

**5/29/1987**

**OREGON  
ENVIRONMENTAL QUALITY  
COMMISSION MEETING  
MATERIALS**



State of Oregon  
**Department of  
Environmental  
Quality**

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OREGON ENVIRONMENTAL QUALITY COMMISSION MEETING

May 29, 1987

Fourth Floor Conference Room  
Executive Building  
811 S.W. Sixth Avenue  
Portland, Oregon

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A G E N D A

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 the April 17, 1987, EQC meeting; April 22, 1987, special meeting; and May 7, 1987, special conference call.
- B. Monthly Activity Report for March 1987.
- C. Tax Credits.

9:05 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.

ACTION AND INFORMATION ITEMS

Public hearings have previously been conducted on items marked by an asterisk (\*). The Commission may, however, wish additional information on these items and accept comments from interested persons or call on interested persons to answer questions. This opportunity shall not replace comments at public hearings. Public testimony will be accepted on all other items.

- D. Request for Issuance of an Environmental Quality Commission Compliance Order for the North Albany County Service District.
- 10:00 a.m. E. Public Hearing and Proposed EQC Adoption of Temporary Rule Amending Solid Waste Permit Application Processing Fee for Large General Purpose Domestic Waste Landfills, OAR 340-61-120.
- \* F. Proposed Adoption of Changes in Air Contaminant Discharge Permit Fees and other Requirements as Amendments to the State Implementation Plan (OAR 340-20-155 and 340-20-165).
- \* G. Proposed Adoption of Open Field Burning Rules, OAR 340-26-001 through 340-26-055, as a Revision to the Oregon State Implementation Plan.

- \* H. Proposed Adoption of Amendments to the Water Quality Program Permit Fee Schedule (OAR 340-45-070, Table 2).
- \* I. Proposed Adoption of Amendments to the Hazardous Waste Management Rules, OAR 340, Divisions 100 through 102.
- J. Informational Report: Individual Aerobic Sewage Treatment Plants.
- 11:00 a.m. K. Informational Report: Report from Facility Siting Advisory Committee, Chairperson Rebecca Marshall.
- L. Adoption of Rules for Contested Case Hearing on Senate Bill 662 Landfill Siting Decision.

#### WORK SESSION

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

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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 am to avoid missing any item of interest.

The Commission will have breakfast (7:30 a.m.) at the Portland Inn, 1414 S.W. Sixth Avenue. Agenda items may be discussed at breakfast. The Commission will lunch at the DEQ offices, 811 S.W. Sixth Avenue, Portland..

The next regular Commission meeting will be July 17, 1987, in Coos Bay, Oregon.

Copies of the staff reports on the agenda items are available by contacting the Director's Office of the Department of Environmental Quality, 811 S.W. Sixth Avenue, Portland, Oregon 97204, phone 229-5395, or toll-free 1-800-452-4011. Please specify the agenda item letter when requesting.

MINUTES ARE NOT FINAL UNTIL APPROVED BY THE EQC

ENVIRONMENTAL QUALITY COMMISSION

Minutes of the One Hundred Eightieth Meeting  
May 29, 1987

Fourth Floor Conference Room  
Executive Building  
811 S. W. Sixth Avenue  
Portland, Oregon

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Commission Members Present:

Chairman, James Petersen  
Vice-Chairman, Arno Denecke  
Mary Bishop  
Wallace Brill

Commissioner Sonia Buist was absent.

Department of Environmental Quality Staff Present:

Director, Fred Hansen  
Assistant Attorney General, Michael Huston  
Assistant Attorney General, David Ellis  
Division Administrators and program staff members

NOTE:

Staff reports presented at this meeting, which contain the Director's recommendations, are on file in the Office of the Director, Department of Environmental Quality, 811 S. W. Sixth Avenue, Portland, Oregon 97204. Written material submitted at this meeting is made a part of this record and is on file at the above address.

## BREAKFAST MEETING

Stan Biles, Assistant to the Director, provided a legislative update for the Commission. The Department is tracking about 200 bills, not originated by the Department, that impact the agency. He reviewed proposals to create new programs dealing with used tires, household hazardous wastes, drug lab cleanup, and plastics reduction and indicated that such proposals reflect the high level of credibility the department has with the legislature. He then reviewed the current status of a number of the more significant bills the department is concerned with as reflected in the latest edition of the DEQ Legislative Newsletter. (Further information about specific bills can be found in the Legislative Newsletter available from the Public Affairs Office.)

Lydia Taylor, Administrator, Management Services Division, provided the Commission with a status report on the Department's budget that is currently being considered by the Ways and Means subcommittee. The base budget request had been approved by the subcommittee without any cuts. In general, most decision packages were being accepted as proposed or with minor changes in funding level. The significant issues that were still being discussed were the level of general fund support for the hazardous waste program enhancements, the level of fee for the underground storage tank package, and the source of revenue to fund the spill response package.

