended by revising the hazardous waste numbers for the following substances:

§ 261.33 Discarded commercial chemical product, off-specification species, container residues, and spill residues thereof.

* * * * *

(f) * * *

Hazardous waste No.	Substance
See FO27	Pentachlorophenol.
See FO27	Phenol, pentachloro-.
Do	Phenol, 2,3,4,6-tetrachloro-.
Do	Phenol, 2,4,5-trichloro-.
Do	Phenol, 2,4,6-trichloro-.
See FO27	Propionic acid, 2-(2,4,5-trichlorophenoxy)-.
See FO27	Silvex.
See FO27	2,4,5-T.
See FO27	2,3,4,6-Tetrachlorophenol.
See FO27	2,4,5-Trichlorophenol.
Do	2,4,6-Trichlorophenol.
Do	2,4,5-Trichlorophenoxyacetic acid.

7. Amend Table 1 in Appendix III of Part 261, by removing the entry "chlorinated dibenzodioxins", and adding the following entries in alphabetical order:

Appendix III—Chemical Analysis Test Methods

TABLE 1.—ANALYTICAL METHODS FOR ORGANIC CHEMICALS CONTAINED IN SW–846

Compound	First edition method(s)	Second edition method(s)
Chlorinated dibenzo-*p*-dioxins		8280
Chlorinated dibenzofurans		8280

8. Amend Table 3 in Appendix III of Part 261, by adding the following entry under Organic Analytical Methods—Gas Chromatographic/Mass Spectroscopy Methods (GC/MS) after the entry entitled "GC/MS Semi-Volatiles, Capillary:

TABLE 3.—SAMPLING AND ANALYSIS METHODS CONTAINED IN SW–846

Title	First edition		Second edition	
	Section No.	Method No.	Section No.	Method No.
Analysis of Chlorinated Dioxins and Dibenzofurans			8.2	8280

9. Add the following entries in numerical order to Appendix VII of Part 261:

Appendix VII—Basis for Listing Hazardous Wastes

EPA hazardous waste No.	Hazardous constituents for which listed
FO20	Tetra- and pentachlorodibenzo-*p*-dioxins; tetra and pentachlorodi-benzofurans; tri- and tetrachlorophenols and their chlorophenoxy derivative acids, esters, ethers, amine and other salts.
FO21	Penta- and hexachlorodibenzo-*p*-dioxins; penta- and hexachlorodibenzofurans; pentachlorophenol and its derivatives.
FO22	Tetra-, penta-, and hexachlorodibenzo-*p*-dioxins; tetra-, penta-, and hexachlorodibenzofurans.
FO23	Tetra-, and pentachlorodibenzo-*p*-dioxins: tetra- and pentachlorodibenzofurans; tri- and tetrachlorophenols and their chlorophenoxy derivative acids, esters, ethers, amine and other salts.
FO26	Tetra-, penta-, and hexachlorodibenzo-*p*-dioxins; tetra-, penta-, and hexachlorodibenzofurans.
FO27	Tetra-, penta-, and hexachlorodibenzo-*p*-dioxins; tetra-, penta-, and hexachlorodibenzofurans; tri-, tetra-, and pentachlorophenols and their chlorophenoxy derivative acids, esters, ethers, amine and other salts.
FO28	Tetra-, penta-, and hexachlorodibenzo-*p*-dioxins; tetra-, penta-, and hexachlorodibenzofurans; tri-, tetra-, and pentachlorophenols and their chlorophenoxy derivative acids, esters, ethers, amine and other salts.

10. Add the following constituents in alphabetical order to Appendix VIII of Part 261:

Appendix VIII—Hazardous Constituents

* * * * *

hexachlorodibenzo-*p*-dioxins
hexachlorodibenzofurans
pentachlorodibenzo-*p*-dioxins
pentachlorodibenzofurans

tetrachlorodibenzo-*p*-dioxins
tetrachlorodibenzofurans

* * * * *

11. Appendix X is added to Part 261 to read as follows:

Appendix X—Method of Analysis for Chlorinated dibenzo-p-dioxins and dibenzofurans [1, 2, 3, 4]

Method 8280

1. *Scope and Application*

1.1 This method measures the concentration of chlorinated dibenzo-*p*-dioxins and chlorinated dibenzofurans in chemical wastes including still bottoms, filter aids, sludges, spent carbon, and reactor residues, and in soils.

1.2 The sensitivity of this method is dependent upon the level of interferences.

1.3 This method is recommended for use only by analysts experienced with residue analysis and skilled in mass spectral analytical techniques.

1.4 Because of the extreme toxicity of these compounds, the analyst must take necessary precautions to prevent exposure to himself, or to others, of materials known or believed to contain CDDs or CDFs.

2. *Summary of the Method*

2.1 This method is an analytical extraction cleanup procedure, and capillary column gas chromatograph-low resolution mass spectrometry method, using capillary column GC/MS conditions and internal standard techniques, which allow for the measurement of PCDDs and PCDFs in the extract.

2.2 If interferences are encountered, the method provides selected general purpose cleanup procedures to aid the analyst in their elimination.

3. *Interferences*

3.1 Solvents, reagents, glassware, and other sample processing hardware may yield discrete artifacts and/or elevated baselines causing misinterpretation of gas chromatograms. All of these materials must be demonstrated to be free from interferences under the conditions of the analysis by running method blanks. Specific selection of reagents and purification of solvents by distillation in all-glass systems may be required.

3.2 Interferences co-extracted from the samples will vary considerably from source to source, depending upon the diversity of the industry being sampled. PCDD is often associated with other interfering chlorinated compounds such as PCB's which may be at concentrations several orders of magnitude higher than that of PCDD. While general cleanup techniques are provided as part of this method, unique samples may require additional cleanup approaches to achieve the sensitivity stated in Table 1.

3.3 The other isomers of tetrachlorodibenzo-*p*-dioxin may interfere with the measurement of 2,3,7,8–TCDD. Capillary column gas chromatography is required to resolve those isomers that yield virtually identical mass fragmentation patterns.

4. *Apparatus and Materials*

4.1. Sampling equipment for discrete or composite sampling.

4.1.1 Grab sample bottle—amber glass, 1-liter or 1-quart volume. French or Boston Round design is recommended. The container must be washed and solvent rinsed before use to minimize interferences.

4.1.2. Bottle caps—threaded to screw on to the sample bottles. Caps must be lined with Teflon. Solvent washed foil, used with the shiny side towards the sample, may be substituted for the Teflon if sample is not corrosive.

4.1.3. Compositing equipment—automatic or manual composing system. No tygon or rubber tubing may be used, and the system must incorporate glass sample containers for the collection of a minimum of 250 ml. Sample containers must be kept refrigerated after sampling.

4.2 Water bath—heated, with concentric ring cover, capable of temperature control (±2 °C). The bath should be used in a hood.

4.3 Gas chromatograph/mass spectrometer data system.

4.3.1 Gas chromatograph: An analytical system with a temperature-programmable gas chromatograph and all required accessories including syringes, analytical columns, and gases.

4.3.2 Column: SP–2250 coated on a 30 m long × 0.25 mm I.D. glass column (Supelco No. 2-3714 or equivalent). Glass capillary column conditions: Helium carrier gas at 30 cm/sec linear velocity run splitless. Column temperature is 210 °C.

4.3.3 Mass spectrometer: Capable of scanning from 35 to 450 amu every 1 sec or less, utilizing 70 volts (nominal) electron energy in the electron impact ionization mode and producing a mass spectrum which meets all the criteria in Table 2 when 50 ng of decafluorotriphenyl-phosphine (DFTPP) is injected through the GC inlet. The system must also be capable of selected ion monitoring (SIM) for at least 4 ions simultaneously, with a cycle time of 1 sec or less. Minimum integration time for SIM is 100 ms. Selected ion monitoring is verified by injecting .015 ng of TCDD Cl^{37} to give a minimum signal to noise ratio of 5 to 1 at mass 328.

4.3.4 GC/MS interface: Any GC-to-MS interface that gives acceptable calibration points at 50 ng per injection for each compound of interest and achieves acceptable tuning performance criteria (see Sections 6.1–6.3) may be used. GC-to-MS interfaces constructed of all glass or glass-lined materials are recommended. Glass can be deactivated by silanizing with dichlorodimethylsilane. The interface must be capable of transporting at least 10 ng of the components of interest from the GC to the MS.

4.3.5 Data system: A computer system must be interfaced to the mass spectrometer. The system must allow the continuous acquisition and storage on machine-readable media of all mass spectra obtained throughout the duration of the chromatographic program. The computer must have software that can search any GC/MS data file for ions of a specific mass and that can plot such ion abundances versus time or scan number. This type of plot is defined as an Extracted Ion Current Profile (EICP). Software must also be able to integrate the abundance, in any EICP, between specified time or scan number limits.

4.4 Pipettes-Disposable, Pasteur, 150 mm long × 5 mm ID (Fisher Scientific Co., No. 13–678–6A or equivalent).

4.5 Flint glass bottle (Teflon-lined screw cap).

4.6 Reacti-vial (silanized) (Pierce Chemical Co.).

5. *Reagents*

5.1 Potassium hydroxide-(ACS), 2% in distilled water.

5.2 Sulfuric acid-(ACS), concentrated.

5.3 Methylene chloride, hexane, benzene, petroleum ether, methanol, tetradecane-pesticide quality or equivalent.

5.4 Prepare stock standard solutions of TCDD and ^{37}Cl–TCDD (molecular weight 328) in a glove box. The stock solutions are stored in a glovebox, and checked frequently for signs of degradation or evaporation, especially just prior to the preparation of working standards.

5.5 Alumina-basic, Woelm: 80/200 mesh. Before use activate overnight at 600°C, cool to room temperature in a dessicator.

5.6 Prepurified nitrogen gas

6.0 *Calibration*

6.1 Before using any cleanup procedure, the analyst must process a series of calibration standards through the procedure to validate elution patterns and the absence of interferences from reagents.

6.2 Prepare GC/MS calibration standards for the internal standard technique that will allow for measurement of relative response factors of at least three CDD/^{37}CDD ratios. Thus, for TCDDs, at least three TCDD/^{37}Cl–TCDD and TCDF/^{37}Cl–TCDF must be determined.[5] The ^{37}Cl–TCDD/F concentration

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[1] This method is appropriate for the analysis of tetra-, penta-, and hexachlorinated dibenzo-*p*-dioxins and -dibenzofurans.

[2] Analytical protocol for determination of TCDDs in phenolic chemical wastes and soil samples obtained from the proximity of chemical dumps. T.O. Tiernan and M. Taylor. Brehm Laboratory, Wright State University, Dayton, OH 45435.

[3] Analytical protocol for determination of chlorinated dibenzo-*p*-dioxins and chlorinated dibenzofurans in river water. T.O. Tiernan and M. Taylor. Brehm Laboratory, Wright State University, Dayton, OH 45435.

[4] In general, the techniques that should be used to handle these materials are those which are followed for radioactive or infectious laboratory materials. Assistance in evaluating laboratory practices may be obtained from industrial hygienists and persons specializing in safe laboratory practices. Typical infectious waste incinerators are probably not satisfactory devices for disposal of materials highly contaminated with CDDs or CDFs. Safety instructions are outlined in EPA Test Method 613(4.0)

See also: 1) "Program for monitoring potential contamination in the laboratory following the handling and analyses of chlorinated dibenzo-p-dioxins and dibenzofurans" by F. D. Hileman et al., *In:* Human and Environmental Risks of Chlorinated Dioxins and Related Compounds. R.E. Tucker, et al. eds., Plenum Publishing Corp., 1983. 2) Safety procedures outlined in EPA Method 613. Federal Register volume 44, No. 233, December 3, 1979.

[5] ^{37}Cl-labelled 2,3,7,8–TCDD and 2,3,7,8–TCDF are available from K.O.R. Isotopes, and Cambridge

Continued

in the standard should be fixed and selected to yield a reproducible response at the most sensitive setting of the mass spectrometer. Response factors for PCDD and HxCDD may be determined by measuring the response of the tetrachloro-labelled compounds relative to that of the unlabelled 1,2,3,4- or 2,3,7,8-TCDD, 1,2,3,4,7-PCDD or 1,2,3,4,7,8-HxCDD, which are commercially available.[6]

6.3 Assemble the necessary GC/MS apparatus and establish operating parameters equivalent to those indicated in Section 11.1 of this method. Calibrate the GC/MS system according to Eichelberger, et al. (1975) by the use of decafluorotriphenyl phosphine (DFTPP). By injecting calibration standards, establish the response factors for CDDs *vs.* ^{37}Cl-TCDD, and for CDFs *vs.* ^{37}Cl-TCDF. The detection limit provided in Table 1 should be verified by injecting .015 ng of ^{37}Cl-TCDD which should give a minimum signal to noise ratio of 5 to 1 at mass 328.

7. *Quality Control*

7.1 Before processing any samples, the analyst should demonstrate through the analysis of a distilled water method blank, that all glassware and reagents are interference-free. Each time a set of samples is extracted, or there is a change in reagents, a method blank should be processed as a safeguard against laboratory contamination.

7.2 Standard quality assurance practices must be used with this method. Field replicates must be collected to measure the precision of the sampling technique. Laboratory replicates must be analyzed to establish the precision of the analysis. Fortified samples must be analyzed to establish the accuracy of the analysis.

8. *Sample Collection, Preservation, and Handling*

8.1 Grab and composite samples must be collected in glass containers. Conventional sampling practices should be followed, except that the bottle must not be prewashed with sample before collection. Composite samples should be collected in glass containers in accordance with the requirements of the RCRA program. Sampling equipment must be free of tygon and other potential sources of contamination.

8.2 The samples must be iced or refrigerated from the time of collection until extraction. Chemical preservatives should not be used in the field unless more than 24 hours will elapse before delivery to the laboratory. If an aqueous sample is taken and the sample will not be extracted within 48 hours of collection, the sample should be adjusted to a pH range of 6.0–8.0 with sodium hydroxide or sulfuric acid.

8.3 All samples must be extracted within 7 days and completely analyzed within 30 days of collection.

9. *Extraction and Cleanup Procedures*

9.1 Use an aliquot of 1–10 g sample of the chemical waste or soil to be analyzed. Soils should be dried using a stream of prepurified nitrogen and pulverized in a ball-mill or similar device. Perform this operation in a clear area with proper hood space. Transfer the sample to a tared 125 ml flint glass bottle (Teflon-lined screw cap) and determine the weight of the sample. Add an appropriate quantity of ^{37}Cl-labelled 2,3,7,8-TCDD (adjust the quantity according to the required minimum detectable concentration), which is employed as an internal standard.

9.2 Extraction

9.2.1 Extract chemical waste samples by adding 10 ml methanol, 40 ml petroleum ether, 50 ml doubly distilled water, and then shaking the mixture for 2 minutes. Tars should be completely dissolved in any of the recommended neat solvents. Activated carbon samples must be extracted with benzene using method 3540 in SW–846 (Test Methods for Evaluating Solid Waste—Physical/Chemical Methods, available from G.P.O. Stock #055–022–81001–2). Quantitatively transfer the organic extract or dissolved sample to a clean 250 ml flint glass bottle (Teflon lined screw cap), add 50 ml doubly distilled water and shake for 2 minutes. Discard the aqueous layer and proceed with Step 9.3.

9.2.2 Extract soil samples by adding 40 ml of petroleum ether to the sample, and then shaking for 20 minutes. Quantitatively transfer the organic extract to a clean 250 ml flint glass bottle (Teflon-lined screw cap), add 50 ml doubly distilled water and shake for 2 minutes. Discard the aqueous layer and proceed with Step 9.3.

9.3 Wash the organic layer with 50 ml of 20% aqueous potassium hydroxide by shaking for 10 minutes and then remove and discard the aqueous layer.

9.4 Wash the organic layer with 50 ml of doubly distilled water by shaking for 2 minutes, and discard the aqueous layer.

9.5 Cautiously add 50 ml concentrated sulfuric acid and shake for 10 minutes. Allow the mixture to stand until layers separate (approximately 10 minutes), and remove and discard the acid layer. Repeat acid washing until no color is visible in the acid layer.

9.6 Add 50 ml of doubly distilled water to the organic extract and shake for 2 minutes. Remove and discard the aqueous layer and dry the organic layer by adding 10g of anhydrous sodium sulfate.

9.7 Concentrate the extract to incipient dryness by heating in a 55° C water bath and simultaneously flowing a stream of prepurified nitrogen over the extract. Quantitatively transfer the residue to an alumina microcolumn fabricated as follows:

9.7.1 Cut off the top section of a 10 ml disposable Pyrex pipette at the 4.0 ml mark and insert a plug of silanized glass wool into the tip of the lower portion of the pipette.

9.7.2 Add 2.8g of Woelm basic alumina (previously activated at 600° C overnight and then cooled to room temperature in a desiccator just prior to use).

9.7.3 Transfer sample extract with a small volume of methylene chloride.

9.8 Elute the microcolumn with 10 ml of 3% methylene cholride-in-hexane followed by 15 ml of 20% methylene chloride-in-hexane and discard these effluents. Elute the column with 15 ml of 50% methylene chloride-in-hexane and concentrate this effluent (55° C water bath, stream of prepurified nitrogen) to about 0.3–0.5 ml.

9.9 Quantitatively transfer the residue (using methylene chloride to rinse the container) to a silanized Reacti-Vial (Pierce Chemical Co.). Evaporate, using a stream of prepurified nitrogen, almost to dryness, rinse the walls of the vessel with approximately 0.5 ml methylene chloride, evaporate just to dryness, and tightly cap the vial. Store the vial at 5° C until analysis, at which time the sample is reconstituted by the addition of tridecane.

9.10 Approximately 1 hour before GC–MS (HRGC–LRMS) analysis, dilute the residue in the micro-reaction vessel with an appropriate quantity of tridecane. Gently swirl the tridecane on the lower portion of the vessel to ensure dissolution of the CDDs and CDFs. Analyze a sample by GC/EC to provide insight into the complexity of the problem, and to determine the manner in which the mass spectrometer should be used. Inject an appropriate aliquot of the sample into the GC–MS instrument, using a syringe.

9.11 If, upon preliminary GC–MS analysis, the sample appears to contain interfering substances which obscure the analyses for CDDs and CDFs, high performance liquid chromatographic (HPLC) cleanup of the extract is accompliished, prior to further GC–MS analysis.

10. *HPLC Cleanup Procedure*[7]

10.1 Place approximately 2 ml of hexane in a 50 ml flint glass sample bottle fitted with a Teflon-lined cap.

10.2 At the appropriate retention time, position sample bottle to collect the required fraction.

10.3 Add 2 ml of 5% (w/v) sodium carbonate to the sample fraction collected and shake for one minute.

10.4 Quantitatively remove the hexane layer (top layer) and transfer to a micro-reaction vessel.

10.5 Concentrate the fraction to dryness and retain for further analysis.

11. *GC/MS Analysis*

11.1 The following column conditions are recommended: Glass capillary column conditions: SP–2250 coated on a 30 m long x 0.25 mm I.D. glass column (Supelco No. 2–3714, or equivalent) with helium carrier gas at 30 cm/sec linear velocity, run splitless. Column temperature is 210° C. Under these conditions the retention time for TCDDs is about 9.5 minutes. Calibrate the system daily with a minimum, three injections of standard mixtures.

11.2 Calculate response factors for standards relative to ^{37}Cl-TCDD/F (see Section 12).

11.3 Analyze samples with selected ion monitoring of at least two ions from Table 3.

Isotopes, Inc., Cambridge, MA. Proper standardization requires the use of a specific labelled isomer for each congener to be determined. However, the only labelled isomers readily available are ^{37}Cl–2,3,7,8–TCDD and ^{37}Cl–2,3,7,8–TCDF. This method therefore uses these isomers as surrogates for the CDDs and CDFs. When other labelled CDDs and CDFs are available, their use will be required.

[6] This procedure is adopted because standards are not available for most of the CDDs and CDFs, and assumes that all the congeners will show the same response as the unlabelled congener used as a standard. Although this assumption may not be true in all cases, the error will be small.

[7] For cleanup see also method =8320 or =8330, SW–846, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (1982).

Proof of the presence of CDD or CDF exists if the following conditions are met:

11.3.1 The retention time of the peak in the sample must match that in the standard, within the performance specifications of the analytical system.

11.3.2 The ratio of ions must agree within 10% with that of the standard.

11.3.3 The retention time of the peak maximum for the ions of interest must exactly match that of the peak.

11.4 Quantitate the CDD and CDF peaks from the response relative to the ^{37}Cl-TCDD/F internal standards. Recovery of the internal standard should be greater than 50 percent.

11.5 If a response is obtained for the appropriate set of ions, but is outside the expected ratio, a co-eluting impurity may be suspected. In this case, another set of ions characteristic of the CDD/CDF molecules should be analyzed. For TCDD a good choice of ions is m/e 257 and m/e 259. For TCDF a good choice of ions is m/e 241 and 243. These ions are useful in characterizing the molecular structure to TCDD or TCDF. For analysis of TCDD good analytical technique would require using all four ions, m/e 257, 320, 322, and 328, to verify detection and signal to noise ratio of 5 to 1. Suspected impurities such as DDE, DDD, or PCB residues can be confirmed by checking for their major fragments. These materials can be removed by the cleanup columns. Failure to meet criteria should be explained in the report, or the sample reanalyzed.

11.6 If broad background interference restricts the sensitivity of the GC/MS analysis, the analyst should employ cleanup procedures and reanalyze by GC/MS. See section 10.0.

11.7 In those circumstances where these procedures do not yield a definitive conclusion, the use of high resolution mass spectrometry is suggested.

12. *Calculations*

12.1 Determine the concentration of individual compounds according to the formula:

$$\text{Concentration, } \mu g/gm = \frac{A \times A_s}{G \times A_{is} \times R_f}$$

where:

A = μg of internal standard added to the sample [8]

G = gm of sample extracted

A_s = area of characteristic ion of the compound being quantified.

A_{is} = area of characteristic ion of the internal standard

R_f = response factor [9]

[8] The proper amount of standard to be used is determined from the calibration curve (See Section 6.0).

[9] If standards for PCDDs/Fs and HxCDDs/Fs are not available, response factors for ions derived from these congeners are calculated relative to ^{37}Cl-TCDD/F. The analyst may use response factors for 1,2,3,4- or 2,3,7,8-TCDD, 1,2,3,4,7-PeCDD, or 1,2,3,4,7,8-HxCDD for quantitation of TCDDs/Fs, PeCDDs/Fs and HxCDDs/Fs, respectively. Implicit in this requirement is the assumption that the same response is obtained from PCDDs/Fs ccontaining the same numbers of chlorine atoms.

Response factors are calculated using data obtained from the analysis of standards according to the formula:

$$Rf \quad \frac{A_s \times C_{is}}{A_{is} \times C_s}$$

where:

C_{is} = concentration of the internal standard

C_c = concentration of the standard compound

12.2 Report results in micrograms per gram without correction for recovery data. When duplicate and spiked samples are analyzed, all data obtained should be reported.

12.3 Accuracy and Precision. No data are available at this time.

TABLE 1.—GAS CHROMATOGRAPHY OF TCDD

Column	Retention time (min.)	Detection limit (μg/kg)[1]
Glass capillary	9.5	0.003

[1] Detection limit for liquid samples is 0.003 μg/l. This is calculated from the minimum detectable GC response being equal to five times the GC background noise assuming a 1 ml effective final volume of the 1 liter sample extract, and a GC injection of 5 microliters. Detection levels apply to both electron capture and GC/MS detection. For further details see 44 FR 69526 (December 3, 1979).

TABLE 2.—DFTPP KEY IONS AND ION ABUNDANCE CRITERIA [1]

Mass	Ion abundance criteria
51	30-60% of mass 198.
68	Less than 2% of mass 69.
70	Less than 2% of mass 69.
127	40-60% of mass 198.
197	Less than 1% of mass 198.
198	Base peak, 100% relative abundance.
199	5-9% of mass 198.
275	10-30% of mass 198.
365	Greater than 1% of mass 198.
441	Present but less than mass 443.
442	Greater than 40% of mass 198.
443	17-23% of mass 442.

[1] J. W. Eichelberger, L.E. Harris, and W.L. Budde. 1975. Reference compound to calibrate ion abundance measurement in gas chromatography-mass spectrometry. Analytical Chemistry 47:995.

TABLE 3.—LIST OF ACCURATE MASSES MONITORED USING GC SELECTED-ION MONITORING, LOW RESOLUTION, MASS SPECTROMETRY FOR SIMULTANEOUS DETERMINATION OF TETRA-, PENTA-, AND HEXACHLORINATED DIBENZO-*p*-DIOXINS AND DIBENZOFURANS

Class of chlorinated dibenzodioxin or dibenzofuran	Number of chlorine substituents (x)	Monitored m/z for dibenzodioxins $C_{12}H_{8-x}O_2Cl_x$	Monitored m/z for dibenzofurans $C_{12}H_{8-x}OCl_x$	Approximate theoretical ratio expected on basis of isotopic abundance
Tetra	4	[1] 319.897	[1] 303.902	0.74
		321.894	305.903	1.00
		[2] 327.885	[2] 311.894	
		[3] 256.933		0.21
		[3] 258.930		0.20
Penta	5	[1] 353.858	[1] 337.863	0.57
		355.855	339.860	1.00
Hexa	6	389.816	373.821	1.00
		391.813	375.818	0.87

[1] Molecular ion peak.
[2] Cl_4—labelled standard peaks.
[3] Ions which can be monitored in TCDD analyses for confirmation purposes.

PART 264—STANDARDS FOR OWNERS AND OPERATORS OF HAZARDOUS WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITIES

12. The authority citation for Part 264 reads as follows:

Authority: Secs. 1006, 2002(a), 3004, and 3005 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C. 6905, 6912(a), 6924, and 6925).

13. In Subpart I of Part 264, the introductory text in paragraph (c) is revised and a new paragraph (d) is added to § 264.175:

§ 264.175 Containment.

* * * * *

(c) Storage areas that store containers holding only wastes that do not contain free liquids need not have a containment system defined by paragraph (b) of this section, except as provided by paragraph (d) of this section or provided that:

* * * * *

(d) Storage areas that store containers holding the wastes listed below that do not contain free liquids must have a containment system defined by paragraph (b) of this section:

(1) FO20, FO21, FO22, FO23, FO26, and FO27.

(2) [Reserved]

14. In Subpart J of Part 264, amend § 264.194 by redesignating paragraph (c) as paragraph (c)(1), and adding a new paragraph (c)(2):

§ 264.194 Inspections.

* * * * *

(c)(1) * * *

(2) For EPA Hazardous Wastes Nos. FO20, FO21, FO22, FO23, FO26, and FO27, the contingency plan must also include the procedures for responding to a spill or leak of these wastes from tanks into the containment system. These procedures shall include measures for immediate removal of the waste from the system and replacement or repair of the leaking tank.

15. In Subpart J of Part 264, add the following § 264.200:

§ 264.200 Special requirements for hazardous wastes FO20, FO21, FO22, FO23, FO26, and FO27.

(a) In addition to the other requirements of Subpart J, the following requirements apply to tanks storing or treating hazardous wastes FO20, FO21, FO22, FO23, FO26, and FO27.

(1) Tanks must have systems designed and operated to detect and adequately contain spills or leaks. The design and operation of any containment system must reflect consideration of all relevant factors, including:

(i) Capacity of the tank;

(ii) Volumes and characteristics of wastes stored or treated in the tank;

(iii) Method of collection of spills or leaks;

(iv) The design and construction materials of the tank and containment system; and

(v) The need to prevent precipitation and run-on from entering into the system.

(2) As part of the contingency plan required by Subpart D of Part 264, the owner or operator must specify such procedures for responding to a spill or leak from the tank into the containment system as may be necessary to protect human health and the environment. These procedures shall include measures for immediate removal of the waste from the system and replacement or repair of the leaking tank.

16. In Subpart K of Part 264, add the following section § 264.231:

§ 264.231 Special requirements for hazardous wastes FO20, FO21, FO22, FO23, FO26, and FO27.

(a) Hazardous Wastes FO20, FO21, FO22, FO23, FO26, and FO27 must not be placed in a surface impoundment unless the owner or operator operates the surface impoundment in accordance with a management plan for these wastes that is approved by the Regional Administrator pursuant to the standards set out in this paragraph, and in accord with all other applicable requirements of this Part. The factors to be considered are:

(1) The volume, physical, and chemical characteristics of the wastes, including their potential to migrate through soil or to volatilize or escape into the atmosphere;

(2) The attenuative properties of underlying and surrounding soils or other materials;

(3) The mobilizing properties of other materials co-disposed with these wastes; and

(4) The effectiveness of additional treatment, design, or monitoring techniques.

(b) The Regional Administrator may determine that additional design, operating, and monitoring requirements are necessary for surface impoundments managing hazardous wastes FO20, FO21, FO22, FO23, FO26, and FO27 in order to reduce the possibility of migration of these wastes to ground water, surface water, or air so as to protect human health and the environment.

17. In Subpart L of Part 264, add the following section § 264.259:

§ 264.259 Special requirements for hazardous wastes FO20, FO21, FO22, FO23, FO26, and FO27.

(a) Hazardous Wastes FO20, FO21, FO22, FO23, FO26, and FO27 must not be placed in waste piles that are not enclosed (as defined in §264.250(c)) unless the owner or operator operates the waste pile in accordance with a management plan for these wastes that is approved by the Regional Administrator pursuant to the standards set out in this paragraph, and in accord with all other applicable requirements of this Part. The factors to be considered are:

(1) The volume, physical, and chemical characteristics of the wastes, including their potential to migrate through soil or to volatilize or escape into the atmosphere;

(2) The attenuative properties of underlying and surrounding soils or other materials;

(3) The mobilizing properties of other materials co-disposed with these wastes; and

(4) The effectiveness of additional treatment, design, or monitoring techniques.

(b) The Regional Administrator may determine that additional design, operating, and monitoring requirements are necessary for piles managing hazardous wastes FO20, FO21, FO22, FO23, FO26, and, FO27 in order to reduce the possibility of migration of these wastes to ground water, surface water, or air so as to protect human health and the environment.

18. In Subpart M of Part 264, add the following section § 264.283:

§ 264.283 Special requirements for hazardous wastes FO20, FO21, FO22, FO23, FO26, and FO27.

(a) Hazardous Wastes FO20, FO21, FO22, FO23, FO26 and, FO27 must not be placed in a land treatment unit unless the owner or operator operates the facility in accordance with a management plan for these wastes that is approved by the Regional Administrator pursuant to the standards set out in this paragraph, and in accord with all other applicable requirements of this Part. The factors to be considered are:

(1) The volume, physical, and chemical characteristics of the wastes, including their potential to migrate through soil or to volatilize or escape into the atmosphere;

(2) The attenuative properties of underlying and surrounding soils or other materials;

(3) The mobilizing properties of other materials co-disposed with these wastes; and

(4) The effectiveness of additional treatment, design, or monitoring techniques.

(b) The Regional Administrator may determine that additional design, operating, and monitoring requirements are necessary for land treatment facilities managing hazardous wastes FO20, FO21, FO22, FO23, FO26, and FO27 in order to reduce the possibility of migration of these wastes to ground water, surface water, or air so as to protect human health and the environment.

19. In Subpart N of Part 264, add the following section § 264.317:

§ 264.317 Special requirements for hazardous wastes FO20, FO21, FO22, FO23, FO26, and FO27.

(a) Hazardous Wastes FO20, FO21, FO22, FO23, FO26, and FO27 must not be placed in a landfills unless the owner or operator operates the landfill in accord with a management plan for these wastes that is approved by the Regional Administrator pursuant to the standards set out in this paragraph, and in accord with all other applicable requirements of this Part. The factors to be considered are:

(1) The volume, physical, and chemical characteristics of the wastes, including their potential to migrate through the soil or to volatilize or escape into the atmosphere;

(2) The attenuative properties of underlying and surrounding soils or other materials;

(3) The mobilizing properties of other materials co-disposed with these wastes; and

(4) The effectiveness of additional treatment, design, or monitoring requirements.

(b) The Regional Administrator may determine that additional design, operating, and monitoring requirements are necessary for landfills managing hazardous wastes FO20, FO21, FO22, FO23, FO26, and FO27 in order to reduce the possibility of migration of these wastes to ground water, surface water, or air so as to protect human health and the environment.

20. In Subpart O of Part 264, amend § 264.343 by revising paragraph (a) and redesignating paragraph (a) as paragraph (a)(1), and adding a new paragraph (a)(2) to read as follows:

§ 264.343 Performance standards.

* * * * *

(a)(1) Except as provided in paragraph (a)(2), an incinerator burning hazardous waste must achieve a destruction and removal efficiency (DRE) of 99.99% for each principal organic hazardous constituent (POHC) designated (under § 264.342) in its permit for each waste feed. DRE is determined for each POHC from the following equation:

$$DRE = \frac{(W_{in} - W_{out})}{W_{in}} \times 100\%$$

where:

W_{in} = mass feed rate of one principal organic hazardous constituent (POHC) in the waste stream feeding the incinerator

and

W_{out} = mass emission rate of the same POHC present in exhaust emissions prior to release to the atmosphere.

(2) An incinerator burning hazardous wastes FO20, FO21, FO22, FO23, FO26, or FO27 must achieve a destruction and removal efficiency (DRE) of 99.9999% for each principal organic hazardous constituent (POHC) designated (under § 264.342) in its permit. This performance must be demonstrated on POHCs that are more difficult to incinerate than tetra-, penta-, and hexachlorodibenzo-*p*-dioxins and dibenzofurans. DRE is determined for each POHC from the equation in § 264.343(a)(1). In addition, the owner or operator of the incinerator must notify the Regional Administrator of his intent to incinerate hazardous wastes FO20, FO21, FO22, FO23, FO26, or FO27.

* * * * *

PART 265—INTERIM STANDARDS FOR OWNERS AND OPERATORS OF HAZARDOUS WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITIES

21. The authority citation for Part 265 reads as follows:

Authority: Secs. 1006, 2002(a), 3004, and 3005 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C. 6905, 6912(a), 6924, and 6925).

22. § 265.1 is amended by adding paragraph (d)

§ 265.1 Purpose, scope, and applicability.

* * * * *

(d) The following hazardous wastes must not be managed at facilities subject to regulation under this Part.

(1) EPA Hazardous Waste Nos. FO20, FO21, FO22, FO23, FO26, or FO27 unless:

(i) The wastewater treatment sludge is generated in a surface impoundment as part of the plant's wastewater treatment system;

(ii) The waste is stored in tanks or containers;

(iii) The waste is stored or treated in waste piles that meet the requirements of § 264.250(c) as well as all other applicable requirements of Subpart L of this Part;

(iv) The waste is burned in incinerators that are certified pursuant to the standards and procedures in § 265.352; or

(v) The waste is burned in facilities that thermally treat the waste in a device other than an incinerator and that are certified pursuant to the standards and procedures in § 265.383.

23. In Subpart O of Part 265, add the following § 265.352:

§ 265.352 Interim Status Incinerators Burning Particular Hazardous Wastes.

(a) Owners or operators of incinerators subject to this Subpart may burn EPA Hazardous Wastes FO20, FO21, FO22, FO23, FO26, or FO27 if they receive a certification from the Assistant Administrator for Solid Waste and Emergency Response that they can meet the performance standards of Subpart O of Part 264 when they burn these wastes.

(b) The following standards and procedures will be used in determining whether to certify an incinerator:

(1) The owner or operator will submit an application to the Assistant Administrator for Solid Waste and Emergency Response containing applicable information in §§ 270.19 and 270.62 demonstrating that the incinerator can meet the performance standards in Subpart O of Part 264 when they burn these wastes.

(2) The Assistant Administrator for Solid Waste and Emergency Response will issue a tentative decision as to whether the incinerator can meet the performance standards in Subpart O of Part 264. Notification of this tentative decision will be provided by newspaper advertisement and radio broadcast in the jurisdiction where the incinerator is located. The Assistant Administrator for Solid Waste and Emergency Response will accept comment on the tentative decision for 60 days. The Assistant Administrator for Solid Waste and Emergency Response also may hold a public hearing upon request or at his discretion.

(3) After the close of the public comment period, the Assistant Administrator for Solid Waste and Emergency Response will issue a decision whether or not to certify the incinerator.

24. In Subpart P of Part 265, add the following § 265.383:

§ 265.383 Interim Status Thermal Treatment Devices Burning Particular Hazardous Waste.

(a) Owners or operators of thermal treatment devices subject to this Subpart may burn EPA Hazardous Wastes FO20, FO21, FO22, FO23, FO26, or FO27 if they receive a certification from the Assistant Administrator for Solid Waste and Emergency Response that they can meet the performance standards of Subpart O of Part 264 when they burn these wastes.

(b) The following standards and procedures will be used in determining whether to certify a thermal treatment unit:

(1) The owner or operator will submit an application to the Assistant Administrator for Solid Waste and Emergency Response containing the applicable information in §§ 270.19 and 270.62 demonstrating that the thermal treatment unit can meet the performance standard in Subpart O of Part 264 when they burn these wastes.

(2) The Assistant Administrator for Solid Waste and Emergency Response will issue a tentative decision as to whether the thermal treatment unit can meet the performance standards in Subpart O of Part 264. Notification of this tentative decision will be provided by newspaper advertisement and radio broadcast in the jurisdiction where the thermal treatment device is located. The Assistant Administrator for Solid Waste and Emergency Response will accept comment on the tentative decision for 60 days. The Assistant Administrator for

Solid Waste and Emergency Response also may hold a public hearing upon request or at his discretion.

(3) After the close of the public comment period, the Assistant Administrator for Solid Waste and Emergency Response will issue a decision whether or not to certify the thermal treatment unit.

PART 270—EPA ADMINISTERED PERMIT PROGRAMS: THE HAZARDOUS WASTE PERMIT PROGRAM

25. The authority citation for Part 270 reads as follows:

Authority: Secs. 1006, 2002(a), 3005, 3007, and 7004 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C. 6905, 6912(a), 6925, 6927, and 6974).

26. In Subpart B of Part 270, paragraph (b)(7) of § 270.14 is revised to read as follows:

§ 270.14 Contents of Part B: General requirements.

* * * * *

(b)* * *

(7) A copy of the contingency plan required by Part 264, Subpart D. Note: Include, where applicable, as part of the contingency plan, specific requirements in §§ 264.227, 264.255, and 264.200.

* * * * *

27. In Subpart B of Part 270, §270.16 is amended by adding paragraph (g):

§ 270.16 Specific Part B information requirements for tanks.

* * * * *

(g) Where applicable, a description of the containment and detection systems to demonstrate compliance with § 264.200(a) must include at least the following:

(1) Drawings and a description of the basic design parameters, dimensions, and materials of construction of the containment system.

(2) Capacity of the containment system relative to the design capacity of the tank(s) within the system.

(3) Description of the system to detect leaks and spills, and how precipitation and run-on will be prevented from entering into the detection system.

28. In Subpart B of Part 270, § 270.17 is amended by adding paragraph (j):

§ 270.17 Specific Part B information requirements for surface impoundments.

* * * * *

(j) A waste management plan for EPA Hazardous Waste Nos. FO20, FO21, FO22, FO23, FO26, and FO27 describing how the surface impoundment is or will be designed, constructed, operated, and maintained to meet the requirements of § 264.231. This submission must address the following items as specified in § 264.231:

(1) The volume, physical, and chemical characteristics of the wastes, including their potential to migrate through soil or to volatilize or escape into the atmosphere;

(2) The attenuative properties of underlying and surrounding soils or other materials;

(3) The mobilizing properties of other materials co-disposed with these wastes; and

(4) The effectiveness of additional treatment, design, or monitoring techniques.

29. In Subpart B of Part 270, § 270.18 is amended by adding paragraph (j):

§ 270.18 Specific Part B information requirements for waste piles.

* * * * *

(j) A waste management plan for EPA Hazardous Waste Nos. FO20, FO21, FO22, FO23, FO26, and FO27 describing how a waste pile that is not enclosed (as defined in § 264.250(c)) is or will be designed, constructed, operated, and maintained to meet the requirements of § 264.259. This submission must address the following items as specified in § 264.259:

(1) The volume, physical, and chemical characteristics of the wastes to be disposed in the waste pile, including their potential to migrate through soil or to volatilize or escape into the atmosphere;

(2) The attenuative properties of underlying and surrounding soils or other materials;

(3) The mobilizing properties of other materials co-disposed with these wastes; and

(4) The effectiveness of additional treatment, design, or monitoring techniques.

30. In Subpart B of Part 270, § 270.20 is amended by adding paragraph (i):

§ 270.20 Specific Part B information requirements for land treatment facilities.

* * * * *

(i) A waste management plan for EPA Hazardous Waste Nos. FO20, FO21, FO22, FO23, FO26, and FO27 describing how a land treatment facility is or will be designed, constructed, operated, and maintained to meet the requirements of § 264.283. This submission must address the following items as specified in § 264.283:

(1) The volume, physical, and chemical characteristics of the wastes, including their potential to migrate through soil or to volatilize or escape into the atmosphere;

(2) The attentuative properties of underlying and surrounding soils or other materials;

(3) The mobilizing properties of other materials co-disposed with these wastes; and

(4) The effectiveness of additional treatment, design, or monitoring techniques.

31. In Subpart B of Part 270, § 270.21 is amended by adding paragraph (j):

§ 270.21 Specific Part B information requirements for landfills.

* * * * *

(j) A waste management plan for EPA Hazardous Waste Nos. FO20, FO21, FO22, FO23, FO26, and FO27 describing how a landfill is or will be designed, constructed, operated, and maintained to meet the requirements of § 264.317. This submission must address the following items as specified in § 264.317:

(1) The volume, physical, and chemical characteristics of the wastes, including their potential to migrate through soil or to volatilize or escape into the atmosphere;

(2) The attenuative properties of underlying and surrounding soils or other materials;

(3) The mobilizing properties of other materials co-disposed with these wastes; and

(4) The effectiveness of additional treatment, design, or monitoring techniques.

PART 775—STORAGE AND DISPOSAL OF WASTE MATERIAL [REMOVED]

32. The authority citation for Part 775 reads as follows:

Authority: Sec. 6 of the Toxic Substances Control Act (TSCA) Pub. L. 94–469, 90 Stat. 2020 (15 U.S.C. 2605).

33. Part 775 is removed.

[FR Doc. 85–604 Filed 1–11–85; 8:45 am]
BILLING CODE 6560–50–M

and storage requirements apply to those hazardous waste fuels containing listed wastes and sludges that are shipped from the generator to a burner or blender. See 50 FR 632. If a generator of a listed hazardous waste or sludge blends or processes these wastes and sends them to a burner or a waste fuel processor, the blended waste fuels are subject to regulation until burned or reprocessed by the fuel processor (except as described earlier). Thus, there is a conflict in the regulation, because transporters taking hazardous waste fuels from generators to burners or waste fuel processors are regulated. See § 266.33(a). To correct this conflict, we are revising paragraph (b) of § 266.33 to read as follows: "Transporters of hazardous waste fuel are not presently subject to regulation when they transport hazardous waste fuel from marketers, who are not also the generators, to burners or other marketers."

J. Regulatory Status of Non-Listed Commercial Chemical Products

Under the final rules, commercial chemical products and intermediates, off-specification variants, spill residues, and container residues listed in 40 CFR 261.33 are not considered solid wastes when recycled except when they are recycled in ways that differ from their normal use—namely, when they are burned for energy recovery or used to produce a fuel. A number of questions have been raised as to the regulatory status of commercial chemical products that are not listed in § 261.33 but exhibit one or more of the hazardous waste characteristics (*i.e.*,ignitability, corrosivity, reactivity, and extraction procedure (EP) toxicity).

Although we do not directly address non-listed commercial chemical products in the rules, their status would be the same as those that are listed in § 261.33—That is, they are not considered solid wastes when recycled except when they are recycled in ways that differ from their normal manner of use. This is the same relationship that exists between discarded commercial chemical products that are listed in § 261.33, and those that exhibit a characteristic of hazardous waste. We believe this point is implicit in the rules, as it is implicit in existing §§ 261.3 and 261.33.

K. Regulatory Impact

Under Executive Order 12291, EPA must judge whether a regulation is "major" and therefore subject to the requirements of a Regulatory Impact Analysis. Since this notice simply makes typographical and technical corrections and does not change the previously approved final rule, this rule is not a major rule and, therefore, no Regulatory Impact Analysis was conducted.

List of Subjects

40 CFR Part 260

Administrative practice and procedure, Hazardous materials, Waste treatment and disposal.

40 CFR Part 261

Hazardous materials, Waste treatment and disposal, Recycling.

40 CFR Part 266

Hazardous materials.

Dated: April 2, 1985.

Jack W. McGraw,

Assistant Administrator.

For the reasons set out in the preamble, Title 40 of the Code of Federal Regulations is amended as follows:

PART 260—HAZARDOUS WASTE MANAGEMENT SYSTEM: GENERAL

1. The authority citation for Part 260 reads as follows:

Authority: Secs. 1006, 2002(a), 3001 through 3007, and 3010 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended [42 U.S.C. 6905, 6912(a), 6921 through 6927, and 6930].

2. In § 260.30, paragraph (a) is revised to read as follows:

§ 260.30 Variances from classification as a solid waste.

* * * * *

(a) Materials that are accumulated speculatively without sufficient amounts being recycled (as defined in § 261.1(c)(8) of this chapter);

* * * * *

PART 261—IDENTIFICATION AND LISTING OF HAZARDOUS WASTE

3. The authority citation for Part 261 reads as follows:

Authority: Secs. 1006, 2002(a), 3001, and 3002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended [42 U.S.C. 6905, 6912(a), 6921, and 6922].

4. Section 261.3 is amended by revising paragraph (c)(2) to read as follows:

§ 261.3 Definition of hazardous waste.

* * * * *

(c) * * *

(2)(i) Except as otherwise provided in paragraph (c)(2)(ii) of this section, any solid waste generated from the treatment, storage, or disposal of a hazardous waste, including any sludge, spill residue, ash, emission control dust, or leachate (but not including precipitation run-off) is a hazardous waste. (However, materials that are reclaimed from solid wastes and that are used beneficially are not solid wastes and hence are not hazardous wastes under this provision unless the reclaimed material is burned for energy recovery or used in a manner constituting disposal.)

(ii) The following solid wastes are not hazardous even though they are generated from the treatment, storage, or disposal of a hazardous waste, unless they exhibit one or more of the characteristics of hazardous waste: (A) Waste pickle liquor sludge generated by lime stabilization of spent pickle liquor from the iron and steel industry (SIC Codes 331 and 332).

* * * * *

5. Section 261.4 is amended by revising paragraph (a)(8) to read as follows:

§ 261.4 Exclusions.

(a) * * *

(8) Pulping liquors (*i.e.*, black liquor) that are reclaimed in a pulping liquor recovery furnace and then reused in the pulping process, unless it is accumulated speculatively as defined in § 261.1(c) of this chapter.

* * * * *

6. Section 261.5 is amended by revising the second sentence in paragraph (c) to read as follows:

§ 261.5 Special requirements for hazardous waste generated by small quantity generators.

* * * * *

(c) * * * Hazardous waste that is subject to the requirements of § 261.6 (b) and (c) and Subparts C, D, and F of Part 266 is included in the quantity determination of this section and is subject to the requirements of this section.

* * * * *

PART 266—STANDARDS FOR THE MANAGEMENT OF SPECIFIC HAZARDOUS WASTES AND SPECIFIC TYPES OF HAZARDOUS WASTE MANAGEMENT FACILITIES

7. The authority citation for Part 266 reads as follows:

Authority: Secs. 1006, 2002(a), and 3004 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended [42 U.S.C. 6905, 6912(a), and 6924].

8. In § 266.30, paragraphs (b) (3) and (4) are added to read as follows:

§ 266.30 Applicability.

* * * * *

(b) * * *

(3) Hazardous waste fuels that are exempt from the labeling requirements of RCRA Section 3004(r).

(4) Coke from the iron and steel industry that contains hazardous waste from the iron and steel production process.

* * * * *

9. Section 266.33 is amended by revising paragraph (b) to read as follows:

§ 266.33 Standards applicable to transporters of hazardous waste fuel.

* * * * *

(b) Transporters of hazardous waste fuel are not presently subject to regulation when they transport hazardous wastes fuel from marketers, who are not also the generators of the waste, to burners or other marketers.

* * * * *

[FR Doc. 85-8585 Filed 4-10-85; 8:45 am]
BILLING CODE 6560-50-M

GENERAL SERVICES ADMINISTRATION

41 CFR Chapter 201

[FIRMR Temp. Reg. 12]

Establishing Integrated Records Management Provisions for the Federal Information Resources Management Regulation (FIRMR)

AGENCY: Office of Information Resources Management, GSA

ACTION: Temporary regulation.

SUMMARY: This regulation establishes FIRMR Parts 201-22, Records Management Programs, and 201-45, Management of Records. This regulation consists of those provisions of Federal Property Management Regulations (FPMR) Part 101-11, Records Management, for which GSA will continue to be responsible after April 1, 1985, when the National Archives and Records Service (NARS) becomes an independent agency to be known as the National Archives and Records Administration (NARA). The subject matter includes the management of mail, files, records, directives, forms, reports, micrographics, copy, correspondence, and records equipment and supplies. Regulations governing records disposition and adequacy of documentation are not included in this temporary regulation since NARA will be responsible for those areas, effective April 1, 1985. Except as noted no substantive changes have been made in authorities, policies, or procedures from those contained in FPMR Part 101-11, from which these provisions are derived.

DATES: *Effective date:* April 1, 1985. *Expiration date:* December 31, 1986. *Comments are due:* April 30, 1985.

ADDRESS: Comments should be submitted to the General Services Administration, Office of Information Resources Management, Policy Branch (KMPP), Washington, DC 20405.

FOR FURTHER INFORMATION CONTACT: David R. Mullins, Policy Branch (KMPP), telephone (202) 566-0194 or FTS, 566-0194.

SUPPLEMENTARY INFORMATION: (1) Public Law 98-497, the National Archives and Records Administration Act of 1984, was signed on October 19, 1984. Under the act, NARS will become an independent agency known as The National Archives and Records Administration (NARA), effective April 1, 1985. As a result, responsibility for the administration of the provisions now contained in FPMR Part 101-11 will be divided between GSA and NARA. This regulation incorporates into the FIRMR those provisions of FPMR Part 101-11 which promote economy and efficiency in records management. NARA intends to establish a regulation in 36 CFR XII that will include the FPMR provisions that address records disposition and adequacy of documentation. A subsequent FPMR amendment will rescind the provisions now in FPMR Part 101-11.

(2) The FIRMR was initially established effective April 1, 1984 (49 FR 20994 May 17, 1984). The integrated text, consisting of the provisions governing ADP and telecommunications procurement and management previously contained in FPMR Subpart 101-35, 36, and 37, and Federal Procurements Regulations (FPR) Subparts 1-4.11, 1-4.12, and 1-4.13, was published in the Federal Register on January 30, 1985. This issuance integrates the third IRM component (records management) for which GSA is responsible into the FIRMR text.

(3) The intent of this regulation is to reformat the FPMR provision into the FIRMR format and numbering system and to make editorial changes to accurately reflect the current organizational structure within GSA's Office of Information Resources Management and the division of responsibilities between NARA and GSA. Otherwise, substantive changes from the text now appearing in the FPMR are contained only in § 201-45.104, Forms management; Subpart 201-45.5, Standard and Optional Forms Management Programs; and Subpart 201-45.6, Interagency Reports Management Program. These provisions represent the reconciled versions of proposed FPMR amendments that were previously circulated for public comments. Due to the enactment of Public Law 98-497 and its April 1, 1985, effective date, the proposed changes were not issued as FPMR amendments and are included in this temporary regulation.

(4) Pursuant to section 22(d) of the Office of Federal Procurement Policy Act (section 302(a) of Pub. L. 98-577), the publication of proposed rules has been waived because of the necessity to implement Pub. L. 98-497 effective April 1, 1985.

(5) However, notice of proposed rulemaking regarding this action (as a FIRMR amendment) was published in the Federal Register (50 FR 6970, February 19, 1985) with comments due by March 21, 1985. Comments received on the amendment are being reconciled, and a FIRMR amendment is being prepared to replace this temporary regulation. Although the deadline for comments on the amendment has passed any comments on this temporary issuance received before April 30, 1985, will be considered to the maximum practicable extent in preparation of the final amendment.

(6) This regulation was developed in coordination with the Archivist of the United States in accordance with § 201-1.201(a).

(7) The General Services Administration has determined that this rule is not a major rule for purposes of Executive Order 12291 of February 17, 1981. GSA decisions are based on adequate information concerning the need for, and the consequences of the rule. The rule is written to ensure maximum benefits to Federal agencies. This is a Government-wide management regulation that will have little or no net cost effect on society.

(8) *Derivation Tables for Individual Parts.*

FIRMR sections	FPMR sources
Derivation Table for Part 201-22	
201-22.000	101-11.000
201-22.001	101-11.101
201-22.001-1	101-11.101-1
201-22.001-2	101-11.101-2
201-22.001-3	None
201-22.001-4	101-11.103-1 101-11.104
201-22.002	101-11.102
201-22.002-1	101-11.102-1
201-22.002-2	101-11.102-2
201-22.002-3	101-11.102-3

federal register

Tuesday
April 23, 1985

Part II

Environmental Protection Agency

40 CFR Part 265

Hazardous Waste Management System; Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities; Final Rule

N, of Title 40 of the Code of Federal Regulations are amended as follows:

PART 265—INTERIM STATUS STANDARDS FOR OWNERS AND OPERATORS OF HAZARDOUS WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITIES

1. The authority citation for Part 265 continues to read as follows:

Authority: Secs. 1006, 2002(a), and 3004 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C. 6905, 6912(a), and 6924).

2. In 40 CFR Part 265, Subpart K, §§ 265.222 and 265.229 are revised to read as follows:

§ 265.222 General operating requirements.

(a) A surface impoundment must maintain enough freeboard to prevent any overtopping of the dike by overfilling, wave action, or a storm. Except as provided in paragraph (b) of this section, there must be at least 60 centimeters (two feet) of freeboard.

(b) A freeboard level less than 60 centimeters (two feet) may be maintained if the owner or operator obtains certification by a qualified engineer that alternate design features or operating plans will, to the best of his knowledge and opinion, prevent overtopping of the dike. The certification, along with a written identification of alternate design features or operating plans preventing overtopping, must be maintained at the facility.

[Approved by the Office of Management and Budget under the control number 2050–0007]

§ 265.229 Special requirements for ignitable or reactive waste.

Ignitable or reactive waste must not be placed in a surface impoundment unless:

(a) The waste is treated, rendered, or mixed before or immediately after placement in the impoundment so that:

(1) The resulting waste, mixture, or dissolution of material no longer meets the definition of ignitable or reactive waste under §§ 261.21 or 261.23 of this chapter; and

(2) Section 265.17(b) is complied with; or

(b)(1) The waste is managed in such a way that it is protected from any material or conditions which may cause it to ignite or react; and

(2) The owner or operator obtains a certification from a qualified chemist or engineer that, to the best of his knowledge and opinion, the design features or operating plans of the facility will prevent ignition or reaction; and

(3) The certification and the basis for it are maintained at the facility; or

(c) The surface impoundment is used solely for emergencies.

[Approved by the Office of Management and Budget under the control number 2050–0007]

3. In 40 CFR Part 265, Subpart M, § 265.272 is amended by revising paragraph (a) to read as follows:

§ 265.272 General operating requirements.

(a) Hazardous waste must not be placed in or on a land treatment facility unless the waste can be made less hazardous or nonhazardous by degradation, transformation, or immobilization processes occurring in or on the soil.

* * * * *

4. In 40 CFR Part 265, Subpart M, §§ 265.310 and 265.315 are revised to read as follows:

§ 265.310 Closure and post-closure care.

(a) At final closure of the landfill or upon closure of any cell, the owner or operator must cover the landfill or cell with a final cover designed and constructed to:

(1) Provide long-term minimization of migration of liquids through the closed landfill;

(2) Function with minimum maintenance;

(3) Promote drainage and minimize erosion or abrasion of the cover;

(4) Accommodate settling and subsidence so that the cover's integrity is maintained; and

(5) Have a permeability less than or equal to the permeability of any bottom liner system or natural subsoils present.

(b) After final closure, the owner or operator must comply with all post-closure requirements contained in §§ 265.117–265.120 including maintenance and monitoring throughout the post-closure care period. The owner or operator must:

(1) Maintain the integrity and effectiveness of the final cover, including making repairs to the cover as necessary to correct the effects of settling, subsidence, erosion, or other events;

(2) Maintain and monitor the ground-water monitoring system and comply with all other applicable requirements of Subpart F of this part;

(3) Prevent run-on and run-off from eroding or otherwise damaging the final cover; and

(4) Protect and maintain surveyed benchmarks used in complying with § 265.309.

§ 265.315 Special requirements for containers.

Unless they are very small, such as an ampule, containers must be either:

(a) At least 90 percent full when placed in the landfill; or

(b) Crushed, shredded, or similarly reduced in volume to the maximum practical extent before burial in the landfill.

[FR Doc. 85–9600 Filed 4–22–85; 8:45 am]
BILLING CODE 6560–50–M

Federal Register

Tuesday
April 30, 1985

Part III

Environmental Protection Agency

40 CFR Parts 260, 264, 265, and 270
Hazardous Waste Management System; Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities; Final Rule

and Budget (OMB) under the Paperwork Reduction Act of 1980, 44 U.S.C. 3501–3520 and have been assigned the following control numbers: 2050–0012 and 2050–0013.

VIII. List of Subjects

40 CFR Part 260

Administrative practice and procedure, Hazardous materials, Waste treatment and disposal.

40 CFR Part 264

Hazardous materials, Packaging and containers, Reporting and recordkeeping requirements, Security measures, Surety bonds, Waste treatment and disposal, Water supply.

40 CFR Part 265

Hazardous materials, Packaging and containers, Reporting and recordkeeping requirements, Security measures, Surety bonds, Waste treatment and disposal, Water supply.

40 CFR Part 270

Administrative practice and procedure, Reporting and recordkeeping requirements, Hazardous materials, Waste treatment and disposal, Water pollution control, Water supply, Intergovernmental relations, Penalties, Confidential business information, Incorporation by reference.

Dated: April 22, 1985.

Lee M. Thomas,

Administrator.

For the reasons set forth in the preamble, 40 CFR Parts 260, 264, 265 and 270 are amended as set forth below.

PART 260—HAZARDOUS WASTE MANAGEMENT SYSTEM: GENERAL

1. The authority citation for Part 260 reads as follows:

Authority: Secs. 1006, 2002(a), 3001 through 3007, 3010, and 7004 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976 as amended, (42 U.S.C. 6905, 6912(a), 6921 through 6927, 6930 and 6974).

2. Section 260.11 is amended by revising the fourth reference in paragraph (a) to read as follows:

§ 260.11 References.

(a) * * *

"Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", EPA Publication SW–846 [Second Edition, 1982 as amended by Update I (April, 1984), and Update II (April, 1985)]. The second edition of SW–846 and Updates I and II are available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20401, (202) 783–3228, on a subscription basis.

* * * * *

PART 264—STANDARDS FOR OWNERS AND OPERATORS OF HAZARDOUS WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITIES

3. The authority citation for Part 264 reads as follows:

Authority: Secs. 1006, 2002(a), 3004, and 3005 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C. 6905, 6912(a), 6924, and 6925).

4. Section 264.13 is amended by revising paragraph (b)(6) and by adding an OMB control number to the end of the section to read as follows:

§ 264.13 General waste analysis.

* * * * *

(b) * * *

(6) Where applicable, the methods which will be used to meet the additional waste analysis requirements for specific waste management methods as specified in §§ 264.17, 264.314, and 264.341.

* * * * *

(Information collection requirements in paragraph (b)(6) approved by OMB under control number 2050–0012)

5. Section 264.73 is amended by revising paragraph (b)(3) and by adding an OMB control number to the end of the section to read as follows:

§ 264.73 Operating record.

* * * * *

(b) * * *

(3) Records and results of waste analyses performed as specified in §§ 264.13, 264.17, 264.314, and 264.341;

* * * * *

(Information collection requirements in paragraph (b)(3) approved by OMB under control number 2050–0013)

6. Section 264.314 is amended by revising its title and by adding a new paragraph (c) to read as follows:

§ 264.314 Special requirements for bulk and containerized liquids.

* * * * *

(c) To demonstrate the absence or presence of free liquids in either a containerized or a bulk waste, the following test must be used: Method 9095 (Paint Filter Liquids Test) as described in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods." [EPA Publication No. SW–846].

PART 265—INTERIM STATUS STANDARDS FOR OWNERS AND OPERATORS OF HAZARDOUS WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITIES

7. The authority citation for Part 265 reads as follows:

Authority: Secs. 1006, 2002(a), 3004, and 3005 of the Solid Waste Disposal Act, as amended (42 U.S.C. 6905, 6908, 6912(a), 6924, and 6925).

8. Section 265.13 is amended by revising paragraph (b)(6) and by adding an OMB control number to the end of the section to read as follows:

§ 265.13 General waste analysis.

* * * * *

(b) * * *

(6) Where applicable, the methods which will be used to meet the additional waste analysis requirements for specific waste management methods as specified in §§ 265.193, 265.225, 265.252, 265.273, 265.314, 265.345, 265.375, and 265.402.

* * * * *

(Information collection requirements approved by OMB under control number 2050–0012)

9. Section 265.73 is amended by revising paragraph (b)(3) and by adding an OMB control number to the end of the section to read as follows:

§ 265.73 Operating record.

* * * * *

(b) * * *

(3) Records and results of waste analyses and trial tests performed as specified in §§ 265.13, 265.193, 265.225, 265.252, 265.273, 265.314, 265.341, 265.375, and 265.402;

* * * * *

(Information collection requirements approved by OBM under control number 2050–0013)

10. Section 265.302 as amended by revising the comment to read as follows:

§ 265.302 General operating requirements.

* * * * *

[*Comment*: As required by § 265.13, the waste analysis plan must include analyses needed to comply with §§ 265.312, 265.313, and 265.314. As required by § 265.73, the owner or operator must place the results of these analyses in the operating record of the facility].

11. Section 265.314 is amended by revising its title and by adding a new paragraph (d) to read as follows:

§ 265.314 Special Requirements for Bulk and Containerized Liquids.

* * * * *

(d) To demonstrate the absence or presence of free liquids in either a

containerized or a bulk waste, the following test must be used: Method 9095 (Paint Filter Liquids Test) as described in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods." [EPA Publication No. SW-846].

PART 270—EPA ADMINISTERED PERMIT PROGRAMS: THE HAZARDOUS WASTE PERMIT PROGRAM

12. The authority citation for Part 270 reads as follows:

Authority: Secs. 1006, 2002, 3005, 3007, and 7004 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C. 6905, 6912, 6925, 6927, and 6974).

13. Section 270.6 is amended by revising the first reference in paragraph (a) to read as follows:

§ 270.6 References

(a) * * *

"Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", EPA Publication SW-846 [Second Edition, 1982 as amended by Update I (April, 1984) and Update II April, 1985]. The second edition of SW-846 and Updates I and II are available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20401, (202) 783-3238, on a subscription basis.

* * * * *

[FR Doc. 85-10278 Filed 4-29-85; 8:45 am]
BILLING CODE 6560-50-M

VICTOR ATIYEH
GOVERNOR

Environmental Quality Commission

Mailing Address: BOX 1760, PORTLAND, OR 97207
522 SOUTHWEST 5th AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

MEMORANDUM

TO: Environmental Quality Commission

FROM: Director

SUBJECT: Agenda Item No. E, June 7, 1985, EQC Meeting

Request for Authorization to Hold a Public Hearing to Amend Standards of Performance for New Stationary Sources, Oregon Administrative Rules (OAR) 340-25-510 to 690 to Include Certain New Federal Rules and Consider Requesting EPA to Delegate Authority to Administer the Rules in Oregon.

Background

The U.S. Environmental Protection Agency (EPA) has been adopting New Source Performance Standards (NSPS) since 1971. To acquire delegation to administer these standards, the Commission adopted Oregon Administrative Rules (OAR) 340-25-505 to -705 in September 1975, and amended them in 1981, 1982, 1983, and 1984. EPA delegated NSPS to the Department in 1976, 1981, 1983, and 1984.

Problem Statement

EPA is continuously adopting New Source Performance Standards. The Department of Environmental Quality (DEQ) has committed to bring its rules up to date with EPA rules on a once a year basis.

Seven new and five amended NSPS rules published by EPA in the last year could require new DEQ rule adoptions. These rules cover the following source categories:

40 CFR Subpart	Title	Federal Register Date
M, 60.130 & 60.133	Rod Casting at Secondary Bronze or Brass Production Plants	02/14/85
AA, 60.270 to 60.276	Steel Plants: Electric Arc Furnaces Before 1984	10/31/84

AAa, 60.27a to 60.276a	Steel Plants: Electric Arc Furnaces & Argon Decarbonization	10/31/84
BB, 60.283 to 60.286	Kraft Pulp Mills	02/14/85
GG, 60.335	Gas Turbines	06/31/84
HH, 60.340 to 60.344	Lime Manufacturing Plants	04/26/84
VV, 60.481 to 60.488	Leaks at Synthetic Organic Chemical Manufacturing Industry Plants	05/30/84 & 06/29/84
FFF, 60.580 to 60.585	Vinyl and Urethane Coating and Printing	06/29/84 & 08/17/84
GGG, 60.590 to 60.593	Leaks at Refineries	05/30/84
HHH, 60.600 to 60.604	Synthetic Fiber	04/05/84
JJJ, 60.620 to 60.625	Petroleum Dry Cleaners	09/21/84
PPP, 60.680 to 60.685	Fiberglass Insulation Plants	02/25/85

Authority for the Commission to act is given in Oregon Revised Statutes (ORS) 468.020 and 468.295(3) where the Commission is authorized to establish emission standards for sources of air contaminants. A public hearing notice and "Statement of Need for Rulemaking" is Attachment 1 of this memorandum.

Alternatives and Evaluation

1. The Commission could take NO ACTION.

   A no-action consequence would be that both the Department and EPA staffs would have to review certain emission sources in Oregon, because the DEQ's rules have not been kept up to date with EPA's.

2. The Commission could authorize the past year's additional and revised federal NSPS (in Oregon rule terms) for a public hearing.

   This would help EPA-Department cooperation to achieve single, state jurisdiction and review of certain new and modified sources.

Rule Development Process

The Department has assembled a complete list of amendments to NSPS, and the Federal Registers describing those rule changes, and has made appropriate changes in wording to fit these rules into the OAR format.

PROPOSED RULE ADDITIONS

Secondary Brass and Bronze Production Plants, Subpart M of Title 40 Code of Federal Regulations, Parts 60.130 and 60.133 (40 CFR 60.130, 60.133) was amended by Vol. 49 Federal Register page 43616 (40 FR 43616), to remove the word "ingot" from the title and revises paragraph 60.130(a) to include plants which produce continuously cast rod. A test method was clarified in paragraph 60.133.

Electric Arc Furnaces in Steel Plants, Subpart AA was amended, and Subpart AAa was added by 40 FR 43838, October 31, 1984. Subpart AAa, 40 CFR 60.270a to 60.276a, makes the rule applicable to Argon-Oxygen Decarbonization Vessels.

Kraft Pulp Mills, Subpart BB, was amended by 50 FR 6316, February 14, 1985. EPA granted a waiver by adding section 40 CFR 60.286.

Stationary Gas Turbines, Subpart GG, was amended by 49 FR 30672, July 31, 1984. New test methods were added in 40 CFR 60.335.

Lime Manufacturing Plants, Subpart HH, was amended by 40 FR 18076, April 26, 1984. EPA doubled the standard from 0.30 lb/ton to 0.60 lb/ton in response to a court suit by the National Lime Association. Now that the standard is out of litigation initiated in 1978, the Department recommends asking for delegation. This rule, 40 CFR 60.340 to 60.344, has an effective date of May 3, 1977. The one Oregon facility constructed since then complies with the rule. This one facility is a lime plant's new kiln, in Rivergate area of north Portland, owned by Ash Grove Cement Company.

Synthetic Organic Chemical Manufacturing Industry; Equipment Leaks of Volatile Organic Compounds (SOCMI VOC leaks), Subpart VV was amended by 49 FR 22607, May 30, 1984. Three definitions were added and other paragraphs clarified in 40 CFR 60.480 to 60.488.

Flexible Vinyl and Urethane Coating and Printing, Subpart FFF, was added by 49 FR 26884, June 29, 1984, and amended by 49 FR 32848, August 17, 1984. This new rule, 40 CFR 60.580 to 60.585, limits ink on new rotogravure presses, which coat vinyl or urethane, to 50 percent VOC. Higher solvent inks must have their emissions destroyed with at least 85 percent efficiency.

Equipment Leaks of VOC in Petroleum Refineries, Subpart GGG, was added by 49 FR 22598, May 30, 1984. This new rule, 40 CFR 60.590 to 60.593, requires repair and reporting of VOC leaks at refineries.

Synthetic Fiber Production Facilities, Subpart HHH, was added by 49 FR 13646, April 5, 1984. This new rule, 40 CFR 60.600 to 60.604, limits VOC emissions from certain new or reconstructed synthetic fiber processes to 10 percent of the VOC fed into the process.

Petroleum Dry Cleaners, Subpart JJJ, was added by 49 FR 37328, September 21, 1984. This new rule, 40 CFR 60.620 to 60.625, requires plants, with a rated dryer capacity equal to or greater than 84 pounds, to use only a solvent recovery dryer, and to maintain certain solvent conservation work practices. The rule does not apply to dry cleaners using perchloroethylene. No dry cleaning plant in Oregon has dryer capacity this large.

Wool Fiberglass Insulation Manufacturing Plants, Subpart PPP, was added by 50 FR 7694, February 25, 1985. This new rule, 40 CFR 60.680 to 60.685, limits particulate emissions to less than 11 lbs per ton of glass pulled from each rotary spin wool fiberglass insulation manufacturing line.

Summation

1. EPA adopted the first New Stationary Source Performance Standards (NSPS) in 1971. More have been added since then, the most recent one in February 1985.

2. To acquire delegation to administer NSPS in Oregon, the Commission adopted equivalent administrative rules in September 1975 and subsequently received delegation.

3. The Commission amended the NSPS rules in 1981, in 1982, in 1983, and in August 1984 to bring them up to date with EPA rules.

4. The proposed rule changes (Attachment 2) would bring the State rules up to date with the current federal EPA NSPS rules. The regulated sources affected are:

    a. Rod Casting at Bronze and Brass Plants
    b. Argon Decarbonization at Steel Plants
    c. Kraft Pulp Mills
    d. Stationary Gas Turbines
    e. Lime Manufacturing Plants
    f. Leaks at Chemical Plants
    g. Vinyl and Urethane Coating and Printing
    h. Leaks at Refineries
    i. Synthetic Fiber Manufacture
    j. Large Petroleum Dry Cleaners
    k. Wool Fiberglass Insulation Manufacturing

5. The proposed rules generally affect facilities which may be built in the future. The one exception is an existing north Portland lime plant, which complies with the proposed rules.

Director's Recommendation

It is recommended that the commission authorize the Department to hold a hearing to consider the attached amendments to OAR 340-25-510 to 340-25-690, rules on Standards of Performance for New Stationary Sources, and to consider asking for authority to administer the equivalent Federal Rules in Oregon.

Fred Hansen

Attachments 1. Notice of Public Hearing with attached Statement of Need for Rulemaking
2. Proposed Rules 340-25-510 to 340-25-715

P.B. Bosserman:p
AP60
(503) 229-6278
May 22, 1985

Oregon Department of Environmental Quality

A CHANCE TO COMMENT ON...

Additions to New Source Performance Standards

Date Prepared: May 7, 1985
Hearing Date: July 9, 1985
Comments Due: July 12, 1985

WHO IS AFFECTED: Industry which may build new, reconstruct, or modify the categories listed below.

WHAT IS PROPOSED: The Department of Environmental Quality (DEQ) is proposing to amend OAR 340-25-510 to 340-25-690 to add six and modify five New Source Performance Standards, authored by the federal Environmental Protection Agency (EPA).

Item	49 CFR Subpart	Industry Affected
1.	M, 60.130 to 60.133	Rod Casting at Bronze and Brass Plants
2.	AAa, 60.270a to 60.276a	Steel Plants: Electric Arc Furnaces and Argon Decarbonization
3.	BB 60.283 to 60.286	Kraft Pulp Mills
4.	GG 60.335	Gas Turbines
5.	HH, 60.340 to 60.344	Lime Manufacturing Plants
6.	VV 60.481 to 60.488	Leaks at Chemical Plants
7.	FFF, 60.580 to 60.585	Vinyl and Urethane Coating and Printing
8.	GGG, 60.590 to 60.593	Leaks at Refineries
9.	HHH, 60.600 to 60.604	Synthetic Fiber
10.	JJJ, 60.620 to 60.625	Petroleum Dry Cleaners
11.	PPP, 60.680 to 60.685	Fiberglass Insulation Plants

WHAT ARE THE HIGHLIGHTS: The Department proposes to adopt these federal rules and to request EPA to delegate jurisdiction over any future sources in Oregon to DEQ.

This has been done previously with 31 other sources, some of them more common, like asphalt batch plants. This is considered a routine rule making action, since the sources must abide by an identical federal rule, already in force.

P.O. Box 1760
Portland, OR 97207

8/10/82

FOR FURTHER INFORMATION:

Contact the person or division identified in the public notice by calling 229-5696 in the Portland area. To avoid long distance charges from other parts of the state, call 1-800-452-7813, and ask for the Department of Environmental Quality.

1-800-452-4011

HOW TO COMMENT:

Copies of the complete proposed rule package may be obtained from the Air Quality Division in Portland (522 S.W. Fifth Avenue) or the regional office nearest you. For further information contact Peter Bosserman at (503) 229-6278.

A public hearing will be held before a hearings officer at:

3:00 p.m.
Tuesday, July 9, 1985
Room 4A, 4th Floor, Yeon Bldg.
522 S.W. 5th, Portland, OR 97204

Oral and written comments will be accepted at the public hearing. Written comments may be sent to the DEQ Air Quality Division, P.O. Box 1760, Portland, OR 97207, but must be received by no later than July 12, 1985.

WHAT IS THE NEXT STEP:

After public hearing, the Environmental Quality Commission may adopt rule amendments identical to the proposed amendments, adopt modified rule amendments on the same subject matter, or decline to act. The adopted rules will be submitted to the U. S. Environmental Protection Agency for delegation. The Commission's deliberation should come on September 6, 1985 as part of the agenda of a regularly scheduled Commission meeting.

A Statement of Need, Fiscal and Economic Impact Statement, and Land Use Consistency Statement are attached to this notice.

AP60.1

RULEMAKING STATEMENTS

for
Standards of Performance for
New Stationary Sources

Pursuant to ORS 183.335, these statements provide information on the intended action to amend a rule.

STATEMENT OF NEED:

Legal Authority

This proposal amends Oregon Administrative Rules 340-25-510 to 340-25-690. It is proposed under authority of Oregon Revised Statutes 468.020(1) and 468.295(3) where the Environmental Quality Commission is authorized to establish different rules for different sources of air pollution.