Ron Householder, Acting Administrator, Air Quality Division, briefed the Commission about the draft report on Health Effects of Field Burning that has been prepared for the Field Burning Research Advisory Committee. Ron indicated the staff has reviewed the draft report and has identified no significant errors in methodology used. However, there is concern about the uncertainty and precision of the numbers presented in the report. Specifically, the numbers presented in the draft report suggest that exposure over a 70 year lifespan to typical levels of smoke from Field Burning, Wood Stoves, and Slash Burning would result in 1, 45, and 16 additional deaths per year, respectively.

Ron Householder also advised the Commission that EPA was expected to announce their new fine particulate (PM10) standard on June 3, 1987. This new standard is expected to create some new non-attainment areas in the state.

FORMAL MEETING

CONSENT ITEMS

Agenda Item A: Minutes of the April 17, 1987, EQC Meeting; April 22, 1987, Special Meeting; and May 7, 1987, Special Conference Call.

ACTION: It was MOVED by Commissioner Bishop, seconded by Commissioner Denecke and passed unanimously that the minutes of the April 17, 1987, EQC Meeting; April 22, 1987, Special Meeting; and May 7, 1987, Special Conference Call; be approved.

Agenda Item B: Monthly Activity Report for March 1987.

ACTION: It was MOVED by Commissioner Bishop, seconded by Commissioner Brill and passed unanimously that the activity report for March 1987 be approved.

Agenda Item C: Tax Credits.

ACTION: It was MOVED by Commissioner Bishop, seconded by Commissioner Denecke and passed unanimously that the following Director's recommendation be approved:

1. Issue tax credit certificates for pollution control facilities:

T-1840, Portland General Electric: for replacement of PCB capacitors.

T-1874, Portland General Electric: for an oil spill containment system.

2. Revoke Pollution Control Facility Certificates 853 and 1034 issued to Champion International and reissue to Hanel Lumber Co.

PUBLIC FORUM

Jacob Tanzer, Attorney for Tidewater Barge Lines, Inc. and Wastech, Inc., Wes Hickey, Executive Vice President of Tidewater Barge Lines, and Merle Irvine, Executive Vice President of Wastech

advised the Commission of their proposal to establish a landfill in Eastern Oregon that would be capable of serving the Portland metropolitan area. Mr. Tanzer said Tidewater planned to use container barges to transport garbage to a 600+ acre landfill site near the Boardman bombing range 16 miles south of Boardman. They were pursuing approvals of the site based on a proposal to dispose of garbage from Clark County, Washington. However, the site would also have the capacity to serve the Portland area.

Mr. Tanzer indicated they were not asking the Commission to designate their site as the regional landfill. Rather, they wanted to make sure the Commission was aware of their proposal and did not inadvertently block future consideration of their site. He said the Commission's function was to choose a metropolitan site and to leave METRO with the flexibility to explore other sites. He expressed the view that competition would provide better protection of the public than PUC rate regulation, and that site redundancy (a fall-back site) would be desirable.

#### ACTION AND INFORMATION ITEMS

##### Agenda Item D. Request for Issuance of an Environmental Quality Commission Order for the North Albany County Service District.

This item was a request for a Commission order requiring the North Albany County Service District to correct water quality and sewage treatment plant violations. Despite local efforts for 15 years, no progress was made to resolve the sewage disposal problem in the North Albany area. Action by the Commission would promote a solution and the order would become the basis for seeking self-liquidating bonds if local financing efforts fail.

The Department was advised that 31 residents signed petitions calling for health hazard findings and mandatory annexation. The County Board of Health is expected to act on the petition by June 3 and may request the State Health Division to begin a findings and annexation process.

DIRECTOR'S RECOMMENDATION: Based upon the summation (in the staff report), it is recommended that the Commission issue an Environmental Quality Commission Compliance Order as discussed in the Alternatives and Evaluation Section, by signing the document prepared as Attachment E (to the staff report). The Commission may utilize ORS 454.235 to seek self-liquidating bonds to finance the needed sewerage facilities in the event local financing efforts fail.

David St. Louis, Manager, Willamette Valley Region Office, provided additional background information on the North Albany situation in response to questions from the Commission. It was also noted that the draft order (Attachment E) should be corrected to state North Albany County Service District rather than Sanitary District.

**ACTION:** It was MOVED by Commissioner Denecke, seconded by Commissioner Brill and passed unanimously that the Director's recommendation be approved with the correction in the order as noted above.

Agenda Item E. Public Hearing and Proposed EQC Adoption of Temporary Rule Amending Solid Waste Permit Application Processing Fee for Large General Purpose Domestic Waste Landfills, OAR 340-61-120.

This agenda item was a request to the Commission to adopt a temporary rule allowing revision of the solid waste permit fee schedule. The reason for this request is that the Department has been approached by two companies proposing to build major landfills in north central Oregon. The Department is not staffed nor budgeted to address these two large and complex permit applications in the time for either site to receive solid waste when the St. John's landfill closes.

Based upon the cost involved with the Senate Bill 662 landfill siting process, the Department proposed that the Commission adopt a temporary rule revising the solid waste permit fee schedule. The rule would require an \$85,000 permit application processing fee for a major, new general-purpose domestic waste landfills.