Need for the Rule

The proposed changes bring the Oregon rules up-to-date with changes and additions to the federal "Standards of Performance for New Stationary Source", 40 CFR 60. As Oregon rules are kept up-to-date with the federal rules, then the federal Environmental Protection Agency (EPA) delegates jurisdiction for their rules to the Department, allowing Oregon industry and commerce to be regulated by only one environmental agency.

Principal Documents Relied Upon

1. 40 CFR 60 Code of Federal Regulations, as amended in recent Federal Registers, concerning "Standards of Performance for New Stationary Sources" (NSPS):

Subpart	Title	Federal Register Date
M, 60.130 and 60.133	Rod Casting at secondary Bronze or Brass Production Plants	10/30/84
AA, 60.270 to 60.276	Steel Plants: Electric Arc Furnaces Before 1984	10/31/84
AAa, 60.270a to 60.276a	Steel Plants: Electric Arc Furnaces and Argon Decarbonization	10/31/84
BB, 60.283 to 60.286	Kraft Pulp Mills	02/14/85
GG, 60.335	Gas Turbines	07/31/84
HH, 60.340 to 60.344	Lime Manufacturing Plants	04/26/84

VV, 60.481 to 60.488	Leaks at Synthetic Organic Chemical Manufacturing Plants	05/30/84 & 06/29/84
FFF, 60.580 to 60.585	Vinyl and Urethane Coating and Printing	06/29/84 & 08/17/84
GGG, 60.590 to 60.593	Leaks at Refineries	05/30/84
HHH, 60.600 to 60.604	Synthetic Fiber	04/05/84
JJJ, 60.620 to 60.625	Petroleum Dry Cleaners	09/21/84
PPP, 60.680 to 60.685	Fiberglass Insulation Plants	02/25/85

FISCAL AND ECONOMIC IMPACT STATEMENT:

The NSPS rules are already promulgated by EPA. Adoption by and delegation to DEQ simplifies environmental administration generally at less cost.

Small businesses will incur less cost and processing time if these rules are administered by only one agency.

LAND USE CONSISTENCY STATEMENT:

The proposed rule changes appear to affect land use and appear to be consistent with the Statewide Planning Goals.

With regard to Goal 6 (air, water, and land resources quality), the rules are designed to enhance and preserve air quality in the affected area and are considered consistent with the goal.

Goal 11 (public facilities and services) is deemed unaffected by the rule. The rule does not appear to conflict with other goals.

Public comment on any land use issue involved is welcome and may be submitted in the same fashions are are indicated for testimony in this notice.

It is requested that local, state, and federal agencies review the proposed action and comment on possible conflicts with their programs affecting land use and with Statewide Planning Goals within their expertise and jurisdiction.

The Department of Environmental Quality intends to ask the Department of Land Conservation and Development to mediate any apparent conflict brought to our attention by local, state, or federal authorities.

Standards of Performance for New Stationary Sources

Statement of Purpose

340-25-505 The U.S. Environmental Protection Agency has adopted in **Title 40, Code of Federal Regulations, Part 60,** Standard of Performance for certain new stationary sources. It is the intent of this rule to specify requirements and procedures necessary for the Department to implement and enforce the aforementioned Federal Regulation.

Definitions

340-25-510 (1) "Administrator" herein and in **Title 40, Code of Federal Regulations, Part 60,** means the Director of the Department or appropriate regional authority.

(2) "Federal Regulation" means **Title 40, Code of Federal Regulations, Part 60,** as promulgated prior to [April 18, 1984] March 22, 1985.

(3) "CFR" means Code of Federal Regulations.

(4) "Regional authority" means a regional air quality control authority established under provisions of ORS 468.505.

Statement of Policy

340-25-515 It is hereby declared the policy of the Department to consider the performance standards for new stationary sources contained herein to be minimum standards; and, as technology advances, conditions warrant, and Department or regional authority rules require or permit, more stringent standards shall be applied.

Delegation

340-25-520 The Commission may, when any regional authority requests and provides evidence demonstrating its capability to carry out the provisions of these rules, authorize and confer jurisdiction upon such regional authority to perform all or any of such provisions within its boundary until such authority and jurisdiction shall be withdrawn for cause by the Commission.

Applicability

340-25-525 This rule shall be applicable to stationary sources identified in rules 340-25-550 through [340-25-690] 340-25-715 for which construction, reconstruction, or modification has been commenced, as defined in **Title 40, Code of Federal Regulations,** 40 CFR 60 **[(40 CFR) 60.2** after the effective dates of these rules].

General Provisions

340-25-530 Title 40, CFR, Part 60, Subpart A as promulgated prior to [April 18, 1984,] March 22, 1985 is by this reference adopted and incorporated herein. Subpart A includes paragraphs 60.1 to 60.16 which address, among other things, definitions, performance tests, monitoring requirements, and modifications.

Performance Standards

Federal Regulations Adopted by Reference

340-25-535 Title 40, CFR, Parts 60.40 through 60.154, and 60.250 through [60.506] 60.685 , as established as final rules prior to [April 18, 1984] March 22, 1985, is by this reference adopted and incorporated herein. As of [April 18, 1984] March 22, 1985, the Federal Regulations adopted by reference set the emission standards for the new stationary source categories set out in rules 340-25-550 through [340-25-690] 340-25-715 (these are summarized for easy screening, but testing conditions, the actual standards, and other details will be found in the **Code of Federal Regulations).**

. . .

Standard of Performance for Secondary Brass and Bronze [Ingot] Production Plants

340-25-595 The pertinent federal rules are **40 CFR 60.130 to 60.133,** also known as **Subpart M.** The following emission standards, summarizing the federal standards set forth in **Subpart M,** apply to the following affected facilities in secondary brass or bronze [ingot] production plants subject to this rule: Reverberatory and electric furnaces of 1000 Kg. (2205 lbs) or greater production capacity and blast (cupola) furnaces of 250 Kg/hr (550 lbs/hr) or greater production capacity. Standards for Particulate Matter: No owner or operator subject to the provisions of this rule shall discharge or cause the discharge into the atmosphere from a reverberatory furnace any gases which:

(1) Contain particulate matter in excess of 50 mg/dscm (0.022 gr/dscf).

(2) Exhibit 20 percent opacity or greater.

(3) No owner or operator subject to the provisions of this rule shall discharge or cause the discharge into the atmosphere from any blast (cupola) or electric furnace any gases which exhibit 10 percent opacity or greater.

(Publications: The publication(s) referred to in this rule are available from the office of the Department of Environmental Quality in Portland.)

. . .

Standards of Performance for Steel Plants: Electric Arc Furnaces

340-25-625 The pertinent federal rules are 40 CFR 60.270 to [60.275] 60.276a, also known as **Subpart AA** and AAa. These standards, summarizing the federal standards set forth in **Subpart AA** and AAa, for Steel Plants are applicable only to electric arc furnaces, argon-oxygen decarbonization vessels, and dust-handling equipment, built or modified after October 21, 1974:

(1) No owner or operator shall cause to be discharged into the atmosphere from an electric arc furnace any gases which:

(a) Exit from a control device and contain particulate matter in excess of 12 mg/dscm (0.0052 gr/dscf);
(b) Exit from a control device and exhibit 3.0 percent opacity or greater;
(c) Exit from a shop and, due solely to operations of any electric arc furnaces or argon-oxygen decarbonization vessels, exhibit 6 percent or greater [than zero percent] shop opacity, except that if constructed before August 17, 1983 then shop opacity must be only less than 20 percent during charging periods and only less than 40 percent during tapping periods.

(2) No owner or operator shall cause to be discharged into the atmosphere from dust-handling equipment any gases which exhibit 10 percent opacity or greater.

(**Publications:** The publications(s) referred to in this rule are available from the office of the Department of Environmental Quality in Portland.)

Stat. Auth.: ORS Ch. 468
Hist: DEQ 16-1981,f. & ef. 5-6-81

Standards of Performance for Kraft Pulp Mills

340-25-630 The pertinent federal rules are 40 CFR 60.280 to [60.285] 60.286, also known as **Subpart BB.** The standards for kraft pulp mills' facilities, summarizing the federal standards set forth in **Subpart BB,** are applicable only to a recovery furnace, smelt dissolving tank, lime kiln, digester system, brown stock washer system, multiple-effect evaporator system, black liquor oxidation system, and condensate stripper system built or modified after September 24, 1976:

(1) No owner or operator shall cause to be discharged into the atmosphere particulate matter:

(a) From any recovery furnace:
(A) In excess of 0.10 g/dscm (0.044 gr/dscf) corrected to 8 percent oxygen, or
(B) Exhibit 35 percent opacity or greater;
(b) From any smelt dissolving tank in excess of 0.10 g/Kg black liquor solids, dry weight (0.20 lb/ton);

(c) From any lime kiln:
(A) In excess of 0.15 g/dscm (0.067 gr/dscf) corrected to 10 percent oxygen, when gaseous fossil fuel is burned;
(B) In excess of 0.30 g/dscm (0.13 gr/dscf) corrected to 10 percent oxygen, when liquid fossil fuel is burned.

(2) No owner or operator shall cause to be discharged in the atmosphere Total Reduced Sulfur compounds, (TRS), which are hydrogen sulfide, methyl mercaptan, dimethyl sulfide, and dimethyl disulfide:

(a) From any digester system, brown stock washer system, multiple-effect evaporator system, black liquor oxidation system, or condensate stripper system in excess of 5.0 ppm by volume on a dry basis, corrected to the actual oxygen content of the untreated gas stream;
(b) From any straight kraft recovery furnace in excess of 5.0 ppm by volume on a dry basis corrected to 8 percent oxygen;
(c) From any cross recovery furnace in excess of 25 ppm by volume on a dry basis, corrected to 8.0 percent oxygen;
(d) From any smelt dissolving tank in excess of 0.0084 g/Kg black liquor solids, dry weight (0.0168 lb/ton);
(e) From any lime kiln in excess of 8.0 ppm by volume on a dry basis, corrected to 10 percent oxygen.

(Publications: The publication(s) referred to in this rule are available from the office of the Department of Environmental Quality in Portland.)

Stat. Auth.: ORS Ch. 468
Hist: DEQ 16-1981, f. & ef. 5-6-81

. . .

Standards of Performance for Lime Manufacturing Plants

340-25-647 The pertinent federal rules are 40 CFR 60.340 to 60.344, also known as Subpart HH. The following standards set forth in Subpart HH apply to each rotary lime kiln used in the manufacture of lime, except those at kraft pulp mills, for which construction or modification of any facility affected by the rule commenced after May 3, 1977. Standards for Particulate: No owner or operator subject to the provisions of this rule shall cause to be discharged into the atmosphere from any rotary lime kiln any gases which:

(1) Contain particulate matter in excess of 0.30 kilogram per megagram (0.60 lb/ton) of stone feed.

(2) Exhibit greater than 15 percent opacity when exiting from a dry emission control device.

. . .

Standards of Performance for Flexible Vinyl and Urethane Coating and Printing

340-25-700 The pertinent federal rules are 40 CFR 60.580 to 60.585, also known as Subpart FFF. The following emission standards set forth in Subpart FFF apply to each rotogravure printing line used to print or coat flexible vinyl or urethane products, for which construction, modification, or reconstruction was commenced after January 18, 1983. Standard for Volatile Organic Compounds (VOC): Each owner or operator subject to this subpart shall either:

(1) Use inks with a weighted average VOC content of less than 1.0 kilogram VOC per kilogram ink solids, or

(2) Reduce VOC emissions to the atmosphere by 85 percent.

Standards of Performance for VOC Leaks in Petroleum Refineries

340-25-702 The pertinent federal rules are 40 CFR 60.590 to 60.593, also known as Subpart GGG. The following emission standards set forth in Subpart GGG apply to Volatile Organic Compound (VOC) leaks from petroleum refineries, modified or constructed after January 4, 1983.

(1) VOC leaks from the following components:

(a) Pumps
(b) Compressors
(c) Pressure relief devices
(d) Sampling connection systems
(e) Open-ended valves or lines
(f) Valves

(2) The detailed standards are found in seven pages of federal rules (see 40 CFR 60.592 which references 60.482-1 to 60.482-10), along with the recordkeeping and reporting requirements.

Standards of Performance for Synthetic Fiber Plants

340-25-704 The pertinent federal rules are 40 CFR 60.600 to 60.604, also known as Subpart HHH. The following emission standards set forth in Subpart HHH apply to each solvent-spun synthetic fiber process that produces more than 500 megagrams of fiber per year, that commenced construction or reconstruction after November 23, 1982. Standard for Volatile Organic Compounds (VOC): No owner or operator shall cause the discharge into the atmosphere from any process, VOC in excess of:

(1) 10 kilograms of VOC per megagram of solvent fed to the spinning solution preparation system or precipitation bath for processes producing acrylic fibers, or producing both acrylic and non-acrylic fiber types.

(2) 17 kilograms of VOC per megagram of solvent feed if producing only non-acrylic fiber types.

Standards of Performance for Petroleum Dry Cleaners

340-25-706 The pertinent federal rules are 40 CFR 60.620 to 60.625, also known as Subpart JJJ. The following work practice standards set forth in Subpart JJJ apply to petroleum dry cleaning plants with a total dryer capacity equal to or greater than 38 kilograms (84 pounds), for which construction or modification was commenced after December 14, 1982. Standard for Volatile Organic Compounds:

(1) Each dryer shall be a solvent recovery dryer.

(2) Each filter shall be a cartridge filter, which shall be drained in its sealed housing for at least 8 hours prior to its removal.

(3) Dryers, washers, filters, stills, and settling tanks shall have a leak repair instruction posted on the unit and printed in the operating manual by the manufacturer.

Standards of Performance for Fiberglass Insulation Manufacturing

340-25-715 The pertinent federal rules are 40 CFR 60.680 to 60.685, also known as Subpart PPP. The following emission standard set forth in Subpart PPP applies to each rotary spin wool fiberglass insulation manufacturing line, for which construction, modification, or reconstruction was commenced after February 7, 1984. Standard for Particulate: No owner or operator shall cause to be discharged into the atmosphere from an affected facility any gases which contain particulate matter in excess of 5.5 kg/Mg (11.0 lb/ton) of glass pulled.

Compliance

[340-25-700] 340-25-800 Compliance with standards set forth in this rule shall be determined by performance tests and monitoring methods as set forth in the Federal Regulation adopted by reference in rule 340-25-530.

More Restrictive Regulations

[340-25-705] 340-25-805 If at any time there is a conflict between Department or regional authority rules and the Federal Regulation **(40 CFR, Part 60)**, the more stringent shall apply.

(Publications: The publications incorporated by reference in this rule are available from the office of the Department of Environmental Quality in Portland.)

AP60.3

VICTOR ATIYEH
GOVERNOR

Environmental Quality Commission

Mailing Address: BOX 1760, PORTLAND, OR 97207
522 SOUTHWEST 5th AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Agenda Item No. F, June 7, 1985, EQC Meeting

Proposed Approval of Noise Inspection and Compliance Agreement for Tri-Met Diesel Bus Fleet

Background

On April 16, 1984, a petition for rulemaking was received from the Livable Streets Coalition, asking that Portland area motor vehicles be inspected for excessive noise as part of the current air emission inspection program. The petition requested that all major motor vehicle categories, including Tri-Met's diesel transit buses, be included in a noise inspection program.

After Commission acceptance of the petition, public hearings were held and on November 2, 1984 rules were adopted for noise emission inspection of light duty vehicles (autos and light trucks) and motorcycles. The Commission also directed the Department to develop, prior to April 1, 1985, an agreement that would ensure that all of Tri-Met's buses are maintained to appropriate noise emission limits. As a proposed agreement was not ready for Commission consideration prior to April 1st a status report of the development of the inspection agreement was provided at the March 8, 1985 EQC meeting. That review provided the Commission the opportunity to provide comment and guidance on the development of this agreement.

Since the March 8th EQC meeting, the Department and Tri-Met staff, following the guidance of the Commission, have developed a proposed agreement (Attachment 1) that is acceptable to Tri-Met. If this agreement is found acceptable to the Commission, it should be approved.

Discussion

The Tri-County Metropolitan Transportation District of Oregon (Tri-Met) owns and operates a fleet of approximately 600 diesel powered transit buses providing public transportation to portions of Multnomah, Clackamas, and Washington counties. As these buses operate within noise sensitive neighborhoods and the Portland Transit Mall, significant noise impacts will occur from any bus with a defective exhaust system. Initial studies conducted in July, 1984 indicated that as many as 18 percent of the Tri-Met bus fleet would exceed current standards. Thus, it was concluded that these vehicles should be included within a program that ensured noise emissions were reduced and maintained to appropriate limits established for each sub-fleet of Tri-Met buses.

Standards

At the March 8th EQC meeting, the Department agreed with Tri-Met on a new stationary test procedure to measure noise emissions from their diesel bus fleet. At this time, Tri-Met has measured approximately 20 percent of its fleet and has determined representative noise ratings for each subfleet of buses using the new test procedure. These ratings were determined from data gathered from buses with no detectable defects in either the exhaust system or other major potential noise generating components.

For each subfleet of Tri-Met buses a maximum rating has been established. This sound level is typically 3 to 4 decibels above the average of the subfleet. However, the maximum rating does reflect the sound level of a bus deemed to be in good condition and repair.

Tri-Met has determined that buses with defective equipment that increase sound emissions typically will produce levels 5 to 10 decibels louder than the same bus after it has been repaired. Thus, the Department agrees with Tri-Met that use of the maximum sound rating for each subfleet should ensure that buses with noise control defects will be identified.

Tri-Met currently operates 18 diesel bus subfleets. Four subfleets (numbers 14, 16, 27,and 30) are scheduled to be sold in the near future. The 27 buses in this group were, therefore, not included in the proposed inspection and compliance program.

The maximum noise ratings of the remaining subfleets ranged from 84 dBA to 91 dBA. Evaluation of ratings and subfleets led staff to recommend standards at three levels. A standard of 90 dBA is proposed for 5 subfleets with ratings from 88 to 91 dBA. This group includes approximately 225 buses with 143 buses rated at 91 dBA and 82 buses rated at 88 dBA.

The second standard is proposed at 87 dBA and would include 7 subfleets with noise ratings of 85 to 87 dBA. Approximately 279 buses are in this group with 248 rated at 87 dBA, 20 rated at 86 dBA, and 11 rated at 85 dBA.

The third proposed standard would include 2 subfleets with a total of approximately 94 buses with a rating of 84 dBA. Thus, the proposed standard for this group is 84 dBA.

Exceptions

As Tri-Met has only tested approximately 20 percent of its fleet at this time, there may be some instances of individual buses, in good repair and condition, exceeding the proposed standards. It is, therefore, proposed to provide authority for the Department to authorize an exception to a bus that is no more than 2 dBA above the standard and has been determined by staff to have all noise control equipment in good repair and condition.

Certification

The agreement requires Tri-Met to annually, prior to December 31st, inspect and, if necessary, repair each bus identified by the 14 subfleets. Each bus must be issued a standard Certificate of Compliance available through the Department's motor vehicle inspection program. As Tri-Met will conduct a "motor vehicle fleet operation" as provided in the vehicle inspection rules, each certificate will be issued by the Department for a $3.00 fee. This fee is identical to that assessed all other fleet operations and is necessary to audit compliance with the program.

Review

The proposed agreement requires an annual review to ensure the inspection and compliance effort is providing satisfactory results. This review will ensure the program is evaluated and provide a period to make any necessary adjustment to improve program results.

Summation

1. A rulemaking petition, requesting mandatory inspection of motor vehicle noise emissions, including Tri-Met's diesel powered bus fleet, was filed on April 16, 1984.

2. After Commission acceptance of the petition, the Department was directed to develop an agreement that would ensure that all of Tri-Met's diesel powered buses are maintained to appropriate noise emission limits.

3. As the result of extensive testing and development effort by Tri-Met, a proposed agreement has been written that has been accepted by Tri-Met's administration.

4. The proposed agreement includes the following:

a) All buses will be tested and certified annually, prior to December 31st, and issued a Department Certificate of Compliance under the fee schedule assessed to other vehicle fleet operators issuing these certificates.

b) Decibel standards and testing procedure are specified for each of Tri-Met's 14 subfleets comprising a total of approximately 598 diesel powered transit buses.

c) Provisions are included for the Department to provide exceptions for individual buses, in good repair and condition, that do not exceed standards by more than 2 decibels.

d) Recordskeeping and audit provisions will ensure the Tri-Met fleet self-inspection program is providing satisfactory results.

e) An annual review period will ensure progress of the program is reviewed and any necessary adjustments are made.

Director's Recommendation

Based on the summation, it is recommended that the Commission accept the proposed noise inspection and compliance agreement for Tri-Met diesel bus fleet and execute the agreement.

Fred Hansen

Attachments 1. Proposed Tri-Met Agreement

John Hector:p
AP72
229-5989
May 24, 1985

Attachment 1
Agenda Item F
June 7, 1985
EQC Meeting

INTERGOVERNMENTAL AGREEMENT

(ORS 190.110)

This is an agreement between the State of Oregon, Environmental Quality Commission, the "EQC", and Tri-County Metropolitan Transportation District, "Tri-Met", a municipal corporation of the State of Oregon.

Recitals

1. The Tri-County Metropolitan Transportation District of Oregon owns and operates a fleet of transit buses providing public transportation to portions of Multnomah, Clackamas and Washington Counties in the State of Oregon.

2. Motor vehicle noise, including noise generated by transit buses, is a significant environmental problem given the high density of persons and motor vehicles in the service area of Tri-Met.

3. Studies conducted by Tri-Met and the Department of Environmental Quality have determined that a number of Tri-Met's transit buses exceed the maximum allowable noise levels set forth in Oregon Administrative Rules 340-35-030(1)(a), Table 2, as adopted by the Environmental Quality Commission.

IN RECOGNITION of the foregoing and to evaluate the effect of a compliance effort on over-all noise emissions, Tri-Met and the Environmental Quality Commission hereby agree to establish a compliance program to reduce and mini-

mize motor vehicle noise.

A. Annual Certification

Each bus identified by Tri-Met sub-fleet numbers listed in subsection B shall be certified annually prior to December 31st of the inspection year, beginning with 1985, and issued a Certificate of Compliance. The fee assessed for Certificates of Compliance shall be identical to that established in OAR 340-24-307 which is currently $3.00 per certificate issued for motor vehicle fleet operation.

B. Noise Emission Standards

The maximum allowable noise emission standards for Tri-Met buses shall be as follows:

Sub-Fleet Number	Population	Allowable Limit, dBA
19	13	90
20	31	90
28	99	90
31	3	90
26	79	90
15	7	87
18	10	87
21	135	87
23	9	87
33	87	87
22	20	87
32	11	87
29	19	84
34	75	84

C. Testing Procedure

C.1 Test Site and Instrument Setup.

1.a The site shall be a flat, open space free of large, reflecting surfaces such as vehicles, buildings, walls or signboards within 50 feet of either the bus or the microphone.

1.b The area between the bus and the microphone shall have a surface of concrete, asphalt, or similar hard, non-porous material. It may be wet or dry but it shall not be covered with snow or some other sound-absorbing substance.

1.c Measurements shall not be made during falling precipitation or if there is a wind speed more than 10 mph.

1.d Measurements shall not be made unless the ambient sound level is at least 10 dBA lower than the level of the bus.

1.e The microphone shall be mounted on a tripod and positioned 25 feet $\pm$ 1 foot from the centerline of the bus, and 5 feet $\pm$ 1 foot above the ground opposite the louder side of the bus.

1.f If the engine compartment is in the rear of the bus, the microphone shall be positioned in line with the rear bumper. For any other

location of the engine compartment, the microphone shall be positioned in line with the center of the engine compartment.

1.g Only two people may be within 10 feet of the microphone during rating tests.

C.2 Procedure

2.a The bus shall be tested in a stationary position with the brakes set and the transmission selector in the forward drive position.

2.b The throttle pedal shall be fully and quickly depressed for approximately 10 seconds, causing the engine to stall against the resistance of the torque converter.

2.c The stabilized measurement occurring at the end of the 10-second test period shall be used to report the sound level rating of the bus.

2.d One measurement is normally sufficient, but if more than one measurement is obtained in a test sequence, then the tests shall be continued until the results stabilize. The stabilized result shall be reported as the sound level rating.

2.e The sound level rating shall be the whole number nearest the measured number and frac-

tion. If the fraction is one-half, the measurement shall be rounded up to the nearest whole number to obtain the sound level rating.

2.f While it is unavoidable to find small variations among results due to differences in sites, instrumentation, and bus condition, the allowance for this variation is incorporated into the applicable bus sound level standard rather than applied to the sound level rating based on measurement.

C.3 Requirements for Sound Measuring Instruments and Personnel

3.a The sound measuring system shall conform to American National Standards Institute standard S1.4-1971 Type 1 or Type 2.

3.b Sound measurements shall be taken on the "A-weighting" frequency response and the "fast" dynamic indicator response.

3.c The instrument shall be field calibrated immediately prior to use according to manufacturer's procedures.

3.d Within one year prior to use, the sound level measuring instrument and field calibrator shall receive a laboratory calibration in accordance to the manufacturer's specifications.

3.e Personnel conducting sound measurements shall have been trained and experienced in the use of sound measuring equipment and the procedures to measure bus noise emissions.

D. Repair Policy

Following the completion of noise testing at each of Tri-Met's operating facilities, those buses whose noise emissions are in excess of the standards will be identified. Once identified, those buses will be scheduled for repairs to correct deficiencies such as exhaust leaks which are known to adversely impact noise emissions. After remedial repairs have been made to each bus originally determined to be noncompliant with noise standards, supplementary testing will be conducted to insure ultimate compliance with those standards.

E. Records

Tri-Met will supply noise testing records related to all diesel buses operated in transit service to the DEQ annually on or before March 1st for the previous inspection year. These records will contain all information concerning initial noise testing, necessary repairs to noncompliant buses, supplementary noise testing, dates of all activities, and any other relevant information.

F. Audit

The Department of Environmental Quality may audit Tri-Met's compliance with noise standards by reviewing

inspection records, procedures, and other relevant information and by conducting noise testing of a representative sample of Tri-Met's buses.

G. Preventive Maintenance

Tri-Met will modify preventive maintenance schedules and practices where applicable to more closely monitor potential noise-related problems such as exhaust leaks.

H. Exceptions

The standards established in this Agreement should ensure that sound control devices on buses are maintained in good condition and repair. If Tri-Met determines that a specific bus still exceeds the standard by no more than 2 dBA after all reasonable inspection and repair of sound control devices have been conducted, it may apply for an exception. The Department may issue an exception for any bus that does not exceed the standard by more than 2 dBA after it is determined that all reasonable inspection and repair of sound control devices have been accomplished.

I. Review of Agreement

This agreement shall be reviewed by the parties prior to July 1, 1986, and if deemed appropriate, amended or supplemented on or before such date.

J. Term of Agreement and Termination

This agreement shall remain in full force and effect until mutually terminated by the parties.

IN WITNESS WHEREOF the parties have executed this agreement.

ENVIRONMENTAL QUALITY COMMISSION
OF THE STATE OF OREGON

By_____

_____
Title

_____
Date

TRI-COUNTY METROPOLITAN TRANSPORTATION
DISTRICT, A MUNICIPAL CORPORATION
OF THE STATE OF OREGON

By_____

_____
Title

_____
Date

VICTOR ATIYEH
GOVERNOR

Environmental Quality Commission

Mailing Address: BOX 1760, PORTLAND, OR 97207
522 SOUTHWEST 5th AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Agenda Item No. H, June 7, 1985

Request for Extension of a Variance for the Miscellaneous Products and Metal Parts Industry From OAR 340-22-170(4)(j) Which Limits Solvent Content of Coatings

Background and Problem Statement

The Miscellaneous Products and Metal Parts industry was granted a class variance until July 1, 1985 from the volatile organic compounds (VOC) emission limits by EQC Agenda Item G approved on November 18, 1983. This industry paints various metal parts and is subject to limitations on the amount of solvent in the paint. The VOC solvents are precursors in the formation of ozone. The Portland area is in nonattainment of the ozone ambient air quality standard. The variance was dependent upon the related EQC Agenda Item M approved at the same meeting which directed the department to propose a revised ozone State Implementation Plan (SIP) for the Portland Metropolitan area. The class variance expiration date of July 1, 1985 was based upon the revised ozone SIP being presented to the EQC before that date. Due in part to delays in the analysis of automotive VOC emissions and the commitments to developing the Medford carbon monoxide strategy, the ozone SIP revision has not yet been completed and the Miscellaneous Products and Metal Parts industry faces essentially the same conditions which prompted the initial granting of the variance. A copy of Agenda Items G and M from the November 18, 1983, EQC meeting are attached (attachments 1 and 2).

Discussion

The contention of the Agenda Item G report that reducing the solvent emissions from coating most miscellaneous metal parts is "technology forcing" instead of reasonably available control technology (RACT) still applies. The attached "Status of Miscellaneous Painting Sources In Portland Area" (attachment 3) shows the current compliance status of these sources. Of the 22 sources subject to the rule, only five have achieved

compliance by switching to compliance coatings. Note that many of these sources are achieving compliance under the "bubble rule" which allows the coating rule to be exceeded provided that emissions are reduced elsewhere in the plant. An increase in business could cause these sources to request emission increases and move into noncompliance unless they are able to change their coating formulations.

Agenda Item M from the November 18, 1983, EQC meeting did not include a date when the revised ozone SIP would be presented to the Commission. The Department planned to present the revised SIP no later than December 31, 1984. However, because projected traffic counts for the Portland area were not received until February 22, 1985, and due to staff commitments to the Medford carbon monoxide issue, the Department now plans to complete the proposed SIP revision and proposed rule revision by October of this year. This time period is necessary to allow for review by the air quality advisory committee. It will require another three months for the public hearings and adoption process to be completed before any rule changes are adopted which would change the emission limits for the Miscellaneous Products and Metal Parts industry.

The Commission may grant a variance to the subject industry in accordance with ORS 468.345(1)(c) and (d) when no other alternative facility or method of handling is yet available and if strict compliance would result in substantial curtailment or closing down of a business, plant, or operation.

Alternatives

The Commission has the following alternatives:

Alternative 1

The Commission could grant a variance extension to the Miscellaneous Products and Metal Parts industry from OAR 340-22-170(4)(j) until its January 1986 meeting. The class variance would allow the industry to be included in the Department's analysis of the Portland ozone control strategies. Low solvent emitting coating technology is not available for most applications and strict compliance would result in substantial curtailment or closing down of these operations.

Alternative 2

The Commission could require each source which has not yet requested a variance to do so and have the Department process all the variances individually. The results would be similar to the industry-wide variance alternative listed above.

Alternative 3

The Commission could decline to grant the variances extension in which case approximately 14 of the sources listed on attachment 3 would continue to be in violation of OAR 340-22-170(4)(j) or could fall into violation if business increased. The Department would be obligated to initiate further action, including enforcement actions, to gain compliance.

Summation

1. OAR 340-22-170(4)(j) limits the solvent emissions from coating lines for the Miscellaneous Products and Metal Parts industry.

2. Compliance coatings and the systems to apply the coatings are generally not available to the companies included in the Miscellaneous Products and Metal Parts industry.

3. The Department recommends that an extension of the industry-wide variance from OAR 340-22-170(4)(j) be granted until January 31, 1986.

4. If a variance is granted, the Department will include revising this rule in its study of alternative control strategies. Both are to be completed by October of this year. Any relaxation of the coatings rule will have to be made up from other source categories.

5. ORS 468.325 provides that the Commission may grant specific variances if it finds that strict compliance with the rule or standard is inappropriate because:

   a. Conditions exist that are beyond the control of the persons granted such variance;

   b. Special circumstances render strict compliance unreasonable, burdensome, or impractical due to special physical conditions or cause;

   c. Strict compliance would result in substantial curtailment or closing down of a business, plant, or operation; or

   d. No other alternative facility or method of handling is yet available.

6. Strict compliance would be unreasonable and impractical at this time due to the fact that no other alternative facility or method of coating is yet available and strict compliance would result in substantial curtailment or closing down of a business, plant, or operation.

Director's Recommendation

Based upon the findings in the Summation, it is recommended that the Commission grant an extension of variance for the Miscellaneous Products and Metal Parts Industry with the following conditions:

1. The requirements of OAR 340-22-170(4)(j) be waived for all affected sources until January 31, 1986.

2. The Department include the Miscellaneous Products and Metal Parts industry in its alternative control strategy analysis for the Portland ozone SIP and rule revision, due to be completed by October of 1985 and presented to the Commission for final adoption no later than January 31, 1986.

Fred Hansen

Attachments: 1. Agenda Item G Report dated 11-18-83
2. Agenda Item M Report dated 11-18-83
3. Status of Miscellaneous Painting Sources in Portland Area

Ray Potts:n
AP41
229-6093
May 22, 1985

Attachment 1
Agenda Item H
June 7, 1985
EQC Meeting

VICTOR ATIYEH
GOVERNOR

Environmental Quality Commission

Mailing Address: BOX 1760, PORTLAND, OR 97207
522 SOUTHWEST 5th AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

MEMORANDUM

To: Environmental Quality Commission

From: Acting Director

Subject: Agenda Item No. G, November 18, 1983, EQC Meeting

Request for a Variance for the Miscellaneous Products and Metal Parts Industry From OAR 340-22-170(4)(j) Which Limits Solvent Content of Coatings.

Background and Problem Statement

The Miscellaneous Products and Metal Parts industry is one of the categories covered by the Department's Surface Coating in Manufacturing Rule (OAR 340-20-170(4)(j)). This rule limits solvent content of coatings used in the Portland Metropolitan area in order to reduce emissions of volatile organic compounds (VOC). This source category includes industries not elsewhere categorized in the VOC rules, and not covered by an exemption in the rules. Sources producing primary metal products, fabricated metal products, machinery, electrical and electronic equipment, transportation equipment, instruments, and other miscellaneous manufactured products are included under this rule. OAR 340-22170(4)(j) prohibits emissions of solvent vapors from a coating line where coatings containing solvents are greater than the amounts given below as delivered to the coating applicators:

A.	Clear Coatings	4.3 lbs/gal
B.	Force Air Dried or Air Dried	3.5 lbs/gal
C.	Extreme Performance Coatings	3.5 lbs/gal
D.	Other Coatings (i.e., powder, oven dried at 195° F or higher)	3.0 lbs/gal

The rule was adopted in accordance with provisions of the 1977 Clean Air Act Amendments, which required revisions to the State Implementation Plans (SIP) for ozone. The U.S. Environmental Protection Agency (EPA) has specified that the SIP revisions for areas designated as nonattainment for the ozone standard should contain, as a minimum, regulations for controlling volatile organic compound (VOC) emissions from stationary

sources. These regulations must provide for the implementation of reasonably available control technology (RACT).

To assist the states in defining RACT, the EPA Office of Air Quality Planning and Standards prepared a series of Control Technique Guideline (CTG) documents. The recommended emission limits for coating operations are based on the use of coatings low in organic solvents. The CTG document recommends four different emission limitations based on the type of coating, the number of colors or color changes, and the method of drying. The applicable control technology to meet the emission limitations includes process modifications (such as conversion to water based coatings, electrodeposition, higher solids coatings or powder coatings) and exhaust gas treatment (such as incineration and carbon adsorption).

Sources subject to this rule were required to be in compliance by December 31, 1982. A list of companies affected by the rule is included as Attachment 1. The Department has made a substantial effort to gain compliance with the coatings rule without much success. Of the 25 sources affected by the rule, 21 have not achieved compliance.

The Department is requesting the Commission to grant a variance to the Miscellaneous Products and Metal Parts industry from the VOC rule until July 1, 1985, to allow the Department to include this industry in its study of alternative control strategies for VOC which is discussed in Agenda Item M.

Discussion

It appears now that reducing the solvent emissions from coating operations is "technology forcing" instead of reasonably available control technology (RACT). It appears that EPA placed too much emphasis on reducing the solvent content of coatings without considering the entire coating system. There are many available low emitting coating materials on the market. The coating material is, however, only one part of the coating system. A change in coating material affects all parts of the system including:

A. Cleaning the item to be coated,
B. Equipment used to apply the coating,
C. Oven to dry the coating,
D. Time for coating to dry,
E. Protection provided to the item by the coating,
F. Method of stripping the coating for refinishing,
G. Quality assurance testing, and
H. Customer acceptance of the appearance of the coated product.

Each manufacturer must develop a coating system that will work for each product.

On the attached list of sources (Attachment 1), four sources have achieved compliance, two by use of water base paints and two by bubbling with

emission reductions from non-coating processes. Two sources, FMC and Winter Products, were previously granted variances by the Commission until 1987. Two additional sources, Northwest Marine Iron Works and Union Pacific, have requested variances. The letters of request for a variance from each of these sources are included in Attachments 2, 3, 4, and 5 respectively.

The reduction in emissions resulting from the application of this rule averages an 18 % reduction in total emissions from the plant sites involved. This is because the rule only applies to the coating line, requiring about a 50% reduction in solvent used. Other VOC emitting operations at these plants are not covered by the rules. Compliance with the rule results in less than 400 tons per year reduction in VOC emissions in the Portland airshed. This reduction is less than 1% of the total controlled VOC emissions.

When installing new or replacement coating lines, industry tends to use available low emitting coating systems because of the inherent cost savings resulting from using less solvent. These low emitting systems are presently available for a narrow range of applications.

The only add-on control equipment that has been used on coating line vapors is incineration. An incinerator would burn over 90% of the solvent vapors fed to the incinerator by the capture hoods and ducts. Although incineration is an efficient way to destroy VOC, the large amount of air used with paint spray booths has prevented anyone from using incineration to meet the rule. (Two sources in two other surface coating categories use incineration, but they are able to limit the amount of air used.)

If a variance is granted to the Miscellaneous Products and Metal Parts industry until July 1, 1985, the subject industry can be included in the Department's study of alternative control strategies. The two existing variances, FMC and Winter Products, extend until 1987. These two variances are not affected by this request.