**DIRECTOR'S RECOMMENDATION:** Based upon the findings in the Summation (of the staff report), it is recommended the Commission hold a public hearing and, based on that public hearing, adopt the proposed temporary rule amending OAR 340-61-120 which is provided in Attachment 5 (of the staff report). It is also recommended the Commission authorize the Department to hold public hearings about making the temporary rule permanent.

Jacob Tanzer, Attorney for Tidewater Barge Lines, questioned the justification for the proposed \$85,000 fee for a major new landfill receiving 100,000 tons of garbage per year or more, particularly as it relates to the balance of the fee schedule which has a maximum fee of \$1,000 for a new landfill receiving less than 100,000 tons per year. He further felt the fee was not



justified when the applicant is required to develop all the site information compared to the department developing the information as it did in the metro area landfill siting process. He expressed the view that the proposed fee was quite high for an entrepreneur to put up and they did not want to be singled out. He felt the fee schedule should be based on the cost of doing the necessary review and should be fairly applied to all solid waste facility applications including those for alternative technology.

Bill Webber, Valley Landfills, Inc., also questioned the level of the proposed fee and expressed concern about what the Department would do when this crisis was over and how that staff would be funded. In addition, Mr. Webber said he felt the Department spends too much time on front-end review and does not adequately stress landfill compliance with operating requirements including aesthetics. He said the new fee, if adopted, should not apply to expansion of an existing landfill and therefore recommended that Section h(A) of the proposed new rule be amended to read, "...fee of \$85,000, not to include previously permitted sites, shall be..."

Mike Downs, Administrator, Hazardous and Solid Waste Division, responded to remarks by Messrs. Tanzer and Webber. He noted that the department is trying to deal with an emergency -- the need to promptly review two major applications that were not anticipated. He further noted that the solid waste program operates without federal funding assistance and this results in increased reliance on fees. He stressed that concerns over the impact of landfills on groundwater make it necessary that the department perform a more detailed technical review than has been done in the past. He said the quickest and most economical way to gain the needed information to process an application is to have department staff work closely with the applicants' consultants during their study efforts to make sure essential and correct information is obtained the first time. Additionally, Mr. Downs said, to ensure a comprehensive compliance program is developed and maintained, the front-end design of a site must be studied.

Commission members asked a number of clarifying questions of Mike Downs and Kent Mathiot. Chairman Petersen asked the Department to explore alternatives for funding including the use of Senate Bill 662 funds (\$1/ton surcharge on Portland metropolitan area garbage) to cover the added cost the the application review process. Also, he suggested that a bookkeeping system be considered, where unused application fees could be refunded to the applicant.

**ACTION:** It was MOVED by Commissioner Denecke, seconded by Commissioner Bishop and approved unanimously that the

Commission postpone action on this item until the June 12 meeting to allow the Department the opportunity to explore the alternatives mentioned by the Commission.

At this time, Chairman Petersen moved to Agenda Item K which was scheduled for 11:00 a.m.

Agenda Item K. Informational Report: Report from Facility Siting Advisory Committee, Chair-person Rebecca Marshall.

The Facility Siting Advisory Committee was appointed in January 1986. The purpose of the Committee was to serve as an advisory group on policy or process issues relating to the landfill siting program. The Committee's 14 members live throughout the tri-county area and represented a variety of professions.

The committee met monthly, attended many of the Department's public meetings and hearings and spent a considerable amount of time reading reports.

Rebecca Marshall, Chair-person, presented a summary of the Committee's final review of the landfill siting process. She presented to the Commission a written copy of the summary which is made a part of the record of this meeting. The summary was a compilation of committee concerns, questions and issues they felt the EQC should consider. Ms. Marshall recommended that a report be prepared describing the complete landfill siting process. Such a report would provide a useful guide for other processes as well as for landfill siting.

Chairman Petersen thanked the Committee and expressed appreciation on behalf of the Commission for a job well done.

Agenda Item F. Proposed Adoption of Changes in Air Contaminant Discharge Permit Fees and other Requirements as Amendments to the State Implementation Plan (OAR 340-20-155 and 340-20-165).

This item was a request to recommend changes in the fee schedule for Air Contaminant Discharge Permits, effective July 1, 1987. The changes were recommended to partially offset inflationary costs of operating the permit program and to make the fees more equitable for industry by reflecting time spent by the Department on different source classes.

DIRECTOR'S RECOMMENDATION: Based upon the Summation (in the staff report), it is recommended the Commission adopt the

proposed modifications to OAR 340-20-155, Table 1, Air Contaminant Sources and Associated Fee Schedule (Attachment 1 of the staff report), and OAR 340-20-165, Fees. It is also recommended the Commission direct the Department to submit the rule revision to the U. S. Environmental Protection Agency for inclusion to the State Implementation Plan.

The Commission asked for clarification of the level of the proposed fee increase compared to the level of inflation and the portion of program costs borne by the public. Lloyd Kostow, Air Quality Program Operations Manager, responded that fees had not been increased for 4 years and the proposed increase was 13.4 percent. He also noted that approximately one half of the permit compliance costs are covered by fees and the remainder are funded from a combination of state general funds and federal funds.

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

Agenda