The Commission may grant a variance to the subject industry in accordance with ORS 468.345(1)(c) and (d) when no other alternative facility or method of handling is yet available and if strict compliance would result in substantial curtailment or closing down of a business, plant or operation.

Alternatives

The Commission has the following alternatives:

Alternative 1

The Commission could grant a variance to the Miscellaneous Products and Metal Parts industry from OAR 340-22-170(4)(j) until July 1, 1985. The

existing FMC and Winter Products variances would not be incorported into this class variance. The class variance would allow the industry to be included in the Department's study of alternate VOC control strategies. Low solvent emitting coating technology is not available for most applications and strict compliance would result in substantial curtailment or closing down of these operations.

Alternative 2

The Commission could require each source which has not yet requested a variance to do so and have the Department process all the variances individually. The results would be similar to the industry-wide variance alternative listed above.

Alternative 3

The Commission could decline to grant the variances in which case the 21 sources listed would continue to be in violation of OAR 340-22-170(4)(j). The Department would be obligated to initiate further action, including enforcement actions, to gain compliance.

Summation

1. OAR 340-22-170(4)(j) limits the VOC solvent emissions from coating lines for the Miscellaneous Products and Metal Parts industry.

2. Compliance coatings and the systems to apply the coatings are generally not available to the companies included in the Miscellaneous Products and Metal Parts industry.

3. The Department recommends that an industry-wide variance from OAR 340-22-170(4)(j) be granted until July 1, 1985.

4. If a variance is granted, the Department will reconsider the need for this rule in its study of alternative control strategies for VOC control which is due to be completed by December 31, 1984. Any relaxation of the coatings rule will have to be made up from other source categories.

5. FMC and Winter Products have already received variances until 1987.

6. The total amount of VOC emissions reductions is estimated at less than 400 tons/year in the Portland area or less than 1% of the total emissions.

7. ORS 468.325 provides that the Commission may grant specific variances if it finds that strict compliance with the rule or standard is inappropriate because:

a. Conditions exist that are beyond the control of the persons granted such variance;

b. Special circumstances render strict compliance unreasonable, burdensome, or impractical due to special physical conditions or cause;

c. Strict compliance would result in substantial curtailment or closing down of a business, plant, or operation, or;

d. No other alternative facility or method of handling is yet available.

8. The Commission should find that strict compliance would be unreasonable and impractical at this time due to the fact that no other alternative facility or method of coating is yet available and strict compliance would result in substantial curtailment or closing down of a business, plant, or operation.

Acting Director's Recommendation

Based upon the findings in the Summation, it is recommended that the Commission grant a variance for the Miscellaneous Products and Metal Parts Industry with the following conditions:

1. The requirements of OAR 340-22-170(4)(j) be waived for all affected sources until July 1, 1985.

2. The FMC and Winter Products variances remain in effect as originally granted by the Commission.

3. The Department include the Miscellaneous Products and Metal Parts industry in its alternative control strategy analysis for VOC control due to be completed by December 31, 1984.

Michael J. Downs

Attachments:
1. List of Miscellaneous Products and Metal Parts industry.
2. FMC variance.
3. Winter Products variance.
4. Northwest Marine Iron request for variance.
5. Union Pacific Railroad request for variance.

RAY POTTS:a
229-6093
October 17, 1983
AA3907

VICTOR ATIYEH
GOVERNOR

Environmental Quality Commission

Mailing Address: BOX 1760, PORTLAND, OR 97207
522 SOUTHWEST 5th AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

MEMORANDUM

To: Environmental Quality Commission

From: Acting Director

Subject: Agenda Item No. M, November 18, 1983, EQC Meeting

Informational Report on the Ozone Control Strategy and VOC Growth Cushion for the Portland-Vancouver AQMA (Oregon Portion).

BACKGROUND

The Portland-Vancouver Air Quality Maintenance Area (AQMA) is one of three areas in Oregon which have been designated as nonattainment for ozone. The ozone control strategy for the Portland-Vancouver AQMA was adopted by the Commission as a part of the State Implementation Plan (SIP) on July 16, 1982. This strategy was approved by the Environmental Protection Agency (EPA) on October 7, 1982.

The ozone strategy consists of previously committed control measures to reduce volatile organic compound (VOC) emissions from transportation and industrial sources. The Portland ozone analysis indicated that the ozone control strategy would be adequate to meet the ozone standard and provide a small VOC growth cushion by 1987. The ozone modeling projected that VOC emissions in 1987 would be 1700 kilograms per day (kg/day) lower than the VOC emission levels required to just meet the ozone standard.

Subsequent to the adoption of the Portland ozone strategy in July 1982, the Department has received requests for VOC emission increases which would exceed the available VOC growth cushion. As a result of these requests, the Department has updated the Portland ozone analysis and outlined alternatives for handling VOC emission increases.

ALTERNATIVES AND EVALUATION

Ozone is an odorless and potentially toxic gas associated with photochemical smog. It is formed by photochemical reactions in the atmosphere between oxides of nitrogen and volatile organic compounds (VOC) in the presence of direct sunlight and warm temperatures. Reducing VOC emissions is the accepted method of lowering ozone levels.

VOC Emission Trend

The base year for the Portland area VOC emission inventory is 1980. VOC emissions have decreased substantially since 1980 as outlined in Figure 1.

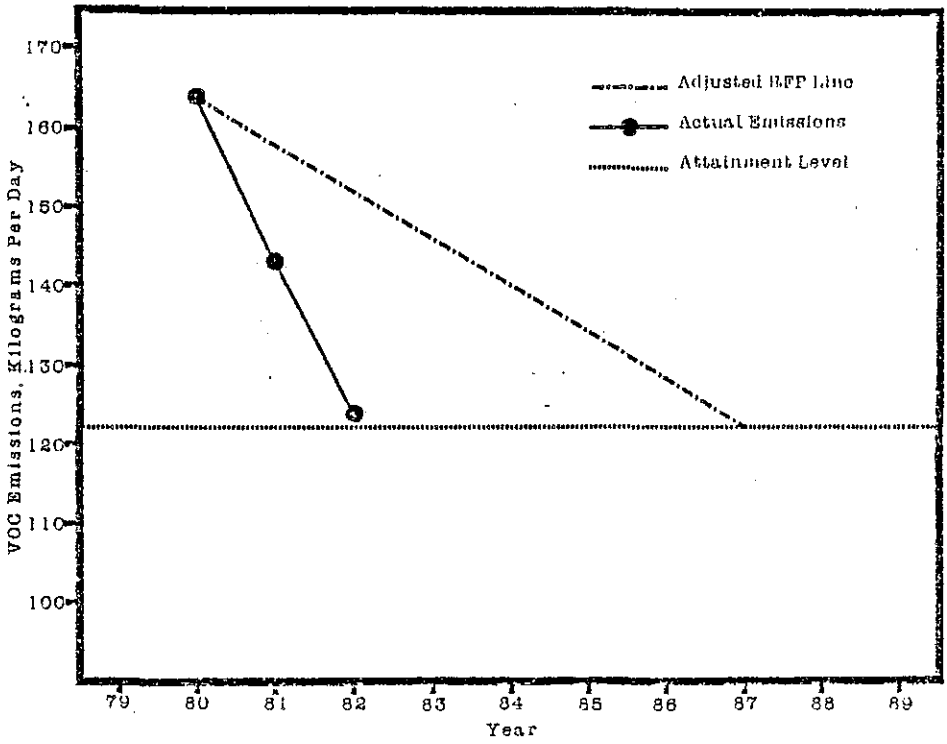


Figure 1. VOC Emission Trend in the Portland-Vancouver AQMA (Oregon Portion).

VOC emission inventories for stationary and mobile sources are summarized in Table 1. Highway VOC emissions in the Portland area have decreased substantially since 1980, primarily due to the Federal Motor Vehicle Emission Control Program (Federal tailpipe program) and the Portland motor vehicle inspection and maintenance (I/M) program. VOC emissions from petroleum marketing and storage sources decreased substantially during the 1980-1982 period due to the installation of: floating roofs, secondary roof seals, and vapor recovery systems on loading racks at gasoline terminals; vapor return systems on gasoline bulk plants; and Stage I controls on gasoline service stations. Some VOC emission decreases in other stationary source categories resulted from new control equipment but the major decreases were from reduced production due to the current economic recession.

Table 1. Portland-Vancouver AQMA (Oregon Portion) VOC Emission Inventories.

Source Category	Volatile Organic Compound Emissions (kg/day)[a] 1980	1981	1982
Stationary Sources	84,721	71,980	59,121
Mobile Sources	78,983	71,378	63,774
Total	163,704	143,358	122,895

a Average summer weekday.

The Portland ozone strategy adopted in July 1982 identified a growth cushion of 1700 kg/day, of which 85% (1445 kg/day) was allocated to Oregon and 15% (255 kg/day) to Washington. Of this growth cushion, a total of 1198 kg/day has been allocated by the Department for industrial expansion (786 kg/day to FMC Corporation) and transportation system revisions and updates (412 kg/day).

Two metal coating firms are currently operating under temporary variances from the VOC rules. A class variance for the metal coating industry is requested under a separate Agenda Item (No. G). These variances would allow VOC emissions to increase by a total of less than 400 tons per year (about 990 kg/day) until 1987. The temporary emissions increases associated with these variances are not expected to interfere with the demonstration of reasonable further progress (RFP) during the 1982-1987 period.

Ambient Ozone Trend

Ambient ozone levels in the Portland area have generally improved over the last seven years. The number of ozone standard exceedances has decreased from 17 in 1977 (actually an estimated 7 exceedances after adjustment for the calibration change) down to 2 exceedances per year in both 1982 and 1983. Five exceedances were recorded during an abnormal heat wave in August 1981. Ambient ozone levels in the Portland area are summarized in Table 2.

Table 2. Summary of Ambient Ozone Levels (Hourly Average) in the Portland Area From 1977 to 1983.

Year	2nd Highest Ozone Day (ug/m^3)[a] Sauvie	Carus	Milwaukie	No. of Days Over 235 ug/m^3 Sauvie	Carus	Milwaukie
1977	208	443	302	0	15	2
1978	245	302	270	2	9	5
1979	310	216	216	1	1	0
1980	164	196	171	0	0	0
1981	213	421	208	0	5	0
1982	235	229	226	1	1	0
1983	97	182	244	0	0	2

a Pre-1979 ozone levels were measured with a different calibration method. The pre-1979 levels should be reduced by 20-25% for comparison with 1979 and later values.

Updated Analysis of the Ozone Strategy

The 1982 ozone strategy projected a small VOC growth cushion. Most of this growth cushion has been allocated as outlined in Table 3. The Department and the Metropolitan Service District (Metro) have updated the stationary and mobile source emission inventories. The Department used the updated emission inventory projections to reevaluate the ozone control strategy. The results of this reevaluation confirm that the ozone strategy is not adequate to accommodate future VOC emission needs.

Table 3. VOC Growth Cushion Allocation for the Portland-Vancouver AQMA.

Description	VOC Growth Cushion (kg/day) Oregon	Washington	Comments
Base Cushion	1700		Before adjustments.
Washington Allocation	-255	+255	Allocated to Washington in July 1982.
Industrial Allocation	-786		Allocated to FMC in June 1983.
Transportation Allocation	-360	-52	Allocation for I-205 and transportation revisions.
Net Growth Cushion	299	203	

Local industries have requested VOC emission increases which are greater than the available growth cushion. For example, the growth cushion is not sufficient to accommodate a permanent rule relaxation for metal coating firms, which would require about 990 kilograms per day of VOC growth cushion. The Department has evaluated various alternatives for dealing with this problem.

Growth Cushion Alternatives

The Portland-Vancouver AQMA ozone strategy adopted by the Commission in 1982 indicated that Oregon would administer a new source review program utilizing the growth cushion concept. The Portland-Vancouver AQMA ozone strategy adopted by the State of Washington in 1982 indicated that Washington would operate in an offset mode, requiring VOC emission offsets by any new or expanded industry locating in the Washington portion of the AQMA. EPA subsequently approved the ozone control strategies submitted by both States and recognized the compatability of the two approaches.

Since it now appears that the needed VOC increases exceed the available growth cushion, the Department has identified the following alternatives for dealing with this problem:

1. The Department could administer the new source review program using the growth cushion concept until the available growth cushion is used up, followed by an offset program.

2. The Commission could adopt additional VOC control measures for the Portland area, thus increasing the available growth cushion, and the Department could continue to administer the new source review program using the growth cushion concept for several years (depending on the magnitude of the VOC reduction from new control measures).

An offset program is viewed by some as a major impediment to growth and development. The Department has favored a growth cushion approach whenever possible in order to remove this impediment to growth and development without sacrificing air quality objectives. The continuation of the growth cushion approach in the Portland area in future years would require the adoption of additional control measures. The major potential VOC control measures for stationary sources which were identified in the 1982 ozone strategy are outlined in Table 4.

Table 4. Potential Future VOC Reductions From Stationary Sources in the Portland Area.

Source Category	VOC Emission Reduction (kg/day)
Service Station Unloading (Stage II)	4,440
Architectural Coating	6,200[a]
Dry Cleaning (Stoddard)	380
More Stringent Gasoline Terminal Rule	870[b]

a This control measure may be technology-forcing in Oregon's climate.
b This rule change would require more stringent controls on 2 of the 9 terminals in the Portland area; the other 7 terminals already provide more stringent controls.

In the 1982 ozone strategy, Metro identified several alternative control measures to reduce VOC emissions from mobile sources. The major potential mobile source control measures are outlined in Table 5.

Table 5. Potential Future VOC Control Measures For Mobile Sources in the Portland Area.

Control Measure	VOC Emission Reduction (kg/day)
Annual I/M Program	5,940
Freeway Ramp Metering	530
Expanded Public Transit	1,035
Additional Park and Ride Lots	80

If the Commission endorses the first alternative, (allocation of growth cushion followed by offset program), then no additional VOC control measures would be required. If the Commission endorses further consideration of the third alternative (new control measures and expanded growth cushion), then the Department would work with Metro and the Portland Air Quality Advisory Committee to identify the most feasible and cost-effective new control measures which could be implemented.

Any revision of the Portland ozone strategy, either to revise the VOC growth cushion or adopt new VOC control measures, would be coordinated with Metro and the State of Washington, presented for public hearing, and reviewed by EPA.

SUMMATION

1. The Portland-Vancouver AQMA is designated as a nonattainment area for ozone.

2. The Portland ozone control strategy was adopted by the Commission in July 1982 and approved by EPA in October 1982.

3. The 1982 ozone strategy was expected to result in attainment of the ozone standard by 1987, and result in a small VOC growth cushion (1700 kg/day) available for new growth and development.

4. The Department has reevaluated the Portland ozone strategy based on ambient ozone trends, VOC emission trends, and updated VOC emission projections. The results of this reevaluation confirm that the ozone strategy is not adequate to accommodate future VOC emission needs.

5. The Department has received industrial projections of need for VOC increases in future years (due to production increases, or rule relaxations) which cannot be accommodated at this time.

6. The Department has identified two alternatives for dealing with this problem:

    a. The Department could administer the available growth cushion until it is used up, and then implement an offset program.

    b. The Commission could adopt additional control measures to expand the available growth cushion, and the Department could continue to administer a new source review program using the growth cushion concept for several years (depending on the magnitude of the VOC reduction from new control measures).

8. The first alternative would require industries that need VOC emission increases to individually provide emission offsets; the second

alternative would require the Department to work with Metro and the Portland Air Quality Advisory Committee to identify the most feasible and cost-effective new VOC control measures which would be applied uniformly to existing VOC sources.

ACTING DIRECTOR'S RECOMMENDATION

The Acting Director recommends that the Commission direct the Department to work with Metro and the Portland Air Quality Advisory Commission to identify as expeditiously as possible the most feasible and cost-effective new VOC control measures which could be implemented to increase the VOC growth cushion in the Portland-Vancouver AQMA. A proposed revised ozone SIP would be brought back to the EQC for hearing authorization.

Michael J. Downs

AA3935
MERLYN HOUGH:a
229-6446
October 21, 1983

ATTACHMENT 3

STATUS OF MISCELLANEOUS PAINTING SOURCES IN PORTLAND AREA

		FIRM NAME	PERMIT NO.	TONS/YEAR VOC (PSEL) *
1.	Compliance achieved by switching to complying coatings.	ESCO	26-2068	7.4
		Portland Willamette	26-2435	59.5
		Hearthcraft	26-3037	21.1
		Brod & McClung Pace	03-2680	13.9
		Union Pacific	26-3098	39.0
2.	Compliance schedule adopted.	FMC (now Gunderson, Inc)	26-2944	776
		Winter Products	26-3033	10.86
3.	Compliance achieved by bubbling.	Chevron	26-2027	16.5
		Freightliner Assy.	26-2197	161.9
		Lear Siegler	34-2670	4.2
		Oregon Steel Mills	26-1865	56.3
		Myers Drum	26-3035	24.7
		Wagner Mining	26-3039	10.5
		Bingham Willamette	26-2749	4.1
		Cascade Corporation	26-3038	5.8
		Wade Manufacturing	34-2667	4.2
		Boeing	26-2204	2.1
		Pacific Fireplace Furn.	26-3031	8.9
4.	Compliance achieved by Agenda Item G class variance.	Tektronix	34-2638	26.3
		Pacific Coating	26-3115	66.4
		Amcoat	26-3036	28.2
		Dura Inc.	26-3112	5.9

* Portion affected by the subject rule.

AP41.A

VICTOR ATIYEH
GOVERNOR

Environmental Quality Commission

Mailing Address: BOX 1760, PORTLAND, OR 97207
522 SOUTHWEST 5th AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Agenda Item No. J , June 7, 1985, EQC Meeting

Request from John Noce III for Reduced Amount of Security for Operation of Private Sewerage Facility

Background

Background and Problem Statement

Oregon Revised Statutes (ORS) 454.425 requires a perpetual surety bond, or approved alternative security, to be posted for construction and operation of a private sewerage system serving multi-family units. The amount of security required and the approved alternatives have been established in Oregon Administrative Rules Chapter 340, Division 15. The rules require security in the amount of $1 per gallon of design capacity. For example, a 10,000 gallon per day system requires a $10,000 bond. The rules require a minimum bond of $5,000 and have a ceiling of $25,000.

The rules allow an insured savings account to be assigned to the Department in lieu of the perpetual bond. If the owner is unable to acquire a perpetual bond or provide the cash for the entire security required, the rules provide for a lesser cash deposit coupled with a non-perpetual bond. Each year the cash deposit must be increased until the entire security requirement is in the savings account.

The Commission may also approve other security in such form or amount as deemed appropriate.

John Noce has acquired a houseboat moorage, Paradise Moorage, and associated sewerage system from Roy H. Berg. Although the septic tank and drainfield serving the facility is large enough to require security in the amount of $10,000, the Commission approved the previous owner to provide a lesser security in the amount of $5,000. That approval was granted at the October 15, 1982 EQC meeting. A copy of the agenda item is included as Attachment B.

Mr. Noce has requested that the $5,000 security requirement remain the same for him as the new owner. He gives reasons of financial hardship based upon additional unforeseen expenses he has incurred since acquiring the moorage. His request is included on Attachment A.

Alternatives and Evaluation

There are at least three alternatives available for commission consideration:

1. Deny the request to allow the new owner to continue with a reduced security. This would require Mr. Noce to either acquire a $10,000 perpetual bond or assign a $10,000 savings account to the Department. Since perpetual bonds are very difficult to get, Mr. Noce would probably be required to assign a $10,000 savings account to the Department.

2. Allow a combination security in the form of an assigned savings account plus an annually renewable bond. If Mr. Noce could show evidence that he could not get a perpetual bond and could not raise the necessary $10,000 in cash, the Department could allow an amount at least equal to one-third of the security requirement to be assigned to the Department in the form of a savings account with the remaining amount in the form of a non-perpetual bond. The savings account would have to be increased each year by at least 20% of the total required security until the total amount required had been assigned.

3. Authorize continuation of a reduced security in the amount of $5,000. The Commission could approve Mr. Noce's request for a savings account of $5,000 to be the total required security. This would extend to Mr. Noce the same consideration granted the previous owner.

   Factors which provide some justification for approving the request include:

   (a) The new owner has requested the lower amount based on financial hardship.

   (b) A reduced amount of security was approved for the previous owner on the same basis.

   (c) The system consists of a large concrete septic tank and community drainfield with no large items which require periodic maintenance or replacement.

   (d) Those items which would likely need periodic attention are replacement of small sewage pumps, septic tank pumping, and broken pipe repairs.

   (e) Since the system serves a houseboat moorage, it could be closed and the houseboats relocated in the event of a massive failure of the system.

Summation

1. ORS 454.425 requires a perpetual surety bond or approved alternative security for private sewerage systems serving multi-family units.

2. The amount of security required is based upon the design capacity of the sewerage system. A 10,000 gallon per day facility requires $10,000 in security.

3. The Commission may approve a change in the security required, either in form or amount.

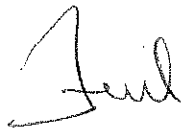
4. October 15, 1982, the Commission reduced the amount of security required for the Paradise Moorage from $10,000 to $5,000. This occurred as a result of a hardship request from the owner, Roy H. Berg. The sewerage system for which the security is required is a large septic tank and drainfield serving a houseboat moorage.

5. The Paradise Moorage has now changed hands. The new owner, John Noce III, has requested that the Commission approve the same amount of security for him as had been approved for the previous owner.

6. The new owner is also pleading financial hardship because of unanticipated costs associated with the moorage.

Director's Recommendation

Based upon the Summation, it is recommended that the Commission approve the amount of $5,000 as the required security for the sewerage system serving the Paradise Moorage.



Fred Hansen

Attachments 3 - A. Letter from John Noce III
B. Commission Agenda Item R, October 15, 1982
C. OAR Chapter 340, Division 15

C.K. Ashbaker:h
WM177
229-5325
5/20/85

ATTACHMENT A

CQ # 139
$ 50.00
5-02-85

John Noce III
Paradise Moorage
50350 Cowens Rd #1
Scappoose, Or 97056

April 30, 1985

Appl # 999723
OK to transfer

Charles K. Ashbaker
Supervisor, Sourse Control Section
Water Quality Division

Dear Mr. Ashbaker:

In response to your letter dated April 22, 1985, I am formally requesting from you a transfer of River Port Moorage's waste water permit (Permit # 3575, File # 7888 Columbia County) to John Noce III dba Paradise Moorage. In addition, I should like to plead my case for a poverty statis ceiling of $5000 in the form of a time certificate.
The basis for such a plea being the excessive overruns in costs. A few cases in point are as follows: New $5000 fresh water well sours. Additional cost of $6000. New $11,000 graded and gravelled road is not good enough for the new county road master. Instead of oil, 3" of finished asphalt is required to the tune of $28,500. Berg's original estimate of $10,000 for dredging 500' of river bottom peaks out at $26,500. Worst of all, the IRS have become such greedy basturds. There's plenty more if you would like to hear it but I won't waste your time now.(Besides, no one likes to beg)

Enclosed is the $50 fee.

If you have any questions which I can answer to expedite your favorable decision please call me at 543-5009

Sincerely,

John Noce III
Paradise Moorage
50350 Cowens Rd #1
Scappoose, Or 97056

Rec'd WQ 5-3-85

ATTACHMENT B

VICTOR ATIYEH
GOVERNOR

Environmental Quality Commission

Mailing Address: BOX 1760, PORTLAND, OR 97207
522 SOUTHWEST 5th AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Agenda Item No. R, October 15, 1982, EQC Meeting

Request from Roy H. Berg for Alternate Form of Security for Construction of Sewerage Facility for Houseboat Moorage

Background

Mr. Roy H. Berg is constructing a houseboat moorage on Multnomah Channel in Columbia County. A sewerage system, consisting of a 10,000-gallon septic tank and large drainfield, will serve the facility.

Oregon Administrative Rules 340 Division 15 requires that every person proposing to construct facilities for collecting treatment, or disposal of sewage with a design capacity over 5,000 gallons per day, file with the Department a surety bond, insured savings account assigned to the Department, or other security in form and amount as specifically approved by the Commission.

Mr. Berg claims he has not been able to get anyone to provide him a $10,000 bond of the perpetual nature required by the rules. Department staff have contacted one of the local insurance companies who have provided these surety bonds in the past and have verified that they are not willing to provide a perpetual bond for a small operator like Mr. Berg. He also does not have the $10,000 available for a cash deposit.

Problem and Evaluation Statement

Mr. Berg is anxious to construct the drainfield before winter weather arrives. He is stymied because of his inability to get a surety bond.

Since he is constructing a standard-type septic tank and drainfield with no pumps or other high-maintenance components, the necessity of a perpetual surety bond is far less than if he were constructing a mechanical-type sewage treatment plant.

Mr. Berg can get a short-term surety bond without difficulty. He requests that he be allowed to get a surety bond with an expiration date of two years to cover the construction of the sewerage facility and one year of operation. In lieu of that he requests that the cash deposit be reduced to $5,000.

Because of the critical need for houseboat moorages with sewerage facilities and the low-maintenance characteristics of the facilities proposed, the Department staff can support Mr. Berg's request for the reduced cash deposit. A reduced-level cash deposit would be more satisfactory than a short-term surety bond for the continued operation and maintenance of the system.

Summation

1. OAR 340 Division 15 requires perpetual security for all private sewerage facilities with a design capacity of over 5,000 gallons per day.

2. Mr. Roy Berg is proposing a 10,000-gallon-per-day septic tank and drainfield for a houseboat moorage.

3. Surety Companies are unwilling to write a perpetual surety bond for individuals like Mr. Berg.

4. The system being proposed is a low-maintenance system and the need for perpetual security is not great.

5. Mr. Berg can get a short-term surety bond during construction or provide a cash deposit of $5,000.

6. Mr. Berg has requested relief from the requirement for the $10,000 perpetual security for the sewerage system.

Director's Recommendation

Based upon the summation, it is recommended that the Commission approve Mr. Berg's request and allow him to provide a $5,000 insured savings account or equivalent, assigned to the Department in lieu of the $10,000 security.

William H. Young

Attachments: 1
A. Letter from Roy Berg

Charles K. Ashbaker:l
WL2024
229-5325
10/7/82

ATTACHMENT A

October 7, 1982

Charles K. Ashbaker, Supervisor Source Control Section
Water Quality Division
Department of Environmental Quality
P.O. Box 1760
Portland, Oregon 97207

Dear Mr. Ashbaker;

In regards to our phone conversation today concerning the bond for the drain field for River Port Moorage, I would ask your department if it is possible to reduce the time limit on the surety bond from a perpetual time limit to that of one for two years. We have not been able to find a bonding company that will bond it for a perpetual time, however I feel if that stipulation could be modified to a two year time period, we would be successful in finding a bonding company.

If the department cannot see their way to make this change, then our other alternative would be to reduce the security requirements from $10,000 to $5,000 on an insured savings account assigned to the department with interest earned by such account made payable to the assignor (Roy H. Berg.) This would help to reduce the hardship imposed on us by these requirements.

As you know time is very important, as the rainy season is almost here, and we need good weather to put in the drain field. Please let me know your decission as soon as possible.

Sincerely,

Roy H. Berg

Roy H. Berg 655-9301
River Port Moorage
1150 Clayton Way
Gladstone, Oregon 97027

DIVISION 15

SURETY BONDS OR OTHER APPROVED EQUIVALENT SECURITY FOR CONSTRUCTION, OPERATION, AND MAINTENANCE OF SEWAGE COLLECTION, TREATMENT OR DISPOSAL FACILITIES

Statement of Purpose

340-15-005 These rules, adopted pursuant to ORS 454.425, prescribe the requirements and procedures for the filing, maintenance, and termination of surety bonds or other approved equivalent security for the construction, operation, maintenance of sewage collection, treatment, or disposal facilities.

Stat. Auth.: ORS Ch.
Hist: DEQ 82, f. 1-30-75, ef. 2-25-75

Definitions

340-15-010 As used in these rules, unless the context requires otherwise:

(1) "Alternative sewage disposal system" has the same meaning as in ORS 454.605(2).

(2) "Commission" means the Environmental Quality Commission.

(3) "Construct" or "Construction" includes installation, repair, and major modification or addition.

(4) "Department" means the Department of Environmental Quality.

(5) "NPDES waste discharge permit" means a waste discharge permit issued in accordance with requirements and procedures of the National Pollutant Discharge Elimination System required by the Federal Water Pollution Control Act Amendments of 1972 (Public Law 92-500) and of OAR 340-45-005 through 340-45-065.

(6) "Person" means any person as defined in ORS 174.100 but does not include, unless the context specifies otherwise, any public officer acting in his official capacity or any political subdivision, as defined in ORS 237.410.

(7) "Subsurface sewage disposal system" has the same meaning as in ORS 454.605(14).

Stat. Auth.: ORS Ch.
Hist: DEQ 82, f. 1-30-75, ef. 2-25-75; DEQ 99(Temp), f. & ef. 10-1-75; DEQ 102, f. & ef. 12-18-75

Surety Bond Required

340-15-015 (1) Every person proposing to construct facilities for the collection, treatment, or disposal of sewage shall file with the Department a surety bond, or other approved equivalent security, of a sum determined under rule 340-15-025 of these rules.

(2) The following shall be exempt from the provision of section (1) of this rule:

(a) Any subsurface, alternative, or other sewage disposal system or systems designed or used to treat or dispose of a sewage flow of not more than 5,000 gallons (18.925 cubic meters) per day;

(b) Any subsurface, alternative, or other sewage disposal system or systems, regardless of size, used to serve any food handling establishment, mobile home or recreation park, tourist and travelers facilities, or other development operated by a public entity or under a valid license or certificate of sanitation issued by the State Health Division or Department of Commerce;

(c) Any sewage collection, treatment, or disposal facility owned and operated by a state or federal agency, city, county, county service district, sanitary authority, sanitary district, or other public body, including, but not limited to, a school district or port district;

(d) Any sewage collection, treatment, or disposal facilities of an industrial plant or commercial development having a valid NPDES Waste Discharge Permit or Water Pollution Control Facilities Permit issued by the Department pursuant to ORS 468.740 provided such facilities serve only employees or customers but no permanent residences.

Stat. Auth.: ORS Ch.
Hist: DEQ 82, f. 1-30-75, ef. 2-25-75; DEQ 99(Temp) f. & ef. 10-1-75; DEQ 102, f. & ef. 12-18-75

Type of Security

340-15-020 The type of security to be furnished pursuant to ORS 454.425 may be:

(1) Perpetual surety bond executed in favor of the State of Oregon on a form approved by the Attorney General and provided by the Department, such bond to be issued by a Surety Company licensed by the Insurance Commissioner of Oregon;

(2) Insured savings account assigned to the Department with interest earned by such account made payable to the assignor; or

(3) When it is not possible to acquire a perpetual surety bond or insured savings account for the total amount of security as required by OAR 340-15-025, a combination of insured savings account and a non-perpetual surety bond may be approved if the following conditions are met:

(a) Evidence must be provided that a perpetual surety bond cannot be acquired. This evidence shall consist of denial letters from at least two surety companies.

(b) A minimum insured savings account for at least 20% of the total required security must be provided. The remainder of the required security may be covered by a renewable, non-perpetual bond, on a form provided by the Department.

(c) The surety bond shall not be cancellable during construction of the facility and one full year of operation.

(d) Each year thereafter the insured savings account shall be increased by at least 20% of the total required security until such time as the savings account is equal to the total required security. The renewable bond may be decreased equivalent to the savings account increase until it is no longer required.

(e) At all times the combination of the savings account and the surety bond must be equal to the total amount of security required by OAR 340-15-025, unless specifically approved otherwise by the Commission.

(3) Other security in such form and amount as specifically approved by the Commission.

Stat. Auth.: ORS Ch. 454
Hist: DEQ 82, f. 1-30-75, ef. 2-25-75; DEQ 4-1984, f. & ef. 3-7-84

Amount of Bond or Other Security

340-15-025 The amount of the surety bond or other approved equivalent security filed with the Department shall be equal to $1.00 per gallon per day of installed sewage treatment or disposal capacity with the minimum sum not to be less than $2,000, or shall be of some other sum specifically approved by the Commission, except that in no case shall the maximum sum exceed $25,000.

Stat. Auth.: ORS Ch.
Hist: DEQ 82, f. 1-30-75, ef. 2-25-75

Transfer of Facilities

340-15-030 The ownership of the sewage disposal facilities shall not be transferred without the prior written approval of the Department and the surety bond or other approved

VICTOR ATIYEH
GOVERNOR

Environmental Quality Commission

Mailing Address: BOX 1760, PORTLAND, OR 97207
522 SOUTHWEST 5th AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Agenda Item No. K, June 7, 1985, EQC Meeting

Request for Approval of Preliminary Plan, Specifications and Schedule for Sanitary Sewers to Serve Health Hazard Annexation Area Known as North Vernonia Road Area, Contiguous to City of St. Helens, Columbia County

Background

Pursuant to ORS 222.850-915, the Administrator of the State Health Division, on March 8, 1985, certified an area contiguous to the City of St. Helens to be a health hazard because of failing septic systems. The certification orders a study and plan for alleviation of the health danger by the city. The area requiring annexation to correct the health hazard is known as the North Vernonia road area. A copy of the annexation order was sent to the City of St. Helens. (Attachment 1)

The area was surveyed during 1983. Twenty of twenty-five properties had inadequate sewage disposal.

The City has 90 days after receipt of a certified copy of the order to prepare preliminary plans and specifications, together with a time schedule for removing or alleviating the health hazard.

By letter received April 17, 1985, the City of St. Helens has submitted preliminary plans, and a time schedule for construction of sewers in the proposed annexation area. (Attachment 2) Specifications will be similar to a recently approved sewer project.

The Environmental Quality Commission has 60 days from time of receipt of preliminary plans and other documents to determine them either adequate or inadequate to remove or alleviate the dangerous conditions and to certify same to the City.

Upon receipt of EQC certification, the City must adopt an ordinance in accordance with ORS 222.900 which includes annexation of the territory. The City is then required to cause the necessary facilities to be constructed.

Evaluation

The schedule proposed by the City calls for annexation of the territory immediately following certification of preliminary plans, specifications, and time schedule by the EQC. All construction work would be completed within six months.

The preliminary plans and specifications require construction of gravity sewers within the health hazard annexation area. These would connect to an existing ten inch sewer in Campbell Park.

Treatment of collected sewage will be at the City's treatment plant which has adequate capacity to do so.

The staff concludes from the Health Division findings and conclusions that the health hazard in the area is a result of sewage at or on the surface of the ground resulting from disposal systems constructed within shallow soil over rock. Installation of a sewage collection system will prevent the discharge of inadequately treated sewage onto the ground surface, into various ditches through Campbell Park and into Milton and McNulty Creeks.

Thus, the staff concludes that installation of sewers in the area will alleviate the health hazard.

Summation

1. Pursuant to the provisions of ORS 222.850 to 222.915, the State Health Division issued an order adopting findings and conclusions and certified a copy to the City of St. Helens.

2. The City has submitted a preliminary plan and specifications, together with a time schedule to the DEQ for review.

3. ORS 222.898(1) requires the Commission to make a determination of the adequacy or inadequacy of the preliminary plans and other documents submitted by the City within 60 days of receipt.

4. ORS 222.898(2) requires the Commission to certify to the City its approval if it considers the proposed facilities and time schedule adequate to remove or alleviate the dangerous conditions.

5. The gravity sewer proposed by the plans and specifications will alleviate the conditions dangerous to public health within the area to be annexed. The proposed time schedule for completion of construction within 6 months after certification is very satisfactory.

Director's Recommendation

Based upon the findings in the summation, it is recommended that the Commission approve the proposal of the City of St. Helens and certify approval to the City.

Fred Hansen

Attachments 1. Health Division Rulings, Findings, Conclusions of Law and Order
2. City Letter of April 10, 1985 with attachments including preliminary plan and schedule

James L. Van Domelen:m
WM199
229-5310
May 10, 1985

ATTACHMENT 1

VICTOR ATIYEH
GOVERNOR

Department of Human Resources
HEALTH DIVISION
1400 S.W. 5th AVENUE, PORTLAND, OREGON 97201 PHONE 229-5954

March 7, 1985

CERTIFIED MAIL # P734894640
RETURN RECEIPT REQUESTED

Rosaline Mallory
City of St. Helens
P.O. Box 278
St. Helens, Oregon 97051

Dear Ms. Mallory:

RE: IN THE MATTER OF THE PROPOSED ANNEXATION OF A CERTAIN TERRITORY COMMONLY KNOWN AS THE NORTH VERNONIA ROAD AREA TO THE CITY OF ST. HELENS, COLUMBIA COUNTY, OREGON, PURSUANT TO THE PROVISIONS OF ORS 222.850 TO 222.915 DUE TO CONDITIONS CAUSING A DANGER TO HEALTH.

Please find enclosed a certified copy of Findings and Final Order in the above stated matter.

I refer you to ORS 222.897 through 222.900 which direct procedures following these findings. If you have questions in this regard, please contact me at 229-6325.

Sincerely,

Ronald A. Hall, R.S., Manager
Health Hazard Studies Program
Office of Environment and Health Systems

RAH:io

cc: James Petersen, EQC CERTIFIED MAIL #P734894641
Janet Gillespie, DEQ
Fred Bolton, DEQ
Hal Sawyer, DEQ
Ray Eastwood, Columbia County Land Development Office

CERTIFICATE

I, Kristine Gebbie, Assistant Director for Health, Department of Human Resources, Administrator of the State Health Division and legal custodian of the records and files of said Division, DO HEREBY CERTIFY:

That the attached copy of the ASSISTANT DIRECTOR'S FINDINGS OF FACT, ULTIMATE FINDINGS OF FACT, CONCLUSIONS OF LAW AND ORDER, in the matter of the Annexation of Certain Territory commonly known as the N. Vernonia Road Area to the City of St. Helens, has been compared by me with the original thereof and said copy is a true, full and correct transcript from and of the whole of said original as the same appears in the records of the State Health Division in my custody.

In Testimony Whereof, I have hereunto set my hand this 5th day of March, 1985.

Kristine M. Gebbie
Assistant Director, Human Resources
Administrator, State Health Division

BEFORE THE STATE HEALTH DIVISION

OF THE DEPARTMENT OF HUMAN RESOURCES

OF THE STATE OF OREGON

In the Matter of the Proposed Annexation of a Certain Territory Commonly Known as the North Vernonia Road Area to the City of St. Helens, Columbia County, Oregon, Pursuant to the Provisions of ORS 222.850 to 222.915 Due to Conditions Causing a Danger to Public Health	ASSISTANT DIRECTOR'S FINDINGS OF FACT, ULTIMATE FINDINGS OF FACT, CONCLUSIONS OF LAW AND ORDER

A hearing on the question of the existence of a danger to public health in the above-entitled matter was held on August 29, 1984, in the Columbia County Courthouse, St. Helens, Oregon, a place near the proposed area to be annexed, before Samuel J. Nicholls, the hearings officer appointed by the Health Division. The hearings officer considered all the evidence presented by the Division and affected persons and made his FINDINGS OF FACT, CONCLUSIONS OF LAW and RECOMMENDATIONS. Opportunity for arguments and for petitioning for exclusion of property was thereafter given by publication of notice as prescribed by rules of the Division. Two petitions for exclusion were received and a hearing on these petitions was provided on January 22, 1985 as required by rule and statute. Following this hearing the appointed hearings officer, William Gibson, upon consideration of all evidence presented, issued his FINDINGS OF FACT, CONCLUSIONS OF LAW and RECOMMENDATIONS.

The Assistant Director, having considered the findings,

conclusions and recommendations of the appointed hearings officers, now make the following disposition of this matter.

FINDINGS OF FACT

I.

By order of the Oregon State Health Division dated June 26, 1984, a hearing was ordered in this matter for the following purpose: to determine whether a danger to public health exists due to conditions existing in the territory proposed to be annexed and described in a resolution dated May 2, 1984 of the Columbia County Board of Health.

II.

Notice of said order and resolution was given by the Health Division by publication once each week for two successive weeks in the Sentinel-Mist Chronicle, a newspaper of general circulation within the City of St. Helens, Oregon and the territory proposed to be annexed, and by posting copies of the order and resolution in each of four public places within the territory proposed to be annexed.

III.

There is no community collection system for sewage disposal and treatment within the area proposed to be annexed; all units depend upon individual sub-surface sewage disposal facilities, primarily septic tanks and drainfields.

IV.

There are two primary components to a septic tank and drainfield system. The first is the septic tank itself, which is a

water-tight box which serves as a settling basin to settle out solids. The second component is a drainfield, which is a series of underground pipes through which the sewage effluent is pumped into the ground.

V.

Treatment of raw sewage occurs in the soil of the drainfield, where micro-organisms in the presence of oxygen break down pathogenic or disease causing organisms which may be present in human sewage.

VI.

Properly constructed and functioning sub-surface disposal systems do not pump sewage effluent onto the ground surface. Sewage must be retained in the soil to be adequately treated bacteriologically and to be rendered non-septic. Sewage effluents rising or discharging onto the ground surface from a sub-surface sewage disposal facility are inadequately treated and essentially raw.

VII.

Limiting factors to the effective use of a sub-surface drainage system are soil type of the drainfield and the level of the water table. Both factors affect the amount of oxygen in the soil, which is necessary for adequate bacteriological treatment of the effluent. Presence of excess water in the drainfield limits the amount of oxygen available to the micro-organisms which break down the pathogenic organisms in the sewage and render them non-septic.

VIII.

The soil types and the general conditions of soil saturation in the area proposed for annexation are not conducive to the adequate operation of the sub-surface sewage systems serving the area.

IX.

Non-treated sewage being discharged onto the ground may be detected by a very strong characteristic odor and appearance. In addition, non-treated sewage rising to the surface may be detected by finding standing water on the surface of a drainfield which does not appear on adjacent areas, especially when combined with a lush green growth of grass over the drainfield area.

X.

One method used to detect an improperly functioning sub-surface sewage disposal system is to introduce a dye into the toilet of a particular system, flush water through the system, and watch to see if the hydraulic action of the system carries that dye to the surface of the ground. If the dye appears on the ground at all, the system is not functioning properly. If the dye appears on the surface within a short period of time, virtually no treatment is being provided to the sewage discharged into that particular system.

XI.

Pathogens, or disease-causing agents, are found in the fecal material of mammals. Microbiological testing for the presence of the following organisms is performed to investigate the presence

of inadequately treated sewage: total coliform, fecal coliform, and decal streptococcus organisms. These organisms are not themselves pathogens, but are indicators of the presence of fecal matter which may contain pathogens.

1. Coliform organisms are bacteria widely distributed in nature, and are always found in the feces of mammals; therefore, they are a reliable indicator of the presence of some contaminant, which may or may not be from a fecal source.

2. Fecal coliform organisms, if present, show that the contamination is definitely from a fecal source, and the danger of transmission of disease is therefore immediate and serious.

3. The presence of fecal streptococcus organisms indicate the presence of a fecal contaminant which may or may not be from a human source. The relatively short lifespan of these organisms indicates that the contamination is quite recent.

XII.

A statistical method used to report test results for these micro-organisms is the MPN (MOST PROBABLE NUMBER) method, which is a statistical count of what would be the most probable number of colonies of these individual organisms per one hundred milliliters of water.

XIII.

The following conditions existed on properties within the area proposed for annexation, and without evidence to the contrary, are presumed to continue to exist:

1. On February 8, 1983, on tax lot 3400 of tax map 41513,

the ground above the drainfield area was saturated with water. The soil on this property is unsatisfactory for a sub-surface sewage disposal system, because of slow percolation characteristics.

2. On February 8, 1983, on a developed portion of tax lot 2800 of tax map 41513, the ground above the drainfield area was saturated, The owner of this property acknowledges that sewage discharged into the sub-surface system rises to the ground surface.

3. On February 8, 1983, on tax lot 2900 of tax map 41513, dye was introduced into the toilet at 3:00 p.m. The dye was observed in a ditch at the side of the house and in the area of the septic tank behind the house five (5) minutes later. A water sample taken from that area indicated the presence of total coliform (MPN 11,000), fecal coliforn (MPN 72), fecal streptococcus (MPN 36) organisms.

4. On February 8, 1983, there was standing water and a saturated marshy area over the drainfield east of the house located on tax lot 300 of tax map 41513. The soil on this property is unsatisfactory for sub-surface sewage disposal because of slow percolation characteristics. Untreated sewage in the marshy area over the drainfield drains through a series of culverts into Milton and McNulty Creeks.

5. On February 23, 1983, on tax lot 1200 of tax map 41524, a lush green growth of grass was observed around water standing on the drainfield area. Dye was introduced into the toilet at the

house at 2:45 p.m. on February 23, 1984 and was observed on the surface of the drainfield area at 11:00 a.m. on the following day. Water from the surface of the drainfield drains across the road, into a marshy area on tax lot 300, and ultimately into Milton and McNulty Creeks. A water sample taken from that area indicated the presence of total coliform (MPN>1,100), fecal coliform (MPN>1,100); and fecal streptococcus (MPN 240) organisms).

6. On February 8, 1983, water standing on tax lot 1300 of tax map 41524 had the characteristic odor and appearance of sewage. The owner of this property confirms that sewage often surfaces on the property due to the high water table.

7. On May 15, 1984, a pipe from the side of the house located on tax lots 2000 and 2100 of tax map 41524 was discharging a liquid with the characteristic odor and appearance of sewage directly into a ditch on the south side of the property. Dye introduced into the sewage system of the house appeared in the ditch within thirty (30) minutes. The ditch drains past Campbell Park and ultimately into Milton and McNulty Creeks.

8. On February 8, 1983, on tax lot 2400 of tax map 41524, the drainfield area was saturated with water. The soil on the property is rated as unsatisfactory for sub-surface sewage disposal because of slow percolation characterisitics.

9. On February 16, 1983, on tax lot 1700 of tax map 41524, a lush green growth of grass and standing water were present over the drainfield area. Dye was introduced into the sewage system

at 11:20 a.m. on February 16, 1983 was observed on the ground surface of the property at 11:00 a.m. on the following day. A water sample of this water showed the presence of total coliform (MPN 11,000), fecal coliform (MPN 430), and fecal streptococcus (MPN 430) organisms.

10. On February 9, 183, on tax lot 1600 of tax map 41524, standing water was observed over the drainfield area. The dye introduced into the sewage system, on the property at 3:30 p.m. on February 9, 1983 was observed on the ground surface of the property at 9:30 a.m. on the following day. A later sample taken of this water showed the presence of total coliform (MPN>11,000), fecal coliform (MPN 230); and fecal streptococcus (MPN 2,400).

11. On February 16, 1983, on tax lot 1500 of tax map 41524, a lush green growth of grass was present over the drainfield area. The soil in the drainfield area was saturated with water. The owner admitted to having sewage on the ground at various times during the year. A water sample taken of this water showed the presence of total coliform (MPN 2,400), fecal coliform (MPN 2,400); and fecal streptococcus (MPN 91) organisms.

12. On February 16, 1983, on tax lot 1400 of tax map 41524, a lush green growth of grass was present over the drainfield area. The soil in the drainfield area was saturated with water. A dye introduced into the sewage system on the property was observed on the surface of the ground within five (5) minutes.

13. On February 16, 1983, a pipe draining from the house

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located on tax lot 1000 of tax map 41524, was discharging sewage effluent into the field. A sample taken at the outfall of the pipe showed the presence fo total coliform (MPN 11,000), fecal coliform (MPN (30), and fecal streptococcus (MPN 36) organisms.

14. On February 16, 1983, on tax lot 300 of tax map 415, standing water was observed over the drainfield, and effluent with the characteristic odor and appearance of sewage was being discharged by a pipe into an open ditch. A dye was introduced into the sewage system of the house and was observed in the ditch within a very short time. This ditch drains into a roadside ditch on North Vernonia Road, through Campbell Park, and ultimately into Hilton and McNulty Creeks. A water sample of this water showed the presence of total coliforms (MPN>11,000), and fecal coliform (MPN>11,000) organisms.

15. On May 1, 1983, on a developed portion of tax lot 200 of tax map 415, a lush green growth was observed over the drainfield area. The soil in the drainfield area was saturated with water. A dye introduced into the sewage system of the house on the property at 11:00 a.m. was observed on the ground surface above the drainfield area the following day. The drainfield drains into the roadside ditch on North Vernonia Road, through Campbell Park, and ultimately into Hilton and McNulty Creeks. A water sample taken of this water showed the presence of total coliform (MPN>11,000), fecal coliform (MPN 430), and fecal steptococcus (MPN 460) organisms.

16. On May 1, 1983, a dye was introduced into the sewage

system of the house located on tax lot 100 of tax map 41531. Within five (5) minutes, the dye was observed discharging from a pipe on the property into a ditch which flows through Campbell Park and ultimately into Milton and McNulty Creeks.

17. On May 15, 1984, an open pit surrounding the distribution tank serving the septic system of the house on tax lot 1800, on tax map 41524, was surrounded by sewage. A water sample taken of this water showed the presence of total coliform (MPN 24,000) and fecal coliform (MPN 11,000) organisms.

18. On February 23, 1983, a dye introduced into the sewage system of the house located on tax lot 4400 of tax map 41513 at 12:00 noon was observed at 3:05 p.m. in a swampy area behind the house. Gray water waste from this house discharges directly onto the surface of the ground. A water sample taken of this dyed effluent showed the presence of total coliform (MPN>1,100), fecal coliform (MPN>1,100), and fecal streptococcus (MPN 42) organisms.

19. On February 23, 1983, a lush green growth of grass was present over the drainfield area on tax lot 4300 of tax map 41514. Groundwater was found at a depth of six (6) inches on the property. The sub-surface sewage disposal system is inadequate in size to serve the house located on the property, thus allowing sewage access to the roadside ditch and ultimately into Milton and McNulty Creeks.

20. On May 13, 1984, a lush green growth of grass exists over the drainfield area of the house located on tax lot 3,000 of

tax map 41513, commonly known as 390 North Vernonia Road. On May 14, 1984, effluent with the characteristic odor and appearance of sewage was observed discharging directly to the surface of the ground.

XIV.

Raw or inadequately treated sewage may contain communicable or contagious disease-producing organisms, which cause physical suffering or illness. Such condition can arise when an infected person's feces is deposited into the sewage. When sewage containing such organisms is permitted to discharge on the surface of the ground or into drainage ditches there is a possibility of transmission of disease to humans, either by direct contact of sewage or through the intervening contact of the sewage by vectors.

XV.

In the area proposed for annexation, the possibility of contracting disease through direct or indirect contact with raw or inadequately treated sewage occurs due to:

1. Normal daily activities carried on in and around the residential living units in the area.

2. Children playing in the area are exposed to contaminated surface water.

3. Domestic animals found in the subject area are possible vectors of pathogens to residents within and outside the area.

4. Other vectors, such as insects, rodents, or other pests, could transmit pathogens to persons within and outside the area.

XVI.

Persons living within the territory proposed for annexation who contract diseases as discussed above could, in turn, carry diseases so contracted to persons living outside the subject territory, either by direct personal contact or by contaminating food to be consumed by persons outside the territory. In addition, persons from outside the territopry are exposed to the conditions discussed above by virtue of the passage of contaminated water through drainage ditches on the surface of the ground through Campbell Park, and into Milton and McNulty Creeks, which are used for recreation.

XVII.

By Notice of the Oregon State Health Division dated December 31, 1984, a hearing was ordered in this matter for the following purpose: To receive evidence relative to the petitions for exclusion of territory from the territory proposed to be annexed in the within proceeding. Petitioners were: Marion V. and Blanche I. Gartman, owners of tax lot 200 on tax map 415 and Melvin E. and Jean E. Moore, owners of tax lot 2800 on tax map 41513. Petitioners sought to exclude undevleoped portions of the tax lots in question.

XVIII.

Notice of the hearing was given by the Health Division by publishing the notice in the Sentinel Mist Chronicle, aforementioned on January 6, 1985.,

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XIX.

No danger to public health presently exists on any of the property proposed for exclusion from the annexation.

XX.

None of the areas proposed for exclusion would be surrounded by the terriotry remaining to be annexed.

XXI.

The reduction in boundaries would be in accordance with statewide planning goals for the area established under ORS ch 197.

XXII.

The property proposed to be excluded would not be directly served by the facilities necessary to remove or alleviate the danger to public health exisiting in the area remaining to be annexed.

XXIII.

The area proposed for annexation as described in the county resolution after excluding the proposed portions of tax lot 200 on tax map 415 and tax lot 2800 on tax map 41513 is continguous to the City of St. Helens, Oregon, and is within the urban growth boundaries of the city.

ULTIMATE FINDING OF FACT

1. The improper and inadequate installation for the disposal or treatment of sewage or other contaminated or putrifying wastes, as described in paragraph XIII, constitute conditions which are conducive to the propagation of communicable or contagious disease-producing organisms and which present a reasonably

clear possibility that the public generally is being exposed to disease-caused physical suffering or illness.

2. Such conditions do not exist within the portions of tax lot 200 on tax map 415 and tax lot 2800 on tax map 41513 proposed for exclusion and such territory further qualifies for exclusion from the boundary proposed for annexation in the county resolution.

3. The area remaining for annexation after excluding the proposed portions of tax lot 200 on tax map 415 and tax lot 2800 on tax map 41513 which remaining area is legally described in the attached Exhibit "A" made a part hereof, is contiguous to the City of St. Helens, Oregon, and is within the urban growth boundary of the cty.

CONCLUSIONS OF LAW

1. Under ORS 222.880(3) and (4), and OAR 333-12-045, the portions of tax lot 200 on tax map 415 and tax lot 2800 on tax map 41513 proposed for exclusion would be appropriately excluded from the area proposed for annexation.

2. A danger to public health as defined in ORS 222.850(4), as provided in ORS 222.850 to 222.915, exists within the territory described in paragraph three of the ULTIMATE FINDINGS OF FACT above. Such area is otherwise eligible for annexation to the City of St. Helens, Oregon, in accordance with ORS 222.111 and is within the urban growth boundary of the City of St. Helens, Oregon.

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ORDER

IT IS ORDERED that a certified copy of these findings and conclusions be filed with the City of St. Helens, Oregon, and with the Environmental Quality Commission; and that upon their receipt of such findings and conclusions, the City of St. Helens and the Commission proceed in accordance with ORS 222.897 and 222.900.

DATED this 8 day of March, 1985.

KRISTINE M. GEBBIE, Assistant
Director, Human Resources
Administrator, Health Division

NOTICE: You are entitled to judicial review of this order. Judicial review may be obtained by filing a petition for review within 60 days from the service of this order. Judicial review is pursuant to the provisions of ORS 183.482.

EXHIBIT "A"

Beginning at the Northwest corner of Oakwood Estates in the Southwest quarter of the Northeast quarter of Section 5, Township 4 North, Range 1 West, Willamette Meridian, Columbia County, Oregon, as per plat on file and of record in the clerks office, Columbia County, Oregon, said point being on the Westerly line of the city limits of the City of St. Helens; thence tracing the city limits line as follows: South 30°03'04" East, along the Westerly line of said Oakwood Estates a distance of 734.10 feet; thence South 1°33'43" East, along the Westerly line of said Oakwood Estates a distance of 356.03 feet to the Southwest corner of Oakwood Estates; thence South 67°45'35" West, along the Northerly line of Milton County Road #43 (known as North Vernonia Road) a distance of 265.09 feet, more or less, to the center line of Mill Street; thence North 29°07' West, along the center line of Mill Street a distance of 161.15 feet; thence North 67°45' East a distance of 110.36 feet to the Northeast corner of Lot 9, Ellsberg Subdivision, as per plat on file and of record in the clerks office, Columbia County, Oregon; thence North 22°15' West, along the Easterly line of said Ellsberg Subdivision a distance of 228.33 feet to the Northeast corner thereof; thence South 66°47' West, along the North line of said Ellsberg Subdivision a distance of 162.90 feet to the

Northwest corner of Mill Street; thence South 29°07' East, along the Westerly right of way line of said Mill Street a distance of 50.00 feet to the Northeast corner of Lot 6, Ellsberg Subdivision; thence South 66°47' West, along the Northwesterly line of Lot 6 and Lot 5 and the Southwesterly extension thereof a distance of 230.22 feet to the center line of said North Vernonia Road; thence South 29°07' East, along said center line a distance of 395.37 feet, more or less, to the Southerly right of way line of said North Vernonia Road; thence South 32°10' East, along the Easterly line of the Thomas J. Clark tract as described in Deed Book 198, at page 339 and the Easterly line of the Myrtle Emily Clark tract as described in Deed Book 152, at page 501 and the Easterly line of the Elsie Edna Clark tract as described in Deed Book 144, at page 612 and the extension thereof to the Southeasterly line of the Aaron Broyles Donation Land Claim; thence South 66°30' West, along said Donation Land Claim line to a point which is North 66°30' East 1004.54 feet from the Southwest corner of said Aaron Broyles Donation Land Claim; thence North 22°10' West a distance of 208.6 feet to the Northeast corner of the David M. and Ruth Ann Taylor tract as described in Deed Book 170, at page 125; thence South 68°14' West a distance of 70.9 feet to the Northwest corner of said Taylor tract; thence South 22°10' East a distance of 280.6 feet to the Southwest corner of said Taylor tract; thence

South 66°30' West, along the Northerly right of way line of Bachelor Flat Road a distance of 36.7 feet; thence North 22°10' West 718.64 feet to the Northeast corner of the David C. and Gladys I. Tice tract as described in Deed Book 117, at page 48; thence North 66°30' East 35 feet, more or less, to the Southwest corner of the Thomas J. Clark tract as described in Deed Book 108, at page 339; thence North 23°30' West, along the Westerly line of said Clark tract a distance of 280 feet to the Southeast corner of the Kenneth Ray and Susan Stansbury tract as described in Deed Book 244, at page 422; thence South 66°30' West to the Southwest corner of said Tice tract; thence North 22°38' West a distance of 298.16 feet to the Northwest corner of said Tice tract; thence South 68°23' West, along the Southerly right of way line of a 24 foot Roadway as described in Deed Book 125, at page 610 to a point which is South 22°38' East 24 feet, more or less, from the Southwest corner of the Fred Loranza and Hazel Seal tract as described in Deed Book 65, at page 624; thence leaving said City limits line North 22°38' West a distance of 455.3 feet to the Northwest corner of said Seal tract; thence South 68°23' West, along the South line of the Elizabeth A. Renshaw and Ronald R. and Patricia R. Still and Ronald R. Still Jr. tract as described in Deed Book 239, at page 302 to the West line of the Aaron Broyles Donation Land Claim; thence North 22°38' West, along said Donation Land Claim line a

distance of 685.2 feet to the Northwest corner of the Marion V. Gartman tract as described in Deed Book 77, at page 421; thence North 69°30' East, along the North line of said Gartman tract a distance of 1553.09 feet to the center line of North Vernonia Road; thence Easterly to a point on the Easterly right of way line of said North Vernonia Road which is the Northwest corner of the Melvin E. and Jean E. Moore tract as described in Deed Book 192, at page 110; thence East, along the North line of said Moore tract to the Point of Beginning.

Save and except the following described parcels of property:

1. Beginning at a point on the west line of the Aaron Broyles D. L. C. #37 that is N. 22°-38' W. 2245.2' from the southwest corner of said D. L. C. #37 in Section 5, Township 4 North, Range 1 West, of the Willamette Meridian, Columbia County, Oregon; said point also being the southwest corner of a tract of land conveyed to Marion V. Gartman and Blanche I. Gartman as described and recorded June 26, 1945, in Book 77 at page 421 of Columbia County Deed Records; thence N. 69° 26' E. along the south line of said Gartman tract a distance of 1093.35'; thence N. 22° 38' W. parallel to the west line of said Gartman tract 198.75' to the north line of said Gartman tract; thence S. 69° 30' W. along said north line 1093.38' to the northwest corner of said Gartman tract and the west line of said D. L. C. #37; thence S. 22° 38' E. along said west line 200.00' to the true point of beginning.

2. That portion of the Aaron Broyles Donation Land Claim No. 37 in Section 5, Township North, Range 1 West of the Willamette Meridian, Columbia County, Oregon, described as follows:

Beginning at the Northwest corner of a tract of land conveyed to Joseph DuPont et ux by deed dated July 1, 1908 and recorded in Book 9, page 601, Deed Records of Columbia County, Oregon, said point being on the South line of tract of land conveyed to Angelo Pasero et ux by deed recorded April 23, 1923 in Book 34, page 347, Deed Records of Columbia County, Oregon; thence West along the South line of said Angelo Pasero tract to it's intersection with the East line of a transmission line easement granted to the United States of America by instrument recorded June 3, 1941 in Book 68, page 304, Deed Records of Columbia County, Oregon; said point being the TRUE POINT OF BEGINNING of the tract to be described herein; thence Southerly and Westerly along the East and South lines of said easement to the East right of way line of the North Vernonia Road (formerly Milton Road); thence Northwesterly along said road right of way line a distance of 219 feet, more or less, to the South line of said Angelo Pasero tract; thence East along said Pasero tract South line a distance of 510 feet, more or less, to the point of beginning.

ATTACHMENT 2

City of St. Helens

P.O. BOX 278 PHONE (503) 397-6272

St. Helens, Oregon

97051

April 10, 1985

Environmental Quality Commission
% Mr. Jim Van Domlin
P.O. Box 1760
Portland, OR 97207

Re: North Vernonia Road Health Hazard Annexation

Dear Mr. Van Domlin:

In reponse to your Findings and Final Order of March 8, 1985, please find enclosed a copy of the City of St. Helens' plan and timeline to remedy the North Vernonia Road health hazard.

As you can see by the enclosed timeline, we are already prepared to contract for engineering design and expect to call for construction bids by May 29, 1985, all prior to your scheduled review of the plan on June 7th.

It is urgent that the City receive plan approval at your June 7th meeting, followed by immediate notification, if we are to meet the proposed timeline and utilize the 1985 construction season to complete the project.

David Winship, City Engineer, will call you in about a week, after you have had time to review the plan, to go over it with you and verify if it is sufficiently complete.

If you have any questions prior to his call, please feel free to call me at this office at any time.

Sincerely,

Rosaline L. Mallory

Rosaline L. Mallory
City Administrator

Enclosure

Specifications as per recent South Trunk sewer replacement project - on file with DEQ - per conversation with David Winship. RLM April 17th, 1985

Project Description,

The City of St. Helens (population 7,220) is situated on a stratum of basaltic rock, most of the area's topsoil having been washed away at the end of the last Ice Age. This situation has made the feasibility of septic tanks difficult, as well as costly for the installation of sewer and water systems.

Like most areas, pockets of outlying lands were developed without sanitary sewer before organizations such as DEQ began regulating septic systems. The result, around St. Helens, is a relatively large number of unincorporated areas with histories of septic failures. Though DEQ and LCDC regulations now effectively limit future problems, St. Helens still faces problems resulting from the past.

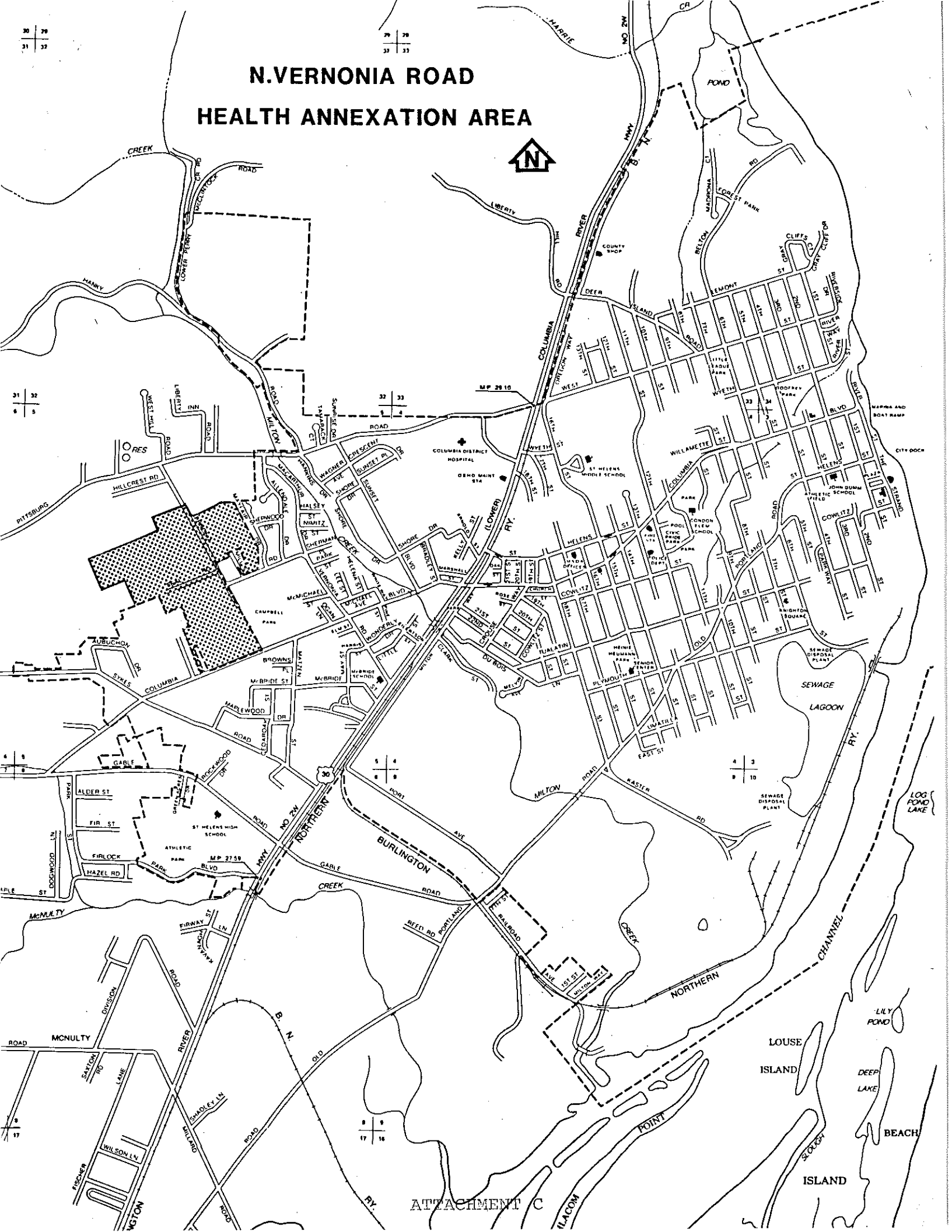
One of those problems is the N. Vernonia Rd. area which is nestled into the City's irregular western boundary line, its owners not wanting to annex when lands to the north and west were developed and annexed. County Sanitarians have known for a while that this was one area that needed sewer. The problem, however, grew drastically in the early 1980's after a large percentage of the houses in the general area were found to have failing septic systems.

Last spring County Sanitarians "persuaded" the City to sewer 6 City-incorporated dwellings with severe septic problems, and which abut the N. Vernonia area; to do this the City had to extend the main sewer line 1,100 feet across Campbell Park. At the same time, the Sanitarians were in the midst of a thorough investigation into whether a Health Hazard Annexation ought to be officially declared for N. Vernonia Rd. The results - 20 out of 25 homes with failing systems - were affirmative.

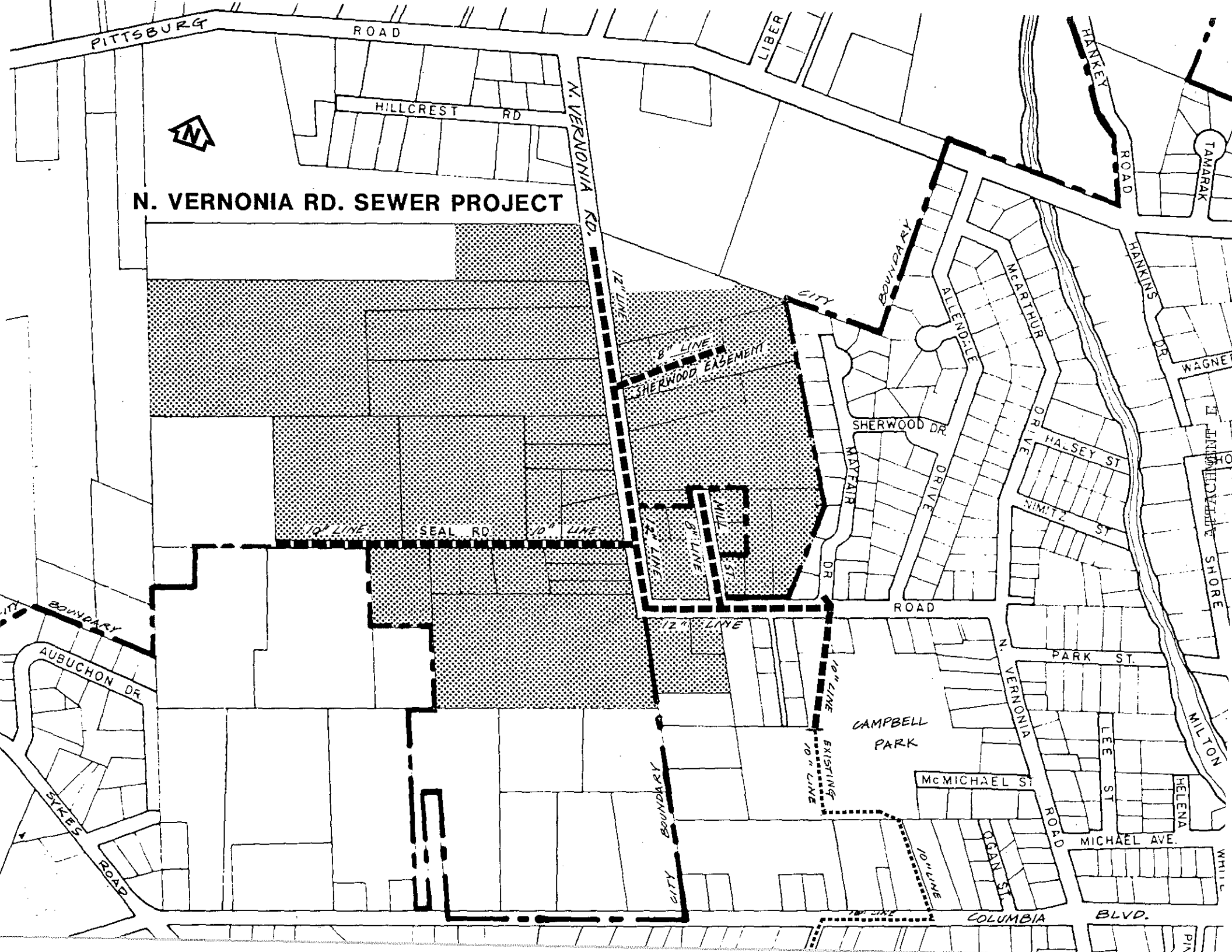
The N. Vernonia project consists of laying 4,505 linear feet of sewer line. After the final 520 feet across Campbell Park, the line will be extended 1,885 feet along N. Vernonia Rd.; laterals will then be constructed along Mill St., Seal Rd., and the Sherwood's easement, to service 37 residences.

Of the 37 housing units served, 25 are in the Health Hazard Annexation, 12 already being within the City but on suspect septic systems. There actually are 6 dwellings within the Annexation that will not be served by this project because they cannot be served by gravity flow. Only 1 of these has a failing system, the other 5 are included because their exclusion would create an unincorporated island. The City and State Health Division are discussing ways to address the sole problem residence that can't be served by the N. Vernonia Rd. project.

Meetings have been held with residents, and preliminary engineering cost estimates have been made. Preliminary assessments for LID's under various scenarios have also been made. The City and affected residents are aware that low and moderate income residents cannot be assessed in an LID that's part of an OCD project.



ATTACHMENT C


N. VERNONIA RD. SEWER PROJECT
PITTSBURG ROAD
HILLCREST RD
N. VERNONIA RD.
LIBER
HANKEY ROAD
TAMARAK
CITY BOUNDARY
ALLENDALE
McARTHUR
HANKINS DR.
WAGNER
12" LINE
8" LINE
SHERWOOD EASEMENT
SHERWOOD DR.
HAYFAIR DR.
DRIVE
HALSEY ST
NIMITZ ST
HILL ST.
8" LINE
12" LINE
10" LINE
SEAL RD.
10" LINE
ROAD
PARK ST.
N. VERNONIA
MILTON
CAMPBELL PARK
10" LINE
EXISTING 10" LINE
McMICHAEL ST
LEE ST
HELENA
MICHAEL AVE.
OGAN ST
10" LINE
CITY BOUNDARY
AUBUCHON DR.
SYKES ROAD
COLUMBIA BLVD.

HEALTH HAZARD ANNEXATION
REMEDY TIMELINE

Contract for Engineering Design	April 17, 1985
Final Design, Plans and Specifications Completed	May 20, 1985
Call for Bids	May 29, 1985
Receipt of Plan Approval and Order to Annex	June 7, 1985
Council Adoption of Annexation Ordinance and Plan	June 19, 1985
Adopt Resolution to Construct Sewer and Set Public Hearing Date	June 19, 1985
L.I.D. Formation Public Hearing	July 9, 1985
Construction Contract Award	July 10, 1985
Construction Start	July 22, 1985
Construction Completion	Nov. 30, 1985
Adopt L.I.D. Assessment Ordinance	January, 1986

ATTACHMENT B

the ground above the drainfield area was saturated with water. The soil on this property is unsatisfactory for a sub-surface sewage disposal system, because of slow percolation characteristics.

2. On February 8, 1983, on a developed portion of tax lot 2800 of tax map 41513, the ground above the drainfield area was saturated, The owner of this property acknowledges that sewage discharged into the sub-surface system rises to the ground surface.

3. On February 8, 1983, on tax lot 2900 of tax map 41513, dye was introduced into the toilet at 3:00 p.m. The dye was observed in a ditch at the side of the house and in the area of the septic tank behind the house five (5) minutes later. A water sample taken from that area indicated the presence of total coliform (MPN 11,000), fecal coliforn (MPN 72), fecal streptococcus (MPN 36) organisms.

4. On February 8, 1983, there was standing water and a saturated marshy area over the drainfield east of the house located on tax lot 300 of tax map 41513. The soil on this property is unsatisfactory for sub-surface sewage disposal because of slow percolation characteristics. Untreated sewage in the marshy area over the drainfield drains through a series of culverts into Milton and McNulty Creeks.

5. On February 23, 1983, on tax lot 1200 of tax map 41524, a lush green growth of grass was observed around water standing on the drainfield area. Dye was introduced into the toilet at the

house at 2:45 p.m. on February 23, 1984 and was observed on the surface of the drainfield area at 11:00 a.m. on the following day. Water from the surface of the drainfield drains across the road, into a marshy area on tax lot 300, and ultimately into Milton and McNulty Creeks. A water sample taken from that area indicated the presence of total coliform (MPN>1,100), fecal coliform (MPN>1,100); and fecal streptococcus (MPN 240) organisms).

6. On February 8, 1983, water standing on tax lot 1300 of tax map 41524 had the characteristic odor and appearance of sewage. The owner of this property confirms that sewage often surfaces on the property due to the high water table.

7. On May 15, 1984, a pipe from the side of the house located on tax lots 2000 and 2100 of tax map 41524 was discharging a liquid with the characteristic odor and appearance of sewage directly into a ditch on the south side of the property. Dye introduced into the sewage system of the house appeared in the ditch within thirty (30) minutes. The ditch drains past Campbell Park and ultimately into Milton and McNulty Creeks.

8. On February 8, 1983, on tax lot 2400 of tax map 41524, the drainfield area was saturated with water. The soil on the property is rated as unsatisfactory for sub-surface sewage disposal because of slow percolation characterisitics.

9. On February 16, 1983, on tax lot 1700 of tax map 41524, a lush green growth of grass and standing water were present over the drainfield area. Dye was introduced into the sewage system

located on tax lot 1000 of tax map 41524, was discharging sewage effluent into the field. A sample taken at the outfall of the pipe showed the presence fo total coliform (MPN 11,000), fecal coliform (MPN (30), and fecal streptococcus (MPN 36) organisms.

14. On February 16, 1983, on tax lot 300 of tax map 415, standing water was observed over the drainfield, and effluent with the characteristic odor and appearance of sewage was being discharged by a pipe into an open ditch. A dye was introduced into the sewage system of the house and was observed in the ditch within a very short time. This ditch drains into a roadside ditch on North Venronia Road, through Campbell Park, and ultimately into Milton and McNulty Creeks. A water sample of this water showed the presence of total coliforms (MPN>11,000), and fecal coliform (MPN>11,000) organisms.

15. On May 1, 1983, on a developed portion of tax lot 200 of tax map 415, a lush green growth was observed over the drainfield area. The soil in the drainfield area was saturated with water. A dye introduced into the sewage system of the house on the property at 11:00 a.m. was observed on the ground surface above the drainfield area the following day. The drainfield drains into the roadside ditch on North Vernonia Road, through Campbell Park, and ultimately into Milton and McNulty Creeks. A water sample taken of this water showed the presence of total coliform (MPN>11,000), fecal coliform (MPN 430), and fecal steptococcus (MPN 460) organisms.

16. On May 1, 1983, a dye was introduced into the sewage

system of the house located on tax lot 100 of tax map 41531. Within five (5) minutes, the dye was observed discharging from a pipe on the property into a ditch which flows through Campbell Park and ultimately into Milton and McNulty Creeks.

17. On May 15, 1984, an open pit surrounding the distribution tank serving the septic system of the house on tax lot 1800, on tax map 41524, was surrounded by sewage. A water sample taken of this water showed the presence of total coliform (MPN 24,000) and fecal coliform (MPN 11,000) organisms.

18. On February 23, 1983, a dye introduced into the sewage system of the house located on tax lot 4400 of tax map 41513 at 12:00 noon was observed at 3:05 p.m. in a swampy area behind the house. Gray water waste from this house discharges directly onto the surface of the ground. A water sample taken of this dyed effluent showed the presence of total coliform (MPN>1,100), fecal coliform (MPN>1,100), and fecal streptococcus (MPN 42) organisms.

19. On February 23, 1983, a lush green growth of grass was present over the drainfield area on tax lot 4300 of tax map 41514. Groundwater was found at a depth of six (6) inches on the property. The sub-surface sewage disposal system is inadequate in size to serve the house located on the property, thus allowing sewage access to the roadside ditch and ultimately into Milton and McNulty Creeks.

20. On May 13, 1984, a lush green growth of grass exists over the drainfield area of the house located on tax lot 3,000 of

VICTOR ATIYEH
GOVERNOR

Environmental Quality Commission

Mailing Address: BOX 1760, PORTLAND, OR 97207
522 SOUTHWEST 5th AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Agenda Item No. L, June 7, 1985, EQC Meeting

Request of East County Sanitary Sewer Consortium for extension of deadline for submittal of additional information regarding Mid-Multnomah County sewerage plans, cost estimates and financing options from July 1, 1985 to September 1, 1985

Background

On December 14, 1984, the Commission adopted Alternative 3 of Agenda Item No. J which required the City of Portland, City of Gresham and Multnomah County to develop and submit essential information by July 1, 1985 for providing sewerage services to Mid-Multnomah County (Attachment 1). The information required included:

"a. Revised treatment works plans, specific schedules, and implementation programs to provide assurance that all discharges of sewage to the groundwater from cesspools or seepage pits in the affected area will be eliminated by no later than December 31, 2005.

b. Complete cost estimates for implementing the revised plan including a display of the total costs to be borne by typical residential and commercial property owners.

c. Equitable and affordable financing options for the costs to be borne by property owners."

On December 28, 1984, the Commission sent a letter to each of the three jurisdictions which provided an elaboration of the information required. (Attachment 2). The elaboration was prepared to aid the jurisdictions in preparing a response.

The East County Sanitary Sewer Consortium, consisting of representatives from the City of Portland, City of Gresham and Multnomah County, on April 2, 1985, requested that the deadline for submission of the required information be extended from July 1, 1985 to September 1, 1985. (Attachment 3). The reason given for the time extension request was that

it took considerable time to acquire outside consultant services for portions of the required work. The Consortium believes that the addition of outside consulting services has resulted in a very strong project team to address the Commission requirements. The Department, on April 22, 1985, acknowledged the Consortium request and indicated that a recommendation would be made to the Commission for a time extension (Attachment 4).

Evaluation

There are two alternative courses of action the Commission may wish to consider: (1) extend the deadline to September 1, 1985, or (2) deny the extension request.

The extension to September 1, 1985, will give the Consortium the requested time to complete the work. The Consortium has stated that September 1, 1985 will be a '"not later than"' date and that the work may be completed sooner.

A denial of the extension request would result in less complete work and less adequate information for the commission to consider as it takes final action on the proposal to find that a threat to drinking water exists in the Mid-Multnomah County area. The Department believes it important to have the best possible information available to the commission and public as final decisions are made.

Summation

1. The Commission on December 14, 1984, required local governments with jurisdiction in Mid-Multnomah County to submit essential information for providing sewerage services by July 1, 1985. A followup letter was sent to the three jurisdictions which provided an elaboration of the information required.

2. The East County Sanitary Service Consortium, on April 2, 1985, requested an extension fron July 1, 1985 to September 1, 1985.

3. Department staff believe this extension request is reasonable.

Director's Recommendation

It is recommended that the Commission grant an extension of the deadline for submittal of the required additional information from July 1, 1985 to September 1, 1985.

Fred Hansen

Attachments 1. Agenda Item No. J, December 14, 1984, EAC Meeting
2. Letter from EQC to jurisdictions
3. Letter from East County Sanitary Service Consortium to DEQ requesting time extension
4. Letter from DEQ to jurisdictions

Thomas J. Lucas
229-5284
May 9, 1985

TJL:m
WM194

VICTOR ATIYEH
GOVERNOR

Environmental Quality Commission

Mailing Address: BOX 1760, PORTLAND, OR 97207
522 SOUTHWEST 5th AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Agenda Item No. J, December 14, 1984, EQC Meeting

Proposal for EQC to Declare a Threat to Drinking Water in a Specifically Defined Area in Mid-Multnomah County Pursuant to the Provisions of ORS 454.275 et seq. - Summary and Evaluation of Hearing Record

Background

On August 30, 1984, the Commission conducted a hearing at Parkrose High School as part of the process to determine whether a threat to drinking water (as defined in ORS 454.275) exists in an area in Mid-Multnomah County. The hearing was continued and concluded on September 11, 1984, in the DEQ conference room with Commissioner Denecke acting as the Hearings Officer. Written testimony, postmarked September 11, 1984, was accepted for the record.

The Department has summarized and evaluated the Hearing Record. The Department's report is attached.

Requirements for Commission Action

The statute appears to direct the Commission to do the following:

1. Make preliminary findings and recommendations.
2. Publish notice of its findings and recommendations.
3. Allow 15 days for people to petition the Commission to make oral or written arguments on the proposed findings and recommendations.
4. Hear and consider arguments (upon petition).
5. Adopt final findings and recommendations and issue a Final Order. [ORS 454.300.]

Department Evaluation and Conclusion

The Department's evaluation of the record, as reflected in the attached report, focuses on 8 questions or issues that Commission must consider and address.

The questions and the Department's conclusions based on analysis of the record, are as follows:

1. DOES MORE THAN 50 PERCENT OF THE AFFECTED AREA CONSIST OF RAPIDLY DRAINING SOILS?

   The hearing record shows that over 80 percent of the soils in the affected area are rapidly draining.

2. IS THE GROUNDWATER UNDERLYING THE AFFECTED AREA USED FOR DRINKING WATER OR CAN IT BE USED FOR DRINKING WATER?

   The hearing record shows that the groundwater in the Mid-Multnomah County water table aquifer and deeper aquifers underlying the affected area is used and can be used for drinking water.

3. IS MORE THAN 50 PERCENT OF THE SEWAGE IN THE AFFECTED AREA DISCHARGED INTO CESSPOOLS, SEPTIC TANKS, OR SEEPAGE PITS AND DOES THE SEWAGE CONTAIN BIOLOGICAL, CHEMICAL, PHYSICAL, OR RADIOLOGICAL AGENTS THAT CAN MAKE WATER UNFIT FOR HUMAN CONSUMPTION?

   The hearing record shows that more than 80 percent of the sewage in the affected area is discharged into cesspools, septic tanks, or seepage pits. The hearing record further shows that sewage contains microorganisms and organic and inorganic chemicals that can make water unfit for human consumption.

4. DOES ANALYSIS OF SAMPLES OF GROUNDWATER FROM WELLS PRODUCING WATER THAT MAY BE USED FOR HUMAN CONSUMPTION IN THE AFFECTED AREA CONTAIN LEVELS OF ONE OR MORE BIOLOGICAL, CHEMICAL, PHYSICAL OR RADIOLOGICAL CONTAMINANTS WHICH, IF ALLOWED TO INCREASE AT HISTORICAL RATES, WOULD PRODUCE A RISK TO HUMAN HEALTH AS DETERMINED BY THE LOCAL HEALTH OFFICER? ARE SUCH CONTAMINANT LEVELS IN EXCESS OF 50 PERCENT OF THE MAXIMUM ALLOWABLE LIMITS SET IN ACCORDANCE WITH THE FEDERAL SAFE DRINKING WATER ACT?

   Analysis of samples of groundwater from wells producing water that may be used for human consumption in the affected area contain levels of the contaminant nitrate-nitrogen in excess of 50 percent of the U.S. EPA drinking water standard. Nitrate-nitrogen levels, in fact, are in the range of 60 to 70 percent of the U.S. EPA drinking water standard. In addition, total dissolved solids levels are at 48 percent of the U.S. EPA secondary drinking water standard.

   Sufficient data and information is not available in the record to establish a trend and determine whether contaminant levels are increasing, decreasing, or staying the same. If population in the affected area is allowed to increase as projected, using cesspools for sewage disposal, higher contaminant levels would be expected.

   The levels of nitrate-nitrogen (NO_3-N) and organics being observed in the groundwater today pose some level of risk to health.

The Multnomah County Health Officer (A28) has stated that there appears to be a positive increasing trend and that the groundwater does have high levels of health threatening human and industrial waste contamination.

5. BASED ON QUESTIONS 1 THROUGH 4 ABOVE, DOES A THREAT TO DRINKING WATER EXIST IN THE AFFECTED AREA?

Based on the above information, a threat to drinking water as defined in ORS 454.275(5) exists in the affected area in that at least 3 of the conditions cited, conditions (a), (b), and (c), are found to exist.

6. IF A THREAT TO DRINKING WATER IS FOUND TO EXIST, ARE THE BOUNDARIES OF THE AFFECTED AREA APPROPRIATE, OR SHOULD THE BOUNDARY BE MODIFIED TO DELETE AREA OR INCLUDE ADDITIONAL AREA?

The affected area boundary established by the local governing bodies in the Threat to Drinking Water Findings, June 1984 (B3b2), encompasses the problem area of Mid-Multnomah County where sewage is disposed of to cesspool and seepage pit systems. No justification for modification of boundaries has been established.

7. CAN THE CONDITIONS (THREAT TO DRINKING WATER) IN THE AFFECTED AREA BE ELIMINATED OR ALLEVIATED BY TREATMENT WORKS?

The facilities proposed by the local governing bodies are treatment works within the meaning of ORS 454.275.

The treatment works can eliminate or alleviate the relevant conditions in the affected area that result in the finding of a threat to drinking water. The proposals of the local governing bodies do not establish deadlines for construction of facilities to eliminate all sewage discharges into cesspools, septic tanks, or seepage pits. The proposals do not assure elimination of all cesspools, septic tanks, or seepage pits. Thus the proposals do not provide assurance that the conditions in the affected area that result in the finding of a threat to drinking water will be eliminated or alleviated.

8. ARE THE TREATMENT WORKS PROPOSED BY THE GOVERNING BODIES THE MOST ECONOMICAL METHOD TO ALLEVIATE THE CONDITIONS (THREAT TO DRINKING WATER)?

The treatment works proposed by the local governing bodies are the only alternative that: (1) meets the definition of treatment works contained in ORS 454.275; and (2) can eliminate or alleviate the conditions which result in a finding of a threat to drinking water; and (3) can be implemented in the area; and (4) are consistent with the adopted regional waste treatment management plan.

Cost information and financing alternatives are preliminary and very general. Estimates of costs to homeowners are lacking. Affordable options for financing of homeowner costs are not addressed.

The Department identified and discussed in the report, 3 alternatives for Commission action based on these conclusions as follows:

1. Proceed immediately to adopt findings, recommendations, and a final order pursuant to ORS 454.300, 454.305(2), and 454.310.

   This alternative would result in adoption of findings of a threat to drinking water and issuance of a final order to implement proposals and construct treatment works.

2. Proceed immediately to adopt findings, recommendations, and an order pursuant to ORS 454.300, and 454.305(5).

   This alternative would result in (a) adoption of findings of a threat to drinking water and the need for construction of treatment works; (b) rejection of the submitted plan as incomplete; and (c) issuance of an order directing the local governing bodies to submit revised plans and additional information.

3. Delay adoption of findings and recommendations, request additional information from the local governing bodies based on guidance from the Commission, and reconvene the hearing.

   This alternative would result in direction to the local governing bodies to submit revised plans and information prior to reconvening the hearing on the matter. Following the reconvened hearing, findings and recommendations would be adopted and an order entered pursuant to the statutory process set forth in ORS 454.300 and 454.305.

All three alternatives are based on the conclusion that sufficient information exists in the present record to find that a threat to drinking water as defined in ORS 454.275(5) exists in the affected area, that the boundaries are appropriately described, and that construction of treatment works is necessary to alleviate the conditions in the affected area.

All three alternatives anticipate direction from the Commission regarding a deadline for completing construction of treatment works so as to eliminate the existing cesspool sewage disposal systems in the affected area. The local governing bodies have proposed to complete major trunk, interceptor, and treatment facilities necessary to serve the affected area over a 20-year period, but have proposed no timeframe for construction of all collection sewers and connection of existing structures to the sewers. The local governing bodies expect the Commission to determine how fast the sewage discharge to the groundwater must be eliminated.

The Department is familiar with the magnitude of the construction job involved, the time it takes to complete plans, complete financing arrangements, get project phases organized, bid, constructed, completed, cleaned up, and house connections completed. The Department would recommend that 20 years is a reasonable time limit for completion of all treatment works and elimination of all existing cesspool and seepage pit sewage disposal systems in the affected area.

Alternatives 2 and 3 would require establishment of a deadline for development and submittal of additional information for the record by the local governing bodies. It is desirable to move as rapidly as possible but still allow adequate time to develop the needed information. The Department would recommend that 6 months be allowed in either alternative. Under Alternative 2, the 6 months would begin after issuance of the interim order--a process that will be expected to take 2 to 3 months to complete. Thus the elapsed time would be more like 9 months before the process to issue final findings and an order could be initiated. Under Alternative 3, the 6-month period would begin immediately upon Commission action.

Director's Recommendation

It is recommended that the Commission proceed to implement Alternative 3 as follows:

1. Review the staff evaluation of the record, and preliminarily conclude that:

    a. A threat to drinking water as defined in ORS 454.275(5) exists in the affected area in that at least 3 of the conditions necessary to find a threat to drinking water conditions (a), (b), and (c), exist in the affected area;

    b. The affected area as defined by the local governing bodies is appropriate and should not be modified;

    c. Construction of treatment works is necessary to alleviate the conditions in the affected area that result in a finding of a threat to drinking water;

    d. Additional information is needed before findings and recommendations can be adopted.

2. Delay adoption of findings and recommendations until additional information is received.

3. Direct each of the affected local governing bodies to develop and submit by no later than July 1, 1985, information to address the following:

a. Revised treatment works plans, specific schedules, and implementation programs to provide assurance that all discharges of sewage to the groundwater from cesspools or seepage pits in the affected area will be eliminated by no later than December 31, 2005.

b. Complete cost estimates for implementing the revised plan including a display of the total costs to be borne by typical residential and commercial property owners.

c. Equitable and affordable financing options for the costs to be borne by property owners.

4. Establish a date in July 1985 for reconvening the hearing to receive additional testimony on the revised plans and information submitted by the local governing bodies.

Fred Hansen

Attachments: 4

1. Proposal to Determine Whether a Threat to Drinking Water Exists in Mid-Multnomah County, Oregon - Evaluation of the Hearing Record

2. Summary of Oral Testimony from the Environmental Quality Commission Hearing Held at Parkrose High School on August 30, 1984

3. Summary of Oral Testimony from the Environmental Quality Commission Hearing Held in Room 1400 of the Yeon Building on September 11, 1984

4. Testimony received or postmarked after September 11, 1984.

HLS:l
TL3880
229-5324
December 3, 1984

VICTOR ATIYEH
GOVERNOR

Environmental Quality Commission

Mailing Address: BOX 1760, PORTLAND, OR 97207
522 SOUTHWEST 5th AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

December 28, 1984

Multnomah County Board of Commissioners
Courthouse
1021 S.W. Fourth Ave.
Portland, OR 97204

At its meeting on December 14, 1984, the Environmental Quality Commission (EQC) considered and took action on Agenda Item J, "Proposal for EQC to Declare a Threat to Drinking Water in a Specifically Defined Area in Mid-Multnomah County Pursuant to the Provisions of ORS 454.275 et seq. - Summary and Evaluation of Hearing Record."

Specifically, the Commission unanimously adopted the following Director's recommendation:

Director's Recommendation

It is recommended that the Commission proceed to implement Alternative 3 as follows:

1. Review the staff evaluation of the record, and preliminarily conclude that:

   a. A threat to drinking water as defined in ORS 454.275(5) exists in the affected area in that at least 3 of the conditions necessary to find a threat to drinking water, conditions (a), (b), and (c), exist in the affected area;

   b. The affected area as defined by the local governing bodies is appropriate and should not be modified;

   c. Construction of treatment works is necessary to alleviate the conditions in the affected area that result in a finding of a threat to drinking water;

   d. Additional information is needed before findings and recommendations can be adopted.

2. Delay adoption of findings and recommendations until additional information is received.

3. Direct each of the affected local governing bodies to develop and submit by no later than July 1, 1985, information to address the following:

a. Revised treatment works plans, specific schedules, and implementation programs to provide assurance that all discharges of sewage to the groundwater from cesspools or seepage pits in the affected area will be eliminated by no later than December 31, 2005.

b. Complete cost estimates for implementing the revised plan including a display of the total costs to be borne by typical residential and commercial property owners.

c. Equitable and affordable financing options for the costs to be borne by property owners.

4. Establish a date in July 1985 for reconvening the hearing to receive additional testimony on the revised plans and information submitted by the local governing bodies.

We hereby formally request that you develop the additional information requested in Paragraph 3 above and submit it to us by no later than July 1, 1985. The Commission also discussed this matter further at a lunch work session and felt it would be desirable to elaborate on the information requested to aid you in preparing your response. We, therefore, request that your response to be submitted by July 1, 1985, specifically address the following:

A. Revised Plans, Specific Schedules, and Implementation Programs

1. The implementation schedule must assure that all sewerage facilities are completed in sufficient time to allow, with a reasonable factor of safety, connection of all structures to sewers by the deadline of December 31, 2005.

2. The implementation program must provide a locally enforceable method for assuring that all structures are connected to sewers and the cesspool and seepage pit systems are properly pumped, filled, and abandoned.

3. The schedule for implementation should be developed to assure cost effective and orderly phasing of facility construction so as to provide sewer service at the lowest possible cost to area residents.

4. The implementation program should propose a method for correcting failures of existing cesspool systems by assuring immediate connection to a sewer wherever possible (rapid short distance extension of collectors to address failures).

5. If local governing bodies believe it necessary to accommodate development in portions of the affected area where sewer service is not accessible, the implementation program should propose a method for interim sewage disposal that does not defeat efforts to reduce sewage discharges to the groundwater.

B. Cost Estimate

1. Clarify present facility cost estimates. For each component of the estimate, identify what is included and what is not. For example, does the estimate for a specific trunk line include any collector lines; does it include street restoration costs, etc.?

2. Specifically delineate the typical costs (average, maximum, minimum) to be borne by individual property owners in different neighborhood settings (fully developed, partially developed, economic differences, commercial) including:

   a. Costs to be paid through property assessments (LID).
   b. Connection/hookup/system development charges.
   c. Costs for essential work on private property.

      (1) Plumbing reversal costs.
      (2) Pipe from structure to sewer in street.
      (3) Cesspool pumping, backfilling, abandonment.

3. Anticipated monthly user charges to finance system operation, maintenance, and replacement.

4. Evaluate the capability of affected area residents to bear the costs. The approach used in the U.S. EPA Sewerage Works Construction Grant Program to assess the financial capability of the area should be utilized. This analysis should be assembled by sub-areas, as appropriate, to deal with neighborhood differences.

C. Equitable and Affordable Financing Options

1. Build on the financial capability analysis to develop an equitable and affordable financing program to implement the plan.

2. Realistically assess outside funding assistance options. Financing planning should be complete enough to capture funding assistance that may become available, but project completion should not be impaired if outside funding assistance is not received.

3. Identify alternatives to assist property owners in financing their share of the costs of sewer service. Alternatives should meet the needs of the broad range of residents in the area (retired, fixed income, low income, etc.).

4. If seepage fee is part of the financing options selected, the fees paid by each property owner should be fully credited against the property owner's share of the costs of sewer service (assessments and connection charges). The method for accounting for fees collected and credited should be clearly identified.

5. A mechanism should be provided for private sector prefinancing and construction of the public facilities, consistent with the overall plan, so as to accommodate maximum opportunity for economic development in the affected areas.

The Commission will establish a date for a hearing to receive testimony on the new information provided by you after July 1, 1985. If you have any questions, please contact us.

Sincerely,

James E. Petersen, Chairman
Environmental Quality Commission

NJM:yt
TT507.B

ATTACHMENT 3

CITY OF
PORTLAND, OREGON
BUREAU OF ENVIRONMENTAL SERVICES

Dick Bogle, Commissioner
John Lang, Administrator
1120 S.W. 5th Ave.
Portland, Oregon 97204-1972
(503) 796-7169

April 2, 1985

Fred Hansen, Director
Department of Environmental Quality
522 SW 5th Avenue
Portland, OR 97204

Dear Fred:

The East County Sanitary Sewer Consortium has recently contracted with the firm of CH2M Hill, Inc., to assist in preparation of the sewer implementation plan which the Consortium has been directed to develop by the Environmental Quality Commission. CH2M Hill, Inc. will act as prime contractor and has subcontracted for additional consultant services from Government Finance Associates of Princeton, New Jersey; the legal firm of Ragen, Roberts, O'Scannlain, Robertson and Neill; and the public communications firm of Bowler and Associates. With the skills and expertise of these consultant firms and the staff of Consortium jurisdictions, a very strong project team is now available to respond to the concerns of the EQC regarding a sewer program for mid-Multnomah County.

It has taken time to acquire consultant services, and to review the consultant selection process, the scope of work and the financing plan for the study, with each of the governing bodies of the Consortium. For this reason, the Consortium is requesting an extension of time for completion of the final work product. The current deadline for submission of the plan to the EQC is July 1, 1985. The Consortium would like to extend that date to September 1, 1985. The September 1 date would be treated as a "not later than" target, with completion of the plan hopefully occurring in late July or early August.

Extending the current date for submitting the plan to September 1, in the opinion of the Consortium, helps guarantee that the plan will satisfy the objectives of the EQC while not causing undue delay in addressing the cesspool problem. It will also allow a reasonable amount of time for review and comment by the Policy Committee and Citizens Committee which the Consortium is creating to oversee the development of the plan.

We would be happy to discuss this with you at your convenience. We would also be willing to appear before the Commission to formally request the extension, if you feel that is appropriate.

Sincerely,

BUREAU OF ENVIRONMENTAL SERVICES

John Lang
Administrator

DJG:al
19:dg-hansen

Burke Raymond
Central County Service District

Bill Cameron
City of Gresham

Dennis Buchanan
Multnomah County

VICTOR ATIYEH
Governor

Department of Environmental Quality

522 S.W. FIFTH AVENUE, BOX 1760, PORTLAND, OREGON 97207 PHONE: (503) 229-5696

April 22, 1985

APR 25 1985

John Lang, Administrator
Bureau of Environmental Services
City of Portland
1120 S. W. 5th Avenue
Portland, Oregon 97204-1972

The Department of Environmental Quality has reviewed your request for a 60-day delay in the deadline for submittal of additional information required by the Environmental Quality Commission regarding your plans for correcting the alleged threat to drinking water in Mid-Multnomah County. We are aware that your consultant selection process took longer than originally anticipated.

We believe that your request for additional time is understandable and appropriate. It is important that the best possible information be available to the Environmental Quality Commission as they make a final decision in this matter.

We will recommend to the EQC that the extension from July 1, 1985 to September 1, 1985 be granted. We will advise you of the time and place for commission action on your request.

Sincerely,

Original Signed By
Fred Hanson

APR 24 1985

Fred Hanson
Director

Film
WM117

cc: Janet Gillespie, DEQ

Date Rec'd by DEQ

VICTOR ATIYEH
GOVERNOR

Environmental Quality Commission

Mailing Address: BOX 1760, PORTLAND, OR 97207
522 SOUTHWEST 5th AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Agenda Item No. M, June 7, 1985, EQC Meeting

Informational Report: Update on Field Burning and Analysis of Smoke-Caused Traffic Accidents

I. General Update on Field Burning Program

A total of 301,559 acres were registered for field burning this summer as of the April 1 deadline. This is a decline of nearly 3 percent from the 310,370 acres registered "on-time" in 1984, and the lowest amount since 1980. This decline is probably a combined result of production cutbacks by growers (and possibly farm bankruptcies) and a shift to alternatives such as propane flaming and alternate crops. This acreage trend was particularly significant in Marion County (10 percent decline) while Benton, Linn, and Clackamas Counties also experienced some reductions.

Based on 1985 registrations, growers will receive maximum burn allocations of approximately 83 percent (250,000 ÷ 301,559) of the total acres they've registered. By administrative decision, the Department has eliminated the extra ten percent historically factored into the "grower allocation", bringing it now strictly in line with the "district allocation". Thus, the amounts allocated to each grower will exactly reflect the pro-rata share of the maximum 250,000 acre annual burning limit.

This change became necessary for two reasons: 1) to alleviate confusion and procedural errors at the fire district level in which a permit agent mistaking the growers' allocation for the applicable limit, may inadvertently allow burning in excess of the effective limit (the district allocation), and 2) to eliminate the built-in potential for inequity which can result late in the season when a grower, upon finding that the district has already burned up to its allocation limit, is precluded from additional burning despite having ample allocation to cover it. In essence, the extra 10 percent traditionally allocated to each grower allowed those burning early in the season to shortchange or "use up" the late burners' legitimate share of the annual limit.

While there have been no rule changes since last year, a few operational improvements are planned as part of a joint agency/industry effort to do a better job of reducing smoke impacts during the coming burn season. First, the system of zones used in smoke management has been refined to allow more effective control of burning, particularly upwind of Salem and the outlying areas of Portland. Fire district quotas have also been reviewed and adjusted where necessary to prevent excessive build-ups of smoke in critical areas.

Second, a wind monitor will be located in the Sweet Home area to provide a record of wind flow patterns along the east side of the Valley. There is currently no reliable wind data from that area, although this information is critical to developing an understanding of the diurnal wind patterns outside the Valley proper which partly account for the often longlasting intrusions in the outlying hills. Program staff will also step up aerial observations and (pi-bal) measurements of winds aloft when forecasts are at all uncertain.

Finally, the Oregon Seed Council and the Department have agreed, on a one-year trial basis, to voluntarily limit field burning on Sundays when dispersion conditions are predicted to be marginal. Specifically, if the Sunday morning forecast is for a ventilation index (VI)[1] of less than about 35 (equivalent to an atmospheric mixing height of 3500' with an average of 10 knot winds through that depth), then burning will be declared prohibited for that entire day. In very general terms, this should allow for continued maximum utilization of "good" burning opportunities (i.e., daily burning in the range of 10,000 acres or more) while eliminating lesser amounts of burning on Sundays under limited or high risk conditions.

This experimental plan is put forth in recognition of the heightened sensitivity of the general public to weekend smoke intrusions. This will also give program personnel some experience and working knowledge of the merits and problems of this type of approach, which may be one viable option in minimizing impacts on visibility in Class I wilderness areas during heavy use periods.

II. Analysis of Smoke-Caused Traffic Accidents

Background

Burning fields along public roads has long been a safety concern, involving not only the driving public and the grower doing the burning, but a variety of state and local agencies with interrelated responsibilities and jurisdictions. In January of last year, the Department drafted proposed revisions to the field burning rules designed to update, streamline, and clarify a number of provisions, including several rules governing burning along designated ("priority area") highways. Another proposed change would have added Cascade Highway (between Silverton and Stayton) to the list of designated priority areas. This latter recommendation was made in response to an increasing number of smoke-related traffic accidents occurring along that section of road in recent years.

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[1] VI is defined as $\frac{\text{Maximizing height}}{1000'}$ X average wind speed

Public testimony on this particular recommendation was mixed. The Oregon Seed Council opposed "priority" designation of Cascade Highway on the grounds that it would effectively preclude any burning opportunity for fields along the west side of the road, noting the overriding restrictions already in place which prevent burning there when the wind would blow the smoke away from the road (but toward populated areas nearby). A representative of the City of Eugene suggested a broader, more comprehensive analysis of the problems and the overall regulatory policy toward burning along highways throughout the Valley. The Commission concurred with this suggestion and advised staff to study the matter and return with recommendations. With the exception of the Cascade Highway designation, the proposed rules were adopted on February 24, 1984, and were in effect during the 1984 field burning season.

Record of Smoke-Caused Accidents, 1978-1984

A summary of smoke-related traffic accidents resulting from field burning in the Willamette Valley from 1978 through 1984 is provided in Table A. Most of this information was obtained from the Oregon Department of Transportation's computerized accident listings which are derived from traffic accident reports received from their Motor Vehicles Division. This record should not be considered entirely complete, however, a few additional accidents are known to have occurred but, for various reasons (including pending litigation), are not represented in Table A or in this evaluation. A major 22-car accident that occurred on Interstate 5 on August 11, 1978 is notably not represented.

TABLE A
SUMMARY FIELD BURNED SMOKE-CAUSED TRAFFIC ACCIDENTS, 1978-84

	78	79	80	81	82	83	84	Ttl. ACC	No. Motor Veh.	PDO	----Injuries---- A	B	C	Total
State Hwy ("Priority"):	1	1	3	2	0	1	1	9	24	13	1	11	7	19
State Hwy ("Non-Priority"):	0	1	1	0	0	1	1	4	9	5	1	5	2	8
County Roads:	4	0	5	3	6	5	5	28	61	40	3	22	23	48
Total	5	2	9	5	6	7	7	41	94	58	5	38	32	75

According to the available records, a total of 41 separate motor vehicle accidents attributable to field burning smoke occurred in the Willamette Valley on State and county roads during the seven year study period.[2] These accidents involved some 94 vehicles.

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[2] It should be noted that there were also 9 accidents (10 injuries) in the Willamette Valley attributed to smoke from sources other than field burning, and another 29 smoke-related accidents (56 injuries, 5 fatalities) in some 13 other counties around the state.

There were 58 vehicle operators who sustained property damage only (PDO). A total of 75 individuals were injured. There were no fatalities.

Injuries are reported in three categories of severity. The breakdowns on the bases of property damage and injury class are shown below along with average estimated costs associated with each.

TABLE B

Incident	Number Individuals	ESTIMATED COSTS* Average Per Incident	Total
PROPERTY DAMAGE ONLY (PDO)	58	$1,090	$63,220
INJURY A-INCAPACITATED Unconscious, unable to walk, broken or distorted limbs, severe lacerations	5	$18,200	$90,000
INJURY B-NON-INCAPACITATED Lumps, abrasions, cuts	38	$5,500	$209,000
INJURY C-POSSIBLE Momentary unconsciousness, pain, nausea, limping	32	$1,300	$41,600
TOTAL	133		$403,820

* Cost estimates derived from National Safety Commission, 1983 statistics.

Further analysis of records shows that the majority of field burning related accidents (29) and injuries (58) result from rear-end type collisions. There were 3 "head-on" and 3 "broad-side" type collisions and the remaining 6 involved turns, side-swipes, or parked vehicles.

In a typical accident scenario, the driver of a lead car will see the plume near the road ahead and procede to drive through it, assuming the obstruction to be limited and passable. However, once in the plume, visibility is dramatically reduced by the dense smoke and the driver reacts by stopping or drastically slowing down. A second car approaching from behind also procedes into the plume and, unable to see the lead car in time, strikes it. Staff is aware of a number of accidents in which the driver saw but failed to heed warning signs, flares, or flaggers posted on the road by the grower's own crew or by fire district officials.

A breakdown of smoke-caused accidents by County and Highway/Road is presented in Table C. As indicated, Marion County alone accounted for about half of all accidents Valley-wide (21) and more than half the injuries (43). Linn County accounted for 12 accidents and 22 injuries.

Accidents on state highways designated by Department rule as "priority" areas for special protection accounted for 9 accidents (19 injuries) over the seven year period; however, there have been only two such accidents

TABLE C

SMOKE-RELATED ACCIDENTS BY COUNTY AND HIGHWAY/ROAD

COUNTY	No. Accidents	No. Motor Vehicles	P.D.O.*	Injuries A	Injuries B	Injuries C	TOTAL
Marion	21	48	30	4	17	22	43
Linn	12	29	16	1	15	6	22
Polk	3	7	4	0	2	2	4
Yamhill	1	2	1	0	0	1	1
Benton	2	4	3	0	4	0	4
Lane	2	4	4	0	0	1	1
	41	94	58	5	38	32	75
STATE HIGHWAYS							
Priority — I-5	1	5	3	0	2	0	2
Priority — Hwy. 20	3	6	4	0	2	4	6
Priority — Hwy. 34	1	2	1	1	0	0	1
Priority — Hwy. 99E	1	4	2	0	5	0	5
Priority — Hwy. 99W	3	7	3	0	2	3	5
Non-Priority	4	9	5	1	5	2	8
	13	33	18	2	16	9	27
COUNTY ROADS							
Cascade Hwy. (Marion)	8	21	12	3	4	15	22
Butteville Rd. (Marion)	2	4	3	0	3	2	5
Meridian Rd. (Marion)	2	4	3	0	0	1	1
Independence Hwy (Benton)	2	4	3	0	4	0	4
Columbus St. (Linn)	2	4	2	0	1	1	2
Other Roads**	12	24	17	0	10	4	14
	28	61	40	3	22	23	48

* P.D.O. - Personal Damage Only

** Represents highways (4) and county roads (12) each with single accident only

since 1981, suggesting an improving trend perhaps partially attributed to present control efforts. Highways 99W and 20 (between Albany and Lebanon) were the notable problem areas, but again most of those accidents occurred prior to 1982.

There were 4 accidents (8 injuries) on state highways not designated as "priority" area.

Overall, the majority of field burning related accidents (28) and injuries (48) occurred not on state highways, but on county roads. The most significant problem road is Cascade Highway, a two-lane road which winds through the hilly grass seed areas of Marion County from Silverton south to its intersection at Highway 22 near Sublimity. Field burning along this entire section of road is managed by just two fire districts (Silverton and Sublimity RFPD). Traffic flow over this section of road is relatively light (averaging approximately 1650 daily trips[3]).

There were a total of 52 individual fields (2062 acres) registered for burning in 1984 within a 1/4 mile strip along the west side of Cascade Highway. This is a particularly difficult area for burning because overriding smoke management concerns preclude it on northerly or easterly winds. Thus, burning is allowable only when there is no appreciable wind at the surface, but the winds aloft have some westerly component. Such conditions are relatively rare and still carry a significant degree of risk that a detrimental wind shift could occur after burning is initiated.

Overview of Regulatory Authority Relating to Field Burning Safety

The Department (DEQ) has general authority to regulate open field burning through the exercise of daily discretion in setting the times, places, amounts of burning to be allowed, consistent with state policy of maximizing the burning while minimizing effects on the public health and welfare. However, state laws (ORS 477.515, 477.530, 476.380, 478.960) and rules (OAR 340-26-010) also specify that a fire permit from the local fire permit issuing agency is required for all open burning, including field burning:

> "The fire chief shall prescribe conditions upon which permission is granted and which are necessary to be observed in setting the fire and preventing it from spreading and endangering life or property or endangering the air resources of this state....(ORS 478.960(2)."

That two bodies are responsible for the regulation of field burning underscores the different spheres of interest - DEQ protects air quality through the issuance of "smoke" permits and the fire districts protect safety through the issuance of "fire" permits. (In practice, the two permits are issued concurrently.) Thus the two interests are to work cooperatively to reduce field burning problems (DEQ shall "Aid fire districts in carrying out their responsibilities for administering field sanitation programs" ORS 468.474).

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[3] Marion County Public Works, 1985 estimate

It should be noted that there are several Department rules which relate directly or indirectly to field burning safety. There are general regulations which require the grower to promote efficient burning and to attend each burn until it's effectively extinguished. Another stipulates that burning in compliance with the rules does not exempt any person from civil or criminal liability for consequences or damages resulting from burning.

More to the point, however, there are some specific rules which focus solely on burning in "priority" areas along designated state highways. Priority areas include all acreage within a 1/4 mile strip along both sides of Interstate 5 and Highways 99, 99E, 99W, 34, 20 (between Albany and Lebanon) and 228 (between Brownsville and Tulsa). Some 46,000 acres fall in this category and statistics show that burn accomplishment rate is only slightly less than that for general burning. The applicable rules are as follows:

- The Department, and subsequently the local fire district, may not permit priority fields to be burned upwind of the adjacent highway.

- If a permit is issued, based on a general suitability of winds, but the grower finds that the wind at the field would carry the smoke toward (and noticeably affect) the adjacent highway, then the grower is required to refrain from burning. If the wind shifts after the burn is initiated, the grower is obligated to extinguish the burn.

- All fields in the priority area on the west side of and abutting I-5 must have an 8' wide fireguard between the field and the freeway right-of-way.

- The Department may not allow priority fields in the south Valley (Linn, Lane, and Benton Counties) to be burned upward of Eugene-Springfield.

In reviewing the statutory authorities, counsel has concluded that the Department should cooperate with fire permit issuing agencies on relevant fire safety programs, but not try to usurp the role of these agencies by establishing duplicative regulations.

Procedures for Burning Near Highways

Once air quality considerations are satisfied, the daily regulations and procedures for burning along designated highways, or dry road for that matter, rely principally on local discretion. From a practical standpoint, Department staff have limited ability to know of or evaluate the unique conditions at each and every field which will determine whether a particular burn is safe or not. Instead, program personnel provide on request ground and aerial observations and forecasts to assist the local fire district permit agent and grower in making informed decisions. In addition, staff and Seed Council personnel occasionally provide guidance and instructions to growers on methods of burning next to roads.

Permit agents usually reside in their area and tend to be familiar with the important local factors such as location of roads and fire hazards, terrain, localized wind patterns, and the varying capabilities or "track records" of their growers to conduct safe and efficient burns. They are also assisted by maps upon which all fields are identified.

The kinds of restrictions imposed by fire districts in their fire permits vary considerably from one district to another. Some impose no special restrictions while others specify, for example, minimum fireguards, manpower, and fire-fighting equipment. Some districts try to have personnel or equipment attend the burn or even assist. Some may occasionally help out on traffic control when necessary. Staff is aware of at least one district (Harrisburg RFPD) which has recently adopted an aggressive approach which requires any grower burning alongside a road to post a crew member with warning signs at each end of the field. That district recently puchased a number of handheld signs which it provides to the growers at no charge.

Ultimately, the decision to burn and what safety measures to employ, rests with each grower. There has been an increased awareness in the grower community of the need for providing for public safety whenever burning. Court rulings in recent years have identified field burning as an "ultra-hazardous" activity subject to strict liability. As a result, insurance premiums are reportedly escalating and civil actions against growers for burning-related damages appear to be on the rise.

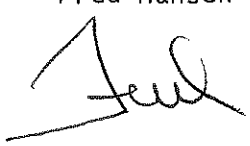
Planned Courses of Action

Staff recently met with Willamette Valley fire district officials to gauge support for a more coordinated effort in addressing local field burning safety concerns. The response was quite favorable. Staff has since consulted with counsel and with Department of Transportation officials to determine what legal and effective measures are available to control traffic on roads and highways. Some preliminary recommendations on signing, for example, have been formulated. The Seed Council has agreed to coordinate meetings with the involved state and local agencies and growers with the intent of developing guidelines for use this summer, with particular emphasis on Cascade Highway and other problem roads.

III. Director's Recommendations

It is recommended that the Commission concur in the courses of action proposed by the Department in sections I and II of this report.

Fred Hansen



Sean K. O'Connell:pd
(503) 686-7837
May 9, 1985

VICTOR ATIYEH
GOVERNOR

Environmental Quality Commission

Mailing Address: BOX 1760, PORTLAND, OR 97207
522 SOUTHWEST 5th AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Agenda Item N, June 7, 1985, EQC Meeting

Informational Report: Report to 63rd Oregon Legislative Assembly on Status of the Oregon Recycling Opportunity Act and Waste Reduction Programs.

Background

The Department is seeking Commission concurrence in the submission of a report to the Legislature.

ORS 459.055(4) requires the Department to report to each legislative assembly on the siting of landfills in farm use zones, level of compliance with waste reduction programs and recommendations for further legislation. There has been no use made of this section and no new development of waste reduction programs.

ORS 459.168(3) requires the Commission to report to each regular session of the legislative assembly regarding compliance with the provisions of this new legislation (SB 405 - 1983 Legislature). We have combined the Department's report on the implementation of the waste reduction programs and the Commission's report on the implementation of the Recycling Opportunity Act into a single document.

Director's Recommendation

It is recommended that the Commission concur in the submission of the report to the Legislature.

Fred Hansen

Attachment

William R. Bree:b
229-6975
May 15, 1985
YB4274

Report to
63rd Oregon Legislative Assembly
1985 Regular Session

Oregon Recycling Opportunity Act and Waste Reduction Programs

OREGON RECYCLING OPPORTUNITY ACT

I. INTRODUCTION

During its 1983 regular session, the 62nd Oregon Legislative Assembly passed the Oregon Recycling Opportunity Act (SB 405) (Attachment I). It requires that the "opportunity to recycle" be made available to all Oregonians by July 1, 1986. The Environmental Quality Commission (EQC) has adopted rules and policy guidance for implementation of the Act (Attachment II). The major provisions of the Act and rules are discussed below.

II. GENERAL PROVISIONS OF THE ACT AND RULES

A. POLICY PRIORITIES

The Act places increased emphasis on reuse and recycling as two solid waste management methods by setting the following management priorities: (1) to reduce the amount of solid waste generated, (2) to reuse material for the purpose for which it was originally intended, (3) to recycle materials that cannot be reused, (4) to recover energy from solid waste that cannot be reused or recycled, and (5) to dispose of the remaining solid waste that cannot be reused or recycled, or from which energy cannot be recovered.

B. RECYCLABLE MATERIAL

Recyclable material is defined in the Act as any material or group of materials that can be collected and sold for recycling at a net cost equal to or less than the cost of collecting and disposing of that material. For example, if the cost of collection and disposal of garbage in a community was $100 per ton, and an item like old newspaper can be collected and sold for recycling at a net cost less than $100/ton, then that item would meet the definition of "recyclable material" in the Act.

Key elements in determining the net cost of collection and sale of a recyclable material include the income from the sale and the measurable savings resulting from recycling rather than disposal of the material. For some material, the process of marketing may generate considerable income. For other material, there may be a cost exceeding income.

When materials are identified as a group, then the income and costs for the different materials are combined to find the net cost for the group. Materials that might not individually meet the definition of recyclable materials can be grouped with more profitable material and the group of materials would meet the definition. For example, in the community where waste collection and disposal cost $100/ton, if tin can collection and sale for recycling has a net cost of more than $100, then tin cans by themselves are not a recyclable material. However, if there is a program which collects newspaper, glass and tin cans as a group, and the net cost of collection and sale of the group is less than $100, then that group, including the tin cans, meets the

definition of recyclable material in the Act.

C. OPPORTUNITY TO RECYCLE

1. DEFINITION

The Act requires that the "opportunity to recycle" be provided to every person in the State by July 1, 1986. This includes all households, businesses and industries. The opportunity to recycle includes at a minimum.

- o A recycling depot located either at a disposal site or at another site more convenient to the people being served (this depot is also a condition of the DEQ Solid Waste Disposal Permit),

- o Monthly on-route collection of source-separated recyclable material to collection service customers within urban growth boundaries (UGB) of cities with a population of 4,000 or more, plus all cities within the UGB of the Metropolitan Service District,

- o A public education and promotion program that encourages participation in recycling and notifies each person about the recycling program available to them.

The Act also allows the EQC to develop rules for an alternative method of providing the opportunity to recycle. In those rules, the EQC requires that any proposed alternative method be

submitted to the Department for prior approval. Such an approval will be based on consideration of how well the alternative will increase recycling, how much the alternative will reduce solid waste, how convenient the alternative method is to the public, and what conditions and factors make the alternative method necessary.

The Act does not indicate who will make the opportunity to recycle available to the public. It envisions a cooperative effort among local government (cities and counties), recyclers, garbage collectors, and disposal site operators. It refers to the members of these groups as "affected persons." The Act indicates that the affected persons in each wasteshed will provide the opportunity to recycle.

2. WASTESHEDS

Wastesheds are defined in the Act as areas of the state which are served by a common waste disposal system or an appropriate area in which to develop a recycling program. The Commission has identified the wastesheds throughout the State. Because counties have commonly taken responsibility for solid waste management, the wasteshed boundaries are in most cases the county boundaries. Two individual cities, Portland and Milton-Freewater, requested to be separate wastesheds and have been so designated. The City of Portland's garbage collection system is different from that in the three counties it occupies. Milton-Freewater runs its own solid waste collection and disposal system separate from Umatilla County.

3. RECYCLING REPORT

In each wasteshed, cities and counties will coordinate with the other affected persons to develop a recycling report that explains how the opportunity to recycle will be implemented in the wasteshed. The report must be submitted to DEQ by July 1, 1986. DEQ will review the recycling report and determine if the opportunity to recycle is being adequately provided. If it is not, the EQC may, after public hearings, order that the opportunity be provided.

The EQC has, by rule, identified standards for the recycling reports. The Department will provide forms for the reports. The rule outlines the information that will be called for on the forms or as attachments. The Department will work with the affected persons in each wasteshed on preparation and review of the reports. It is the intent of the EQC and the Department to keep the reporting requirements to a minimum so that efforts can be directed at implementation rather than reporting.

4. ON-ROUTE COLLECTION

One major element of implementation of the opportunity to recycle will be the provision of on-route collection of source-separated recyclable materials to persons who have garbage service. This type of service will make the opportunity to recycle as convenient as present garbage collection. At least monthly on-route collection will be required in the urban area of cities with a population over 4,000 and those cities in the UGB of the

Metropolitan Service District. This will involve over 70 cities and 1.5 million people.

Recyclers and solid waste collectors will need to work with local government regulators to determine who will provide this recyclable materials collection. This type of service is presently available in several Oregon cities. For example, monthly on-route collection is provided in Newberg, McMinnville, Baker, Redmond, Forest Grove, Cornelius, Hillsboro, Lake Oswego, Portland, Estacada, Florence and the Dalles. Biweekly collection is available in Eugene and Springfield. And the residents of Oregon City, West Linn, Gladstone, Corvallis, Albany, Lebanon and Salem have weekly on-route collection service.

5. EDUCATION & PROMOTION

Education, promotion and notification are an essential part of the opportunity to recycle. All of the affected persons in a wasteshed, i.e., recyclers, garbage haulers, disposal site operators and local governments, will need to work together to determine who will provide recycling education, promotion and notification. Funding for this service could come from a portion of the garbage rate, franchise fees or an alternative source of funding.

The affected persons in the wasteshed are encouraged to identify an education and promotion representative from the wasteshed to coordinate their efforts with the Department. The EQC rules outline the minimum requirements for notification, education and

promotion programs. These include requirements for notification, service reminders and written information. The rules also covers the level of public participation, notification of local media and community groups, and the designation of an education and promotion representative. Information about the education and promotion programs will be a part of the recycling report.

D. ADMINISTRATIVE RULES

The Commission was directed by the Act to adopt by January 1, 1985, rules and guidelines necessary to carry out the provisions of the Act. The rules were adopted by the EQC on December 14, 1984.

1. REQUIRED RULES

The rules required by the Act are:

a. Acceptable alternatives for providing the opportunity to recycle. (OAR 340-60-035)

b. Educational, promotional and notice requirements. (OAR 340-60-040)

c. Identification of wastesheds within the State. (OAR 340-60-025)

d. Identification of the principal recyclable materials in each wasteshed. (OAR 340-60-030)

e. Guidelines for local governments and other persons responsible for implementing the provisions of the Act. (OAR 340-60-001 to -080)

f. Standards for the joint submission of the recycling reports required of local governments. (OAR 340-60-045)

g. Permit fees assessed against disposal sites (adopted by Commission February 24, 1984, Agenda Item No. I). (OAR 340-61-115)

2. CRITERIA

The criteria considered in developing the proposed rules were:

a. The purposes and policy stated in ORS 459.015.

b. Systems and techniques available for recycling, including but not limited to existing recycling programs.

c. Availability of markets for recyclable material.

d. Costs of collecting, storing, transporting and marketing recyclable material.

e. Avoided costs of disposal.

f. Density and characteristics of the population to be served.

g. Composition and quantity of solid waste generated and potential recyclable material found in each wasteshed.

The Department compiled and reviewed information pertinent to these criteria. Surveys were conducted to identify recycling markets, the amounts of materials recycled by those markets and the freight allowances offered by the markets. Disposal sites and communities throughout the state were surveyed to identify existing recycling activities. Previous waste generation and composition studies were reviewed. Available information on population densities and state geographical differences were compiled and reviewed. Existing solid waste planning and management areas were identified and evaluated for suitability for wasteshed designation. Local government control mechanisms of collection service were reviewed. And, cities of 4,000 or more persons with responsibilities under the Act were identified.

3. PUBLIC PARTICIPATION

The rules were developed with the assistance of the Recycling Rules Subcommittee of the Solid Waste Advisory Task Force which has met at least monthly from October 1983 to December 1984. The Department also held a series of eight public informational meetings throughout the State on the proposed rules in June and July 1984. Additionally, the Department's staff met with many local governments and other affected persons to discuss the Act and its implementation. These meetings occurred from January to July 1984. Five public hearings were held throughout the State on October 1st and 2nd to receive comments on the Department's

proposed rules. The hearings were held in Portland, Eugene, Medford, Bend and Pendleton.

E. POLICY GUIDANCE

In the process of development of rules for the implementation of the Act, there was considerable concern over interpretation of both the provisions of the Act and the new rules. Along with the rules, the Commission adopted a policy guidance document which clarifies their intent. The guidance is distributed with the rules and assists local governments and other affected persons in their implementation efforts.

F. DISPOSAL SITE PERMITS

One of the provisions of the Act is that the Department incorporate a recycling condition into all of its disposal site permits. All new and existing permits are to include a condition that there be a place for the collection of source-separated recyclable materials at the permitted disposal site or at a location more convenient to persons whose waste goes to that site. Satisfaction of this requirement of the Act will also meet that portion of the opportunity to recycle which calls for recycling depots at disposal sites.

G. FRANCHISING

1. AUTHORITY

The Act clarifies cities' and counties' authority to franchise

the collection of solid waste and/or recyclable material. This authority allows cities and counties to: (1) establish just and reasonable rates adequate to provide for service, (2) determine the quality and character of service, (3) determine responsible parties to provide the service, (4) collect fees from franchise holders, (5) assign service areas, (6) permit one or more franchise holder to cooperate in providing the "opportunity to recycle," and (7) extend a current franchise.

2. PROVISIONS OF THE ACT

The provisions affecting franchising authority are as follows:

- o If a collection service franchise is continued, extended, renewed or granted on or after October 15, 1983, the opportunity to recycle must be provided to the customers of the franchisee no later than July 1, 1986.

- o The opportunity to recycle may be provided by (1) the person holding the garbage collection franchise, (2) another person who provides the opportunity to recycle to the franchise holder's customer or (3) a person who is granted a separate franchise to collect recyclable material and/or provide the education and promotion program. If education and promotion are franchised separately, fees from a garbage collection franchise can be used to pay for the education program.

- o When determining who will provide the opportunity to recycle, a city or county must first consider any person

providing recycling or collection service on or before June 1, 1983, if that service has been regularly provided.

3. RATES

The rates established by the authority of the Act shall be just and reasonable and adequate to provide necessary collection service.

The rates set under a franchise will allow the franchise holders to recover any additional cost of providing the opportunity to recycle at the minimum level required by the Act or at a higher level permitted by a city or county. A city or county may provide an alternative method of funding the opportunity in lieu of increasing collection rates.

People who source-separate recyclable materials for collection may not be charged more than the rate they pay for garbage collection and disposal. They may be charged less.

H. FAIR MARKET VALUE

Another major provision of the Act is an exemption from solid waste management regulation for certain recyclable materials and recycling activities. When recyclable material is source-separated by the generator and sold or exchanged for fair market value for reuse or recycling, it is not subject to the provisions of the Act. This would limit local government's ability to regulate recycling activities.

In its rules, the EQC addresses purchase or exchange of source-separated recyclable material for fair market value where it applies to residential recycling activities. Through a combination of provisions in the Act and the rules, local government can restrict competition for collection of recyclable material from residential sources by identifying a group of materials as a recyclable material and restricting individual collection of any member of the group. This approach includes the concept that the fair market value of a member of such a group of materials includes the cost of recycling all of the members of the group.

The basis for the EQC adoption of a fair market value rule was that local government has primary responsibility for solid waste management and the rules should not limit local government's ability to regulate collection of recyclable material from residential sources. Local government is not required to exercise their regulatory authority; however, that authority should be available if local government chooses to use it.

I. ANTI-SCAVENGING

Under the provisions of the recycling act, violation of any of the following is a Class A misdemeanor:

- o Recyclable material set out for collection by an authorized collection service cannot be collected by another person without permission of the owner or generator of the material. This is to stop the theft of recyclable material placed out for collection.

- o Recyclable material may not be removed from any container, drop box, garbage truck or other vehicle, depot, collection or storage site without the permission of the owner. This is to stop the theft of recyclable material from containers and depots.

- o No person may mix source-separated recyclable material with solid waste in any collection or disposal vehicle. This is to stop the dumping rather than recycling of recyclable material.

The Environmental Quality Commission also provided by rule:

- o No person shall dispose of source-separated recyclable material which has been collected or received from the generator by any method other than reuse or recycling. This is to stop the dumping rather than recycling of recyclable material.

III. IMPLEMENTATION

The efforts of the Department, local governments and other affected persons are now being directed at the implementation of the Act. The Department is providing technical assistance to those who are implementing the opportunity to recycle, local governments are incorporating the opportunity to recycle into their solid waste management programs, and the other affected persons are beginning to provide more recycling depots, on-route collection, and education and promotion.

A. DEQ'S ROLE

The Department's technical assistance program includes:

- o Research, design, and distribution of fact sheets and technical papers on on-route collection and markets for recyclable material,

- o Surveys of the need for and availability of recycling services,

- o Design and distribution of generic education and promotion materials,

- o Assistance in the design of local education and promotion programs,

- o Response to inquiries from affected persons and implementors,

- o Meetings with affected persons in each wasteshed and transfer of information between wastesheds,

- o Collection and dissemination of information on markets for recyclable materials,

- o Preparation of lists of recyclable materials for specific locations where the opportunity to recycle is required,

- o Interpretation of the statute and rules,

- o Technical assistance in the incorporation of recycling into franchise agreements,

- o Design and distribution of recycling report forms,

- o Assistance in the preparation of recycling reports and review of final reports, and

- o Response to requests for assistance on special problems.

The Department's regulatory role includes the modification of all disposal site permits to include provisions for a place for collection of recyclable material.

B. LOCAL GOVERNMENT'S ROLE

Local governments are designing and implementing regulatory programs and providing for education and promotion programs. For example, Clackamas County has designed an education and promotion program and hired a coordinator to take the program into the community. The program is jointly funded by the County and private collection industry. Local governments are also making difficult decisions on who should provide recycling service and who should be restricted from providing that service. As examples, the City of Bend is encouraging a joint program between the garbage collection company and the local recyclers, but the Cities of Monmouth and Independence have given all recycling collection rights to the garbage company and have essentially forced the recyclers out of business.

C. OTHER AFFECTED PERSONS' ROLE

Recyclers, solid waste collection and disposal companies are actively starting to provide the opportunity to recycle. Since the passage of the Act, 15 new on-route collection programs have been offered in urban areas. There have also been new recycling depots opened at disposal sites. By July 1985, there will be over 100 disposal sites with recycling.

Even before the July 1, 1986 effective date of the Act, Oregon is starting to see an increase in the level of recycling service available to the public. Many of the efforts to implement the Oregon Recycling Opportunity Act go beyond the original intent of the legislation. Through the cooperative efforts of local governments and recyclers, we are seeing weekly rather than monthly on-route service offered in cities much smaller than 4,000. Programs are starting before either local government or state agency requirements are in place. Effective education and promotion programs are also underway in some communities.

IV. LEGISLATIVE CHANGES

The EQC is not proposing any changes to the original Act. The general intent of the legislation is clear. The affected persons have an understanding of that intent and they should be allowed to provide the opportunity to recycle as was intended without further changes and requirements in legislation.

WASTE REDUCTION PROGRAMS

I. GENERAL INFORMATION

The original landfill siting act, passed by the 1979 legislative assembly required the Department to report to future legislatures on the use made of ORS 459.055. This section requires a waste reduction program when a landfill is sited in an exclusive farm use zone. During the six years of implementation of this law, there has been no direct utilization of that section.

ORS 468.220 was also amended by the same 1979 act. These new provisions provided that local governments which received financial assistance from the Pollution Control Bond Fund, administered by the Department, must develop a waste reduction program as a part of their solid waste management plans. There have been no new waste reduction programs developed since submittal of the Department's 1983 Legislative Report.

II. ANTICIPATED USE OF ORS 459.055

The Department is not aware of plans by any local government to use the provisions of ORS 459.055 for landfill siting in an exclusive farm use zone.

III. NEW LEGISLATION

The major effort to implement the opportunity to recycle act has eclipsed both state and local government efforts on general waste reduction programs. The Department is seeking no changes or new legislation in the area of waste reduction. The Department intends to place major emphasis on the implementation of the Recycling Opportunity Act.

VICTOR ATIYEH
GOVERNOR

Environmental Quality Commission

Mailing Address: BOX 1760, PORTLAND, OR 97207
522 SOUTHWEST 5th AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Agenda Item No. O , June 7, 1985, EQC Meeting

Emergency Repeal of Motorcycle Noise Testing Requirements for the Vehicle Inspection Program, OAR 340-24-311 and 24-337(2)

Background and Problem Statement

At the EQC meeting of November 4, 1984, rules were adopted which added vehicle noise testing requirements to the vehicle inspection program test procedures. The rule adoption incorporating passenger cars and light duty truck noise testing was effective April 1, 1985. On that date, compliance with the noise inspection requirement became compulsory in addition to the emission test requirements. At that same meeting, the Commission directed that motorcycle noise testing be included with an effective date of July 1, 1985; and that necessary funding to accomplish that task be obtained.

At the Commission's direction, the Department submitted a supplemental budget proposal. The budget proposed would have provided for three full time equivalent (FTE) positions and provided for an increase in fees received due to the 30,000 projected motorcycles and mopeds which would be tested and purchasing Certificates of Compliance. The supplemental budget request was specifically rejected by the Joint Subcommittee on Regulation and the full Committee on Ways and Means; and was not included in the budget passed by the Legislature and submitted to the Governor.

ORS 481.190 provides that "motor vehicles registered within the boundaries, designated in ORS 268.125, of the metropolitan service district formed under ORS Chapter 268 for the metropolitan area, as defined in subsection (3) of ORS 268.020, which includes the City of Portland, Oregon, shall be equipped with a motor vehicle pollution control system and shall comply with the motor vehicle pollutant, noise control and emission standards

adopted by the Environmental Quality Commission pursuant to ORS 468.370." The Commission, pursuant to ORS 468.370, adopted motorcycle noise standards OAR 340-24-311 and 340-24-337(2). ORS 481.190 further directs that the Motor Vehicle Division shall not issue a registration or renewal of registration for a motor vehicle subject to these requirements unless the division receives, with the registration or renewal of registration, a completed Certificate of Compliance. Without budget authority, the Department is not now in a position to test motorcycles and mopeds and issue Certificates. The motorcycling public, therefore, would be severely prejudiced by not being able to renew their motorcycle registrations.

If the Department were to utilize its existing resources, and incorporate motorcycle noise testing, existing levels of service to the public would be severely affected and the Department would be taking an action specifically disapproved during the Legislative budget hearings. If no action is taken, potentially both the Department and the Motor Vehicles Division could be open to citizen suit.

Alternatives and Evaluations

The motorcycle noise testing rules previously adopted by the Commission are effective July 1, 1985. The program is now required, but does not have specific legislative budget authorization. There are four major options open for Commission consideration:

1. Issue an emergency repeal of OAR 340-21-311 and OAR 340-24-337(2) and authorize public hearings on a permanent repeal of the rule;

2. Issue an emergency rule change of the effective date of implementation of OAR 340-24-311 and 24-337(2), and direct the Department to seek fiscal approval for positions and revenue from the State Emergency Board so that motorcycle testing may be started at a later date;

3. Direct the Department to implement motorcycle and moped noise testing on schedule without legislative budget approval and thus directly impact our service levels to the motoring public; or

4. Take no action.

ORS 183.335 provides for emergency adoption, suspension, or repeal of administrative rules when failure to act promptly would result in serious prejudice to the public interest. Emergency actions expire 180 days after implementation, requiring finalization through the standard rulemaking process.

Summation

Emergency repeal or suspension of the rules which provide for motorcycle noise testing is necessary to prevent serious prejudice to the public interest because the Oregon Legislature has withheld budget approval for that aspect of the inspection program operation. Prompt emergency action is required because a July 1, 1985 start-up date is incorporated in the noise testing rules. If no action is taken to repeal or suspend the rules, the Motor Vehicles Division is directed by ORS 481.190 to demand a Certificate of Compliance prior to motorcycle registration. If the Department began testing motorcycles and issuing Certificates , it would be operating outside of its legislatively approved budget. These alternatives are unacceptable.

Director's Recommendation

Based upon the summation, it is recommended that:

1. The Commission enter a finding that failure to act promptly will result in serious prejudice to the public interest. The specific reason for this prejudice is that if no action is taken, motorcycle owners within the Portland area would not be able to re-register their motorcycles.

2. The Commission issue an emergency repeal of OAR 340-24-311 and OAR 340-24-337(2) under its authority contained in ORS 183.335 and 468.370.

3. The Commission authorize the Department to hold public hearings on a formal repeal of OAR 340-24-311 and OAR 340-24-337(2).

Fred Hansen

Attachments: 1. OAR 340-24-311 and 340-24-337
2. Statement of Need for Rulemaking

William Jasper:p
AP73
229-5081
May 21, 1985

Attachment 1
Agenda Item No. O
June 7, 1985
EQC Meeting

[MOTORCYCLE NOISE EMISSION CONTROL TEST METHOD

340-24-311

(1) The vehicle is to be in neutral gear with the brake engaged. If the vehicle has no neutral gear, the rear wheel shall be at least 2 inches clear of the ground.

(2) The engine is to be accelerated to a speed equal to 45 percent of the red line speed. Red line speed is the lowest numerical engine speed included in the red zone on the motorcycle tachometer. If the red line speed is not available, the engine shall be accelerated to 50 percent of the speed at which the engine develops maximum rated net power.

(3) If it is judged that the vehicle may be emitting propulsion exhaust noise in excess of the noise standards of rule 340-24-337, adopted pursuant to ORS 467.030, then a noise measurement is to be conducted and recorded while the engine is at the speed specified in Section (2) of this rule. A reading from each exhaust outlet shall be recorded at the raised engine speed.

(4) If it is determined that the vehicle complies with the standards of rule 340-24-337, then, following receipt of the required fees, the vehicle emission inspector shall issue the required certificates of compliance and inspection.

(5) No Certificate of Compliance or inspection shall be issued unless the vehicle complies with all requirements of these rules and those applicable provisions of ORS 468.360 to 468.405, 481.190 to 481.200, 483.800 to 483.825 and 467.030.]

MOTOR VEHICLE PROPULSION EXHAUST NOISE STANDARDS

340-24-337

(1) Light duty motor vehicle propulsion exhaust noise levels not to be exceeded as measured at no less than 20 inches from any opening to the atmosphere downstream from the exhaust ports of the motor vehicle engine:

Vehicle Type	Maximum Allowable Noise Level
Front Engine	93 dBA
Rear and Mid Engine	95 dBA

[(2) Motorcycle propulsion exhaust noise levels not to be exceeded as measured at no less than 20 inches from any opening to the atmosphere downstream from the exhaust ports of the motorcycle engine:

Model Year	Maximum Allowable Noise Level
Pre-1976	102 dBA
1976 and later	99 dBA]

(2) [(3)] The Director may establish specific separate standards, differing from those listed in subsections (1) and (2), for vehicle classes which are determined to present prohibitive inspection problems using the listed standard.

Attachment 2
Agenda Item No. O
June 7, 1985
EQC Meeting

STATEMENT OF NEED FOR RULEMAKING

for

Emergency Rules to Vehicle Inspection Program Rules

Pursuant to ORS 183.335, these statements provide information on the intended action to amend a rule.

Legal Authority

This proposal repeals OAR 340-24-311 and OAR 340-24-337(2). It is proposed under authority of ORS 468.370.

Need for the Rule

The emergency repeal is necessary to prevent prejudice to the public interest because some motorcycles will not be able to renew, as required by ORS 481.190, their motorcycle registration after July 1, 1985 because the Legislature withheld budgetary authority to implement these referenced rules.

Fiscal and Economic Impact Statement

As this action repeals or suspends OAR 340-24-311 and 24-337(2) before its effective date, there is no fiscal or economic impact.

Land Use Consistency Statement

This action does not affect land use as defined in the Department's coordination program approved by the Land Use Conservation and Development Commission.

VICTOR ATIYEH
GOVERNOR

Environmental Quality Commission

Mailing Address: BOX 1760, PORTLAND, OR 97207
522 SOUTHWEST 5th AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Agenda Item No. P, June 7, 1985, EQC Meeting

Request by the City of Klamath Falls for Modification of the Approved Time Schedule for Alleviating the Health Hazard in the Pelican City Area

Background

Pursuant to ORS 222.850-915, the Administrator of the State Health Division, on February 1, 1983, certified an area northwest of the City of Klamath Falls to be a health hazard because of failing septic tanks. The City of Klamath Falls submitted a proposal to the Environmental Quality Commission on March 21, 1983 identifying preliminary plans, specifications and a time schedule for removing the health hazard. The plan proposed to sewer the health hazard area within two years of the City's March 1983 proposal.

At the May 20, 1983 EQC meeting, the Commission certified the City of Klamath Falls' preliminary plans and time schedule to be adequate. (Attachment 1) The City then proceeded with annexation of the health hazard area and began looking for ways to fund the project work.

By the end of 1984, it became apparent that the City was not making any progress on the project and the Department initiated formal enforcement action. The City was very reluctant to spend City treasury money to correct a problem it did not create. The City attempted to locate outside grant funding. These efforts were unsuccessful until the City applied for a $500,000 grant from the Department of Housing and Urban Development (HUD). (Attachment 2)

HUD awarded the City a $105,000 grant in March 1985 for engineering and design of the sewer system. The City's request for engineering design proposals closes May 20, 1985, and an engineering firm will be selected the first week in June. Design work is to be completed by December 1985.

Following design, the City will apply to HUD for a $500,000 construction grant and form a local improvement district to complete the funding of construction. The City has submitted a revised time schedule for the

project. It now proposes to begin construction in April 1986 and to complete the project in April 1987. (Attachment 3)

Evaluation

ORS 222.900 provides that the Commission shall use its powers of enforcement under ORS 448.305, 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745, and ORS Chapter 468 to insure that the facilities are constructed or installed in conformance with the approved plans and schedule.

The City of Klamath Falls is proposing an amended schedule (Attachment 3) as they were unable to find the outside funding necessary to implement the original approved schedule.

The staff sees three courses of action for the Commission to consider:

1. Order that the City comply with the original approved schedule.

2. Approve a new schedule different from the one proposed in Attachment 3.

3. Approve the new schedule as proposed by the City in Attachment 3.

The original completion date proposed by the City has already passed. Option one is, therefore, not a viable option.

Option two would require approval of a different time schedule. Staff believes that the new schedule proposed by the City is reasonable in light of the work that remains to be done. There is no evidence that the City has deliberately put off or ignored its responsibility. The problem has been a lack of money to finance the project.

Staff concludes that the City has made a good faith effort to fulfill its obligation. It has obtained funding to complete the necessary engineering and has proposed a time schedule for completion of the project that is both reasonable and in line with future availability of funding through HUD.

The Department notes that the health hazard statutes do not consider funding aspects. A city ordered to alleviate a health hazard is not given the option of delaying implementation of an approved plan because grant funds are not available. Nevertheless, most cities, Klamath Falls included, will resist using their general fund revenues if the annexing area is unable to support a local improvement district covering the entire cost. Instead, the cities apply for outside grant funding and, if available, proceed. Otherwise, the project stalls.

In consideration of this, however, the Department has concluded that funding issues cannot be realistically divorced from the health hazard process. The increasing stress on public financing dictates this view regardless of viewpoints. Consequently, while the City of Klamath Falls did not look internally for a funding source, the Department does not believe the City acted in bad faith or has intentionally delayed sewering Pelican City.

Summation

1. Pursuant to the provisions of ORS 222.850 to 222.915, the State Health Division issued an order adopting findings and conclusions and certified a copy to the City of Klamath Falls.

2. The City submitted a preliminary plan and specifications, together with a time schedule, and the EQC approved the proposal on May 20, 1983.

3. The City attempted to obtain funding to complete the project within the time schedule and was unable to do so.

4. The City has located a funding source through the Department of Housing and Urban Development to complete engineering design work on the project. Further funds are expected to be available to complete construction of the project.

5. The project cannot be completed within the time schedule approved by the Environmental Quality Commission in May 1983.

6. The proposed time schedule is reasonable for a project of this size.

Director's Recommendation

Based upon the findings in the summation, it is recommended that the Commission approve the revised time schedule of the City of Klamath Falls for extending sewers to the Pelican City area.

Fred Hansen

Attachments: I. Agenda Item No. J, May 20, 1983, EQC Meeting
II. City of Klamath Falls letter dated February 22, 1985.
III. City of Klamath Falls letter dated March 27, 1985

Donald L. Bramhall:b
388-6416
May 16, 1985
GB4685

VICTOR ATIYEH
GOVERNOR

Department of Environmental Quality

522 S.W. 5th AVENUE, BOX 1760, PORTLAND, OREGON 97207

MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Agenda Item No. J, May 20, 1983, EQC Meeting

Request for Approval of Preliminary Plan, Specifications and Schedule for Sanitary Sewers to Serve Health Hazard Annexation Area Known as Pelican City, Contiguous to City of Klamath Falls, Klamath County

Background

Pursuant to ORS 222.850-915, the Administrator of the State Health Division, on February 1, 1983, certified an area northwest of the City of Klamath Falls, to be a health hazard because of failing septic systems. The certification orders the area to be annexed to Klamath Falls. The area requiring annexation to correct the health hazard is known as Pelican City. A copy of the annexation order was sent to the City of Klamath Falls. (Attachment 1)

The area was surveyed during April 8 and 9, 1980 and February 23 and 24, 1982. Twenty-nine properties had inadequate sewage disposal.

The City has 90 days after receipt of a certified copy of the order to prepare preliminary plans and specifications, together with a time schedule for removing or alleviating the health hazard.

By letter received March 21, 1983, the City of Klamath Falls has submitted preliminary plans, specifications, and a time schedule for construction of sewers in the proposed annexation area. (Attachment 2)

The Environmental Quality Commission has 60 days from time of receipt of preliminary plans and other documents to determine them either adequate or inadequate to remove or alleviate the dangerous conditions and to certify same to the City.

Upon receipt of EQC certification, the City must adopt an ordinance in accordance with ORS 222.900 which includes annexation of the territory. The City is then required to cause the necessary facilities to be constructed.

Evaluation

The schedule proposed by the City calls for annexation of the territory immediately following certification of plans, specifications, and time schedule by the EQC. All construction work would be completed within two years or less.

The preliminary plans and specifications require construction of gravity sewers within the health hazard annexation area. These would connect at several points to the existing College Industrial Park trunk sewer which exists westerly and northerly of the area. A new raw sewage pump station and force main on California Avenue will be necessary to provide capacity to convey the added flow into an interceptor sewer.

Treatment of collected sewage will be at the City's treatment plant which has adequate capacity to do so.

The staff concludes from the Health Division findings and conclusions that the health hazard in the area is a result of sewage at or on the surface of the ground and disposal systems constructed within high groundwater areas. Installation of a sewage collection system will prevent the discharge of inadequately treated sewage to the ground surface and groundwater.

Thus, the staff concludes that installation of sewers in the area will remove the health hazard.

Summation

1. Pursuant to the provisions of ORS 222.850 to 222.915, the State Health Division issued an order adopting findings and conclusions and certified a copy to the City of Klamath Falls.

2. The City has submitted a preliminary plan and specifications, together with a time schedule to the DEQ for review.

3. ORS 222.898(1) requires the Commission to make a determination of the adequacy or inadequacy of the preliminary plans and other documents submitted by the City within 60 days of receipt.

4. ORS 222.898(2) requires the Commission to certify to the City its aproval if it considers the proposed facilities and time schedule adequate to remove or alleviate the dangerous conditions.

5. The gravity sewer, pump station, and force main proposed by plans and specifications will remove the conditions dangerous to public health within the area to be annexed. The proposed time schedule is satisfactory.

Director's Recommendation

Based upon the findings in the summation, it is recommended that the Commission approve the proposal of the City of Klamath Falls and certify approval to the City.

Bill

William H. Young

Attachments:

1. Health Division Rulings, Findings, Conclusions of Law and Order
2. City Letter of March 15, 1983

James L. Van Domelen:g
WG2300
229-5310
April 26, 1983

The initial action, by Council, to form a Local Improvement District was taken on January 21, 1985. This action set the assessment boundary, set the method of assessment and set a Public Hearing for February 4, 1985. At the February 4, 1985 meeting, after Public Hearing, the City Council ordered the Pelican City Sanitary Sewer project to be carried out and set a public hearing for February 18, 1985, to hear objections to the proposed assessments. The February 18, 1985, public hearing was held, upon completion of the public hearing the City Council approved the spreading of the assessments. The City Council directed staff to proceed with the project after award of the HUD Grant. The grants are expected to be given out on March 8, 1985.

The engineering and design will begin as soon as award of grant is made. We expect to call for bid in February 1986, with construction to be complete in March 1986.

If you have any questions, please feel free to call me at 883-5363.

Respectfully,

Ray Bidegary

Ray Bidegary
Director of Public Works

RB:ir

CITY OF KLAMATH FALLS, OREGON

AN EQUAL OPPORTUNITY EMPLOYER
P.O. Box 237
97601

SISTER CITY
ROTORUA, NEW ZEALAND

March 27, 1985

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
RECEIVED
MAR 2[illegible] 1985
BEND DISTRICT OFFICE

Mr. Richard J. Nichols
Regional Manager, DEQ
2150 N. E. Studio Road
Bend, OR 97701

Dear Richard Nichols:

The City of Klamath Falls proposed the following time schedule for completion of the North Suburban Sanitary Sewer System:

Selection of Engineering Firm	April 30, 1985
Complete Survey & Design	December 7, 1985
Creation of Local Improvement District	March 3, 1986
Call for Bid & Award Contract	April 21, 1986
Complete Construction	April 1987

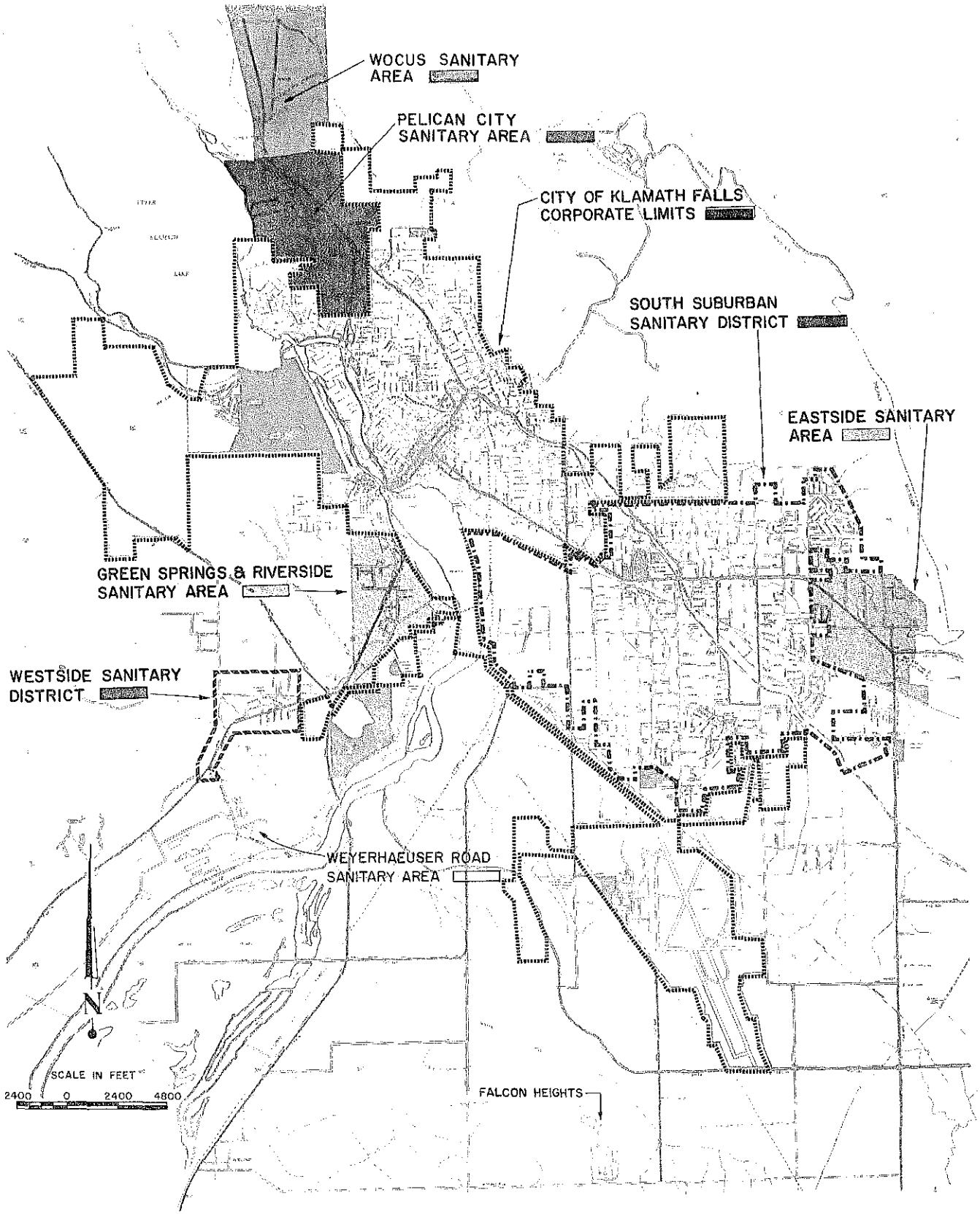
The City will make every effort possible to achieve the above time schedule.

Respectfully,

Ray Bidegary

Ray Bidegary
Director of Public Works

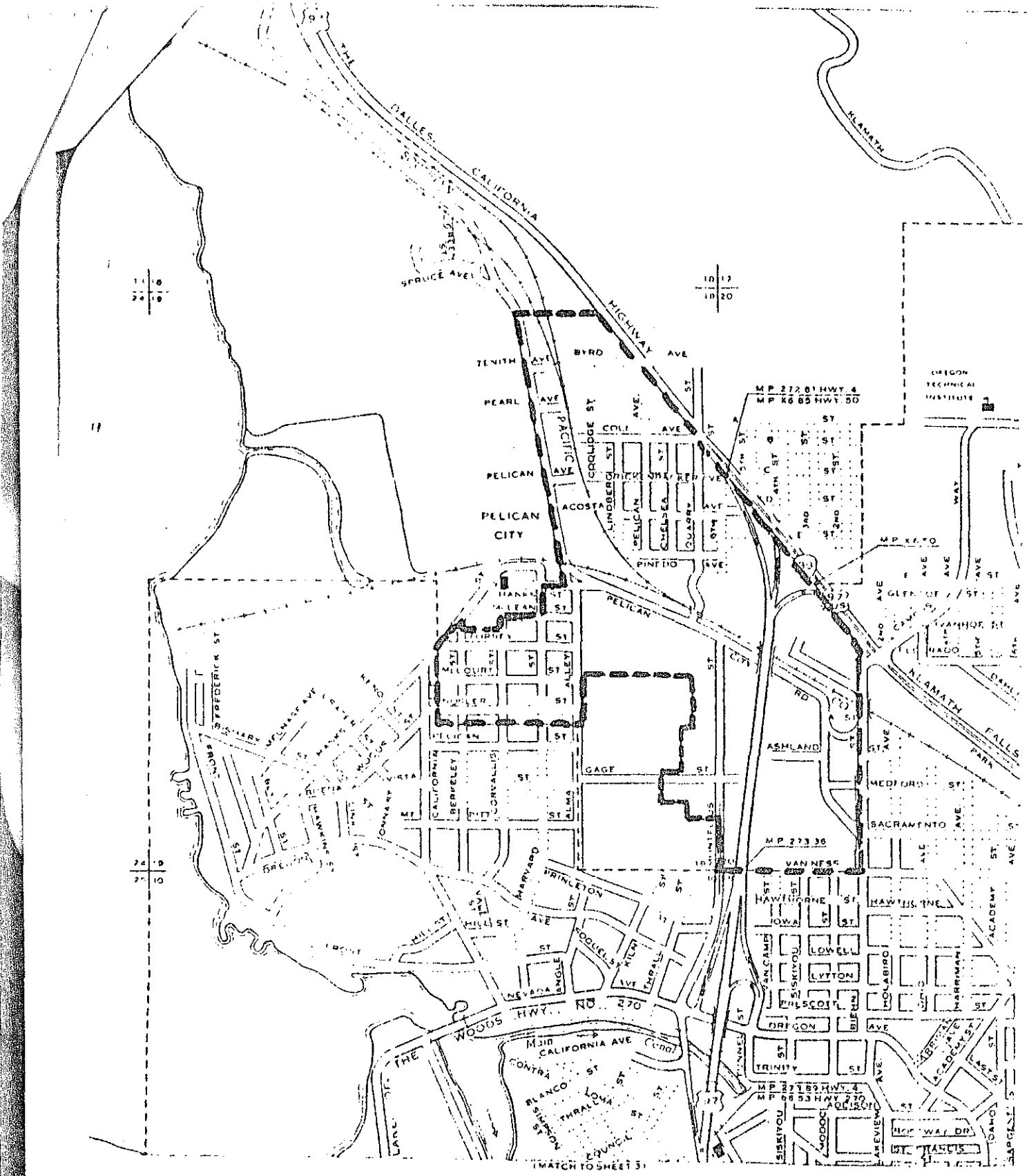
RB:ir
cc: Jim Keller, City Manager
Jeff Ball, City Attorney



POLITICAL SUBDIVISIONS KLAMATH BASIN REGIONAL SEWERAGE STUDY

HGE INC ENGINEERS & PLANNERS
405 N. FIFTH/COOS BAY, OR 97420
19 N.W. 5th/PORTLAND, OR 97209

PLATE 2



ATTACHMENT A: Project Area Map

ENVIRONMENTAL QUALITY COMMISSION

JUNE 7, 1985

REVISED BREAKFAST AGENDA

1. PRELIMINARY REQUEST FOR PUBLIC HEARING AUTHORIZATION
   JACKSON COUNTY I/M PROPOSAL

2. ATLAS OF OREGON LAKES

3. SEPTEMBER MEETING DATE

4. LEGISLATIVE UPDATE

VICTOR ATIYEH
GOVERNOR

Environmental Quality Commission

Mailing Address: BOX 1760, PORTLAND, OR 97207
522 SOUTHWEST 5th AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Breakfast Agenda, June 7, 1985, EQC Meeting

PRELIMINARY REQUEST FOR PUBLIC HEARING AUTHORIZATION
JACKSON COUNTY AQMA I/M PROPOSAL

HB2845 has been passed by both the Oregon House, and Senate, and is awaiting signature by the Governor. This legislation provides that if a need for an inspection/maintenance program is identified in the State of Oregon Clean Air Act Implementation Plan,(SIP) then the Commission shall, by rule, designate boundaries where such a program will be required. The Jackson County Air Quality Maintenance Area (AQMA) has been identified and designated in the SIP as such an area. Jackson County is under federal sanction for not implementing sufficient air pollution control strategies including an I/M program, to meet the federal ambient air quality standards.

When HB2845 is signed by the Governor, in order to remove the federal sanctions, the Department will be required to have in place by January 1, 1986, an inspection/maintenance program for the Jackson County AQMA area. The January 1, 1986 date is critical. Computer modeling indicates that this is the latest date to initiate an I/M program in order to achieve sufficient emission reductions to meet the ambient air health standards and thus to lift federal sanctions. Because of various publishing deadlines, Commission meeting dates and other implementation schedules, the Department is requesting preliminary authorization to publish a notice of public hearing prior to final authorization by the Commission. The scope of that notice would be to advertise public hearings on the I/M program implementation in the Jackson County area. The hearings would receive testimony on boundary designation and program rule modifications for a proposed Jackson County area I/M program.

The formal request and staff report is scheduled for the Commission meeting of July 19. To satisfy the 30-day public notice requirement, the Department proposes to publish a public notice in the July 15, Secretary of State's Bulletin. This would allow for public hearings in Jackson County prior to Labor Day. This time frame is required, if the Department is to present a Jackson County AQMA I/M rule package for Commission consideration at its October 18 meeting. Such a consideration date is necessary if the Department is to have an I/M program in operation prior to January 1, 1986.

Director's recommendation It is recommended that authorization be given for publishing a notice of public hearing in the July 15, 1985, Secretary of State's Bulletin with the understanding that final authorization to hold such hearings will be formally requested at the July 19, 1985, EQC Meeting. If such authorization is not received from the Commission, any announced public hearings would be cancelled.

Fred Hansen

W. Jasper:p
VY376
229-5081
May 22, 1985

STATE OF OREGON
DEPARTMENT OF ENVIRONMENTAL QUALITY

Memorandum

To: Environmental Quality Commission Date: May 31, 1985

From: Carol Splettstaszer

Subject: September EQC Meeting

The September meeting is currently set for September 6 in Bend. Mary Bishop has a conflict and if the meeting remains on that date will not be able to attend.

Jim Petersen has a conflict on the next Friday, September 13.

Alternatives:

1. Keep the September 6 date, understanding Mary will be unable to attend.

2. Change to September 20, and adjust the meeting dates for July, October and November accordingly.

Attached are calendars showing the alternatives. We'll be talking about this at your breakfast meeting.

Current Schedule - EQC Meetings

1985

JANUARY

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

FEBRUARY

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24	25	26	27	28		

MARCH

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24	25	26	27	28	29	30
31						

APRIL

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MAY

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JUNE

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JULY (Portland)

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28	29	30	31			

AUGUST

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SEPTEMBER (Bend)

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29	30					

(Mary cannot attend)

OCTOBER (Portland)

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27	28	29	30	31		

NOVEMBER (Eugene)

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17	18	19	20	21	(22)	23
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DECEMBER

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Alternative

1985

JANUARY

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FEBRUARY

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MARCH

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APRIL

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MAY

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26	27	28	29	30	31	

JUNE

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16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

JULY (Portland)

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21	22	23	24	25	26	27
28	29	30	31			

AUGUST

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11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

SEPTEMBER (Bend)

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

OCTOBER (Portland)

S	M	T	W	T	F	S
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6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

NOVEMBER (Eugene)

S	M	T	W	T	F	S
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17	18	19	20	21	22	23
24	25	26	27	28	29	30

DECEMBER (Portland)

S	M	T	W	T	F	S
1	2	3	4	5	6	7
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15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

VICTOR ATIYEH
GOVERNOR

Department of Environmental Quality

522 S.W. FIFTH AVENUE, BOX 1760, PORTLAND, OREGON 97207 PHONE (503) 229-5696

June 7, 1985

TO: Environmental Quality Commission

FROM: Carol Splettstaszer

Jeanne Orcutt, who testified at your public forum this morning, asked me to forward to you the following information she submitted for the record.

March 11, 1985 letter from Jewell Lansing, Portland City Auditor, to Mayor Clark and City Commissioners

June 4, 1985 Gresham City Council agenda item no. III(1)

Chapter 8.75, Inverness Sewage Treatment Plant

/cs
Enclosures

cc: Jeanne Orcutt
Fred Hansen
Harold Sawyer

Public forum 6/7/85

CITY OF
PORTLAND, OREGON
OFFICE OF CITY AUDITOR

Jewel Lansing, City Auditor
Margaret Epting, Chief Deputy
1220 S.W. 5th, Rm. 202
Portland, Oregon 97204
(503) 248-4078

PERSONAL AND CONFIDENTIAL

March 11, 1985

Mayor J.E. Bud Clark
Commissioner Dick Bogle
Commissioner Mike Lindberg
Commissioner Mildred A. Schwab
Commissioner Margaret D. Strachan

SUBJECT: Investigation of Eleven Years of LID Construction Fund activity; LID Construction Fund/General Fund Overhead Charges

Enclosed is a summary of information about past LID Construction Fund (LIDCF) activity, for the period 1975 to the present, which we have discovered during the past seven months. It shows that the LIDCF paid out a total of $808,051 more than it received for administrative and intersection/drainage costs for the four fiscal years ending June 30, 1985. (The source of an additional $200,000 accrued fund balance deficit remains undetermined and is still being investigated. This makes a total LIDCF "leakage" of approximately $1 million from the time its predecessor funds were established in 1975 to the present.) In addition, the Fund will have outstanding delinquent receivables totaling $552,642 at June 30, 1985.

Four points from this analysis are clear:

1) The LID Construction Fund has been absorbing costs for which it has no revenue source to pay;

2) This practice must stop immediately and a plan developed to see that it does not occur again in the future;

3) Actions must be taken to collect delinquent accounts; and

4) A long-term plan must be developed to provide repayment to the Fund for costs which it has absorbed in the past which it had no revenue source to cover.

We did not advise you of these matters earlier because of the sensitive nature of the investigation we have been conducting, and the need to determine the extent of the problem before numbers started being bandied about. Only last week were we able to confirm the cause of $400,000 of the excess costs which the LIDCF has absorbed. The possibility of fraud or malfeasance has been one which we could not dismiss without detailed, exhaustive search. We called in the Fiscal Audit Supervisor to assist us, and hired two accountants on personal service contracts to do a detailed review of past fund transactions.

Fortunately, none of the tests we have conducted to date has produced any indication that any malfeasance has occurred. However, since our investigation is not yet complete, I would appreciate your treating the on-going nature of this search in confidence.

What we have found are outdated and complex record-keeping systems, missing records, inconsistent procedures, and a lack of any system for tracking the Fund's financial status on an accrual or project-oriented basis. Since so much backup detail is missing for FMS transactions made during the period 1975-80, it is possible that we may not be able to determine if transaction posting or other errors occurred during those early years.

Sandra Laubenthal, the Manager of the Assessments/Liens Division, and Margaret Epting, my Chief Deputy to whom Sandra reports, deserve commendation for the enormous progress they have made in identifying and resolving problems regarding the LIDCF. Sandra assumed responsibility for the Assessments/Liens Division only fourteen months ago, and undoubtably knows more about the Fund now than anyone ever has.

The possibility that the Fund might have cash shortfall problems first surfaced when Sandra started making projections as part of the preassessment process necessitated by Ballot Measure 2 last November. Sandra found that the previous perception of her predecessor that the LIDCF was "rich" was a mistaken assumption based in part on previous high interest rates and the continued rollover of note sales and bond sales for new projects. We found, when we spoke with them, that neither of the two outside CPA firms who have conducted the City's annual financial statement audits during the ten-year existence of the LIDCF and its predecessor funds had any knowledge of these potential problems. They did say that the detailed record systems for the funds have never been adequately tied together to give anyone a complete accrual basis picture of what was happening in the funds.

We appreciate your patience in giving us the time to resolve all of these issues quietly. We have been painfully aware of the possible repercussions to future LID projects and the bond rating of the LID notes and bonds if this situation were not handled confidentially and thoroughly. We now see the light at the end of the tunnel for a problem which has given us many sleepless nights.

We have taken steps to deal with the four points which I enumerated at the beginning of this memo. We have met with the Directors of the Office of Fiscal Administration, the Bureau of Environmental Services, the Office of Transportation, and the City Budget Division. We have communicated with the City's financial advisor, David Rush of Government Finance Associates, Inc. We notified Transportation, Environmental Services, and Fiscal Administration that the LIDCF would need all its cash resources to honor payments due to outside contractors until enough new projects were underway to allow a Bond Anticipation Note sale, and that payments for engineering costs and General Fund overhead payments would have to be held up.

Based on the advice of G.F.A., the Budget Division of the Office of Fiscal Administration then agreed that Council would be asked to eliminate the current year General Fund Overhead budgeted charge and to delete such charges for future years. While cash flow will no longer be a problem after the May note sale, the LIDCF will need to set up receivable accounts to recognize these past transactions so that future fund activity can be separately monitored.

The Directors of the Bureau of Environmental Services and the Office of Transportation have agreed (contingent on Council approval) to include cash transfers to the LIDCF in their 85-86 budgets to cover the administrative costs of the LIDCF which exceed Auditor's superintendance fees recoverable under the fee schedule in the City Code. (They can recover these costs through engineering charges assessed to the appropriate Local Improvement District.) We will be working with these bureaus, and others, over the next few months to come up with a proposed plan for funding future unrecovered administrative costs and intersection and drainage subsidies as well as how to recapture other prior unrecovered costs absorbed by the Fund.

One possible solution to recovering all future LIDCF administrative costs would be to ask Council to increase the Auditor's LID superintendence fee provided for in Code Section 17.12.020, or to specify that Auditor's Office actual costs would be charged to LID projects as engineering costs are now handled. The Auditor's superintendence fee would need to be more than doubled to cover all administrative costs. Both John Lang and Geoff Larkin are opposed to either of these ideas because of probable adverse public reaction (especially at a time when the City has promised urban services delivery to newly annexed areas) and because it would discourage property owners from supporting new LID projects. Another possibility would be to have the General Fund subsidize LID administrative costs as it did years ago, but no one seems to feel that such subsidy is feasible at this time.

The collection of delinquent asssessments from Multnomah County is being studied by the Office of Fiscal Administration. Sandra Laubenthal and Irene Stephens, Budget Director, have met with Parks Bureau managers to resolve the question of past and future Parks Bureau LID and bonded assessments. The Internal Audit Division has begun an audit of the process for collection of delinquent assessments to encompass the LIDCF, Bancroft Bond Sinking Fund, and the Assessment Collection Fund.

While the LIDCF will have enough projects underway for a $2.3 million note sale by mid-April, G.F.A. has advised us that the timing is not right, and that another City financial issue should be allowed to go to market before the LID note sale. In addition, by waiting six weeks, a larger number of LID projects will have been approved by Council and we should be able to get a better interest rate for the bigger issue. Therefore, the LIDCF is making arrangements to borrow $1.5 million from the Sewage Disposal Fund or some other source for two months until a $5.8 million LIDCF note sale is conducted in late May. Prior City Attorney opinions have been consulted to verify the legality of this transaction, and an ordinance approving this loan will be on the Council agenda soon. Similar short-term loans from the Sewage Disposal Fund to the LIDCF have been made in the past.

We are also initiating a study of the financial status of the Bancroft Bond Sinking Fund. Preliminary indications are that there may be some surplus funds there from prior paid-off bond issues, but we want to verify this. We are consulting bond counsel to ascertain what could, and should, be done with surpluses if any are found.

All of this work is extremely time-consuming, and sometimes frustrating. We believe that the funding for personal computers for the Division which you recently approved, as well as the reclassification of an existing position to create a Financial Analyst position, will give Sandra the kind of technical tools and assistance which she needs to do this job.

Copies of the enclosed schedule of past costs absorbed by the LIDCF over revenues received will be available at the LIDCF budget review on Tuesday, March 12, if questions arise about this area. Sandra has included a list of policy issues in her proposed LIDCF budget asking what should be done about the collection of delinquent liens. This is a problem which also concerns the Assessment Collection Fund administered by the City Treasurer, and the Bancroft Bond Sinking Fund.

In summary, the LIDCF problems are being addressed through the cooperation of the many City offices and bureaus which are part of the LID process. I ask your support for their efforts. In particular, I hope you will understand and ratify the conclusion that the LIDCF does not now have, and never has had, the resources with which to pay General Fund overhead. If current year General Fund overhead were paid, the total costs absorbed by the LIDCF over revenues received for the four-year period would be $1,012,857, nearly half of which would be for General Fund overhead.

If you would like to discuss any of these issues with Margaret or me personally, or with Sandra Laubenthal at 248-4087, we would be happy to do so. For reasons previously noted, we feel it would be best if these questions are answered privately, rather than in open Council session. We hope you do not feel we have acted inappropriately without first consulting Council. The importance of ensuring the integrity of the Fund and the LID process has been uppermost in our minds, as I am sure it is in yours. All persons involved have acted according to their best judgement as to how to accomplish these ends.

Jewel Lansing
City Auditor

JL:fd
Enclosure

cc: Marino Bual, Manager, Accounting Division
Mark Gardiner, Director, Office of Fiscal Administration
John Lang, Sewerage System Administrator
Geoff Larkin, Director, Bureau of Transportation
Jeff Rogers, City Attorney
David Smith, City Treasurer
Irene Stephens, Budget Office Director
Richard Tracy, Manager, Internal Audit Division

LID CONSTRUCTION FUND
Fiscal Years 1981-82 through 1984-85
ANALYSIS OF ADMINISTRATIVE AND MISCELLANEOUS
COSTS ABSORBED OVER REVENUES RECEIVED

3-8-85 LIDCons9
S. Laubenthal

	Sub-Totals	TOTALS
Costs absorbed:		
Gen Fund overhead excluding $204,806 for 84-85	(289,445)	
Excess of admin cost over fees received	(173,883)	
Intersection/Drainage costs not assessed*	(341,219)*	
Individual assessments reduced by Council	(19,220)	
Total Costs Absorbed		(823,767)
Interest revenue in excess of interest cost		15,716
Excess of costs absorbed over revenues received		(808,051)

* Intersection/Drainage costs not to be paid by property owners per Council Resolution 31174 dated January 10, 1973

DELINQUENT LIDCF OPEN LIENS AS OF 6/30/85

Multnomah County	252,933
Parks Bureau, City of Portland	91,709
Other delinquent open liens	208,000
Total delinquent LIDCF Liens	552,642

Public Forum
6/7/85

AGENDA ITEM

Gresham City Council
Gresham, Oregon

AGENDA ITEM NO. III (1)

AGENDA OF: June 4, 1985

SUBJECT:

CITY MANAGER APPROVAL:

Burnside LRT Sanitary Sewer Connection Agreement

DEPT. OF ORIGIN: Public Works

DATE SUBMITTED: May 28, 1985

AGENDA PROCEEDING:

REVIEWED BY: Legal & Finance

Consent Agenda

EXHIBITS: A. Green Letter
B. Agreement

BUDGET IMPACT

EXPENDITURE REQUIRED: $-0-	AMOUNT BUDGETED: $-0-	APPROPRIATION REQUIRED: $-0-

LEGAL REFERENCE:

BACKGROUND:

Byron and Berniece Green, owners of a 13-unit apartment building located at the Southeast corner of 148th and East Burnside, have wanted to connect their apartment building to the City's sanitary sewer system. A sanitary sewer has been constructed in East Burnside street in conjunction with the LRT construction. The City paid for the Burnside sewer installation with a $1.5 million loan from the State of Oregon. The Greens' sewer SDC is estimated at $14,560 plus a $50.00 permit fee. Their estimated share of the installation work is $13,610. Normally a project such as this would be constructed under an LID and property owners would be allowed to Bancroft their assessments. In this case, there is no LID yet available to finance the Greens' costs.

The Greens wish to connect to the sanitary sewer immediately because Tri-Met's contractor will be installing sidewalks and reconstructing portions of the Greens' driveway and parking lot. The Greens would like to install the necessary building sewers and connect to the house branches so that they will not have to tear up their driveway and parking lot again at a later time.

The trunk oversizing front footage and house branch costs are estimates. We do not yet have final costs agreed upon with Tri-Met and are requesting that we obtain resolution of them as quickly as possible. The proposed property owners' share of the Burnside sewer should be very close to the final costs.

The Greens have appealed to the City to provide some assistance in payment of the fees required for connection to the sewer by allowing them to pay installments rather than paying the total amount up front.

It is proposed to allow the Greens to pay $9,220 of the connection fee at the time the permit is issued and pay the remaining balance of $19,000 in equal principal payments plus interest of 11 percent per annum over a period of five years.

City staff is beginning to review different methods of allowing property owners to finance their share of the sewer installation cost plus Systems Development Charges. Within the next three or four months there should be a recommendation to the City Council as to how the City might be able to assist in the financing of these sanitary sewers.

RECOMMENDED ACTION:

It is recommended that an agreement be entered between the City of Gresham and Byron and Berniece Green. The Greens would pay a $9,220 downpayment with the additional $19,000 in principal plus 11 percent per annum interest to be paid over a five-year period.

jb

Approved by the Gresham City Council Tues 6-4-85.

Public forum
6/7/85

CHAPTER 8.75

INVERNESS SEWAGE PLANT

8.75.100 Construction of Inverness sewage treatment plant

8.75.200 Construction agreement between Portland and county

Exhibit A

8.75.100 Construction of Inverness sewage treatment plant. Multnomah County shall proceed to construct a sewage treatment plant and first phase interceptors in the vicinity of N.E. 122nd Avenue and Sandy Boulevard in Multnomah County, all in accordance with the plans and specifications approved by the State Sanitary Authority and receiving therefor such grants-in-aid from both the State of Oregon and the federal government as may be authorized.

8.75.200 Construction agreement between Portland and county. An agreement between the City of Portland and Multnomah County shall be executed by the chairman of the board in accordance with the form attached to, and made a part of, this chapter, marked "Exhibit A."

EXHIBIT A OF MCC CHAPTER 8.75

Agreement

This Agreement made and entered into this 25th day of April, 1968, between Multnomah County Oregon, hereinafter referred to as the "County," and the City of Portland, Oregon, hereinafter referred to as the "City."

Witnesseth:

WHEREAS there exists in the suburban area of east Multnomah County adjacent to the corporate limits of the City of Portland a serious sewage disposal and water pollution problem, by reason of the complete lack of sewage treatment facilities in an area where raw sewage is deposited in cesspools at the rate of approximately 8,000,000 gallons per day, thereby creating a serious threat toward the contamination of private and public underground water systems; and

WHEREAS the City did heretofore make a study related to the establishment of a sewage treatment plant in the vicinity of N.E. 122nd Avenue and Sandy Boulevard for the purpose of serving areas lying both within and without the boundaries of the city; and

WHEREAS Multnomah County has likewise made a similar study and has completed and adopted a coordinated master plan for sewage service in the same area, all in accordance with the provisions of ORS 451.120; and

WHEREAS Multnomah County proposes to construct said plant immediately and to continue in ownership thereof; and

WHEREAS the City of Portland is desirous that such a plant be used for treating sewage originating within the City of Portland and other areas served by the City of Portland that can most practicably be treated at said plant, and the County is desirous of securing sufficient revenues in the treatment of city sewage at said plant to assist in defraying the costs of construction; and

WHEREAS the City and County are authorized under the provisions of ORS 449.435 to enter into and perform such contracts and agreements as they may deem proper for or the maintenance and operation thereof, and it would be to the mutual benefit of both parties that said sewage treatment plant be constructed in the near future;

NOW, THEREFORE, in consideration of the covenants and agreements to be kept and performed by the parties hereto,

IT IS AGREED as follows:

1. County shall proceed at its own expense to finance and construct said treatment plant in the vicinity of N.E. 122nd Avenue and Sandy Boulevard in Multnomah County, all in accordance with the plans and specifications approved by the State Sanitary Authority and receiving therefor such grants in aid from both the State of Oregon and the federal government as may be authorized. The City shall not be responsible for any of the costs of construction and shall not be responsible for either the maintenance or operation of said plant.

2. When said plant is completed and in operation, the County will accept at said plant or at any trunk or interceptor serving said plant any sewage either originating from an area presently within the city or which later becomes within the boundaries of the City of Portland or which is collected or delivered by the City, and to treat and dispose of such sewage as the said plant treats other sewage under regulations of the Oregon State Sanitary Authority.

3. In event that the land area encompassing the sewage treatment plant should become annexed to the City of Portland, the City shall have the option to purchase said plant from the County at County's cost, less reasonable depreciation, conditioned that the City assume the County's liability under then existing sewage treatment contracts.

4. The City shall pay the County for sewage handled on its behalf by the other party at the rate of $130 per million gallons of sewage transported or treated in its treatment plant at the rate of $130 per million gallons.

5. To make every diligent effort to prevent storm water from infiltrating the sewer lines that deliver sanitary sewage to the other party.

6. To pay a surcharge rate of One Hundred Thirty Dollars ($130) per million gallons over and above the base rate for all sewage that exceeds a flow of four hundred sixty-five gallons per equivalent single residential connection per day. This surcharge rate shall not go into effect until the flow shall have

exceeded an average of four hundred sixty-five gallons per equivalent residential connection for a continuous period of seven days, but all flow exceeding that value through the initial seven-day period, and subsequent, consecutive days shall be subject to the surcharge rate.

7. Equivalent residential connection units shall be determined, as follows:

Single Family Dwellings	1 Unit per Dwelling
Multi-Family Dwellings	1 Unit per Family Unit
High Schools	10 Students per Unit
Elementary Schools	15 Students per Unit
Motor Courts	2 Rental Units per Unit
Trailer Parks	2 Rental Spaces per Unit
Restaurants and Taverns	6 Seating Spaces per Unit
Hospitals and Institutions	2 Beds per Unit
Industrial & Commercial Buildings	9 Employees per Unit

8. Connection charges: At no time during the term of this agreement shall the County charge sewer users in County areas connection charges less than the then current connection charges fixed by the City of Portland for outside city sewer users under its Public Works Code and City Charter.

9. The party receiving the sewage for transporting, treating and disposing shall furnish a manhole and the necessary equipment for measuring the sewage volume of flow, and that party shall take measure readings and invoice the other party each month at the rates stated in paragraphs 4 and 6 above. In instances where the number of sewer connections may be considered by the receiving party to be too few to warrant the installation of a measuring device, the charge to be made for transporting, treating and disposing of sewage shall be based on the assumed flow of four hundred and sixty-five gallons per equivalent residential connection per day at the rate per million gallons stated in paragraph 4 above. In areas where sewage is not initially measured, the party receiving the sewage may measure it at any time and may invoice for transporting, treating and disposing of the sewage on the volume rate basis, as provided in paragraphs 4 and 6 above. It is mutually agreed that each party shall have access to the other party's sewer lines at all times for the purpose of measuring sewage flow volumes. Each party shall notify the other when they are temporarily checking the volume of sewage flow in order that the other party may observe the measurements. If the volume of flow exceeds that of the base rate, the receiving party shall notify the other in order that correction to the sewer lines may be initiated, and a period of sixty (60) days shall be allowed before the receiving party may elect to invoice on the volume basis at the above base rate and surcharge rates set forth in paragraphs 4 and 6 above.

10. It is intended that only sanitary sewage and acceptable industrial wastes will be permitted to be delivered by each party

to the other's sewer system. Each party shall establish and enforce ordinances and/or regulations to prevent discharge into its sewer system of any and all of the following:

a. Liquid or vapor having a temperature of more than 150° F.

b. Gasoline, motor oil, grease or sludge from service stations, or benzene, naptha, fuel oil, or other inflammable or explosive liquid or solid gas.

c. Ashes, cinders, sand, mud, straw, shavings, glass, rags, feathers, tar, plastics, wood or any other solid or viscous substance capable of causing obstructions to the flow in the sanitary sewage disposal system or treatment facility except as to the ordinary grade of detritus material which generally is a part of sanitary sewage.

d. Wastes from the cutting of cloth or cloth garments, or dye or other chemicals used in the manufacturing process of cloth or cloth garments.

e. Odoriferous material or waste, such as mercaptans and any food processing plant waste solids which could be retained on a U. S. Standard 20-mesh screen.

f. Waters or waste having pH lower than 5.5 or higher than 9.0 or having other corrosive properties capable of causing damage or hazard to structures, equipment or personnel.

g. Water or waste containing a toxic or poisonous substance in sufficient quantity to injure or interfere with any sewage treatment process of the others, or constituting a hazard to persons or animals or to create any hazard in the receiving waters at said sewage treatment plant.

h. Radioactive material; provided that, in the event of disaster or civil defense emergency, properly constituted authorities may direct the discharge of radioactive waste into the sanitary sewage disposal system of the other; and provided further that the other may, upon the recommendation of the proper authority of each party, specifically permit the discharge into a sewer of radioactive wastes of a short life if they determine that such waste will not constitute a hazard to personnel, sewer installations, disposal or treatment plant or receiving waters of the sewage treatment plant.

11. To adjust the surcharge rate and/or the surcharge flow volumes by mutual agreement at any time after two years from the date of this contract, subject to the provisions of paragraph 4.

12. That whenever any portion of the area served by the County is annexed to the city, the County will turn over to the

City all sewer lines in said area at no charge to the City, and the City will then assume all maintenance of such facilities.

13. That the term of this agreement shall be twenty (20) years from the date hereof, and shall be binding upon the successors and assigns of each of the parties hereto.

IN WITNESS WHEREOF, MULTNOMAH COUNTY acting by and through its Chairman of the Board of County Commissioners, pursuant to authority of Ordinance 17 passed by said Board April 25, 1968, and the CITY OF PORTLAND acting by and through its Mayor and Commissioner of Public Works, pursuant to Ordinance No. 126690, have caused these presents to be executed.

(The above agreement was signed by M. James Gleason, Chairman, Multnomah County Board of Commissioners, and by Terry D. Schrunk, Mayor, and William A. Bowes, Commissioner of Public Works, City of Portland.)

City Ordinance No. 126690

An Ordinance authorizing execution of an agreement with Multnomah County for sewage transportation and treatment in a plant to be constructed by the County near N.E. 122nd Avenue, and declaring an emergency.

The City of Portland ordains:

Section 1. The Council finds that the County of Multnomah proposes to construct a sewage treatment plant near N.E. 122nd Avenue outside the city and within a County Service District; that the County of Multnomah proposes to continue as owner of such plant in the future; that a portion of area within the city can appropriately be served by said plant for treatment of sewage originating within the city; that therefore, an agreement between the County and City should be entered into for transportation and treatment of sewage at such plant when such construction is completed; now, therefore, the Mayor and Commissioner of Public Works hereby are authorized to execute a form of agreement substantially in accordance with the form attached hereto, marked "Exhibit A" and hereby made a part of this ordinance. The Mayor and Auditor hereby are authorized to draw and deliver warrants in payment for the services to be performed for the City by the County under such agreement from time to time in accordance with the provisions thereof, such warrants to be chargeable to the appropriation Sewage Disposal Fund.

Section 2. Inasmuch as this ordinance is necessary for the immediate preservation of the public health, peace and safety of the City of Portland in this: In order that appropriate plans may be formulated without delay for construction of a plant to prevent and eliminate water pollution for the protection of public health in areas of the city and areas outside the city; therefore, an

emergency is hereby declared to exist and this ordinance shall be in force and effect from and after its passage by the Council.

(The above Ordinance was passed by the Council on April 25, 1968, signed by Terry D. Schrunk, Mayor of the City of Portland, and Ray Smith, Auditor of the City of Portland.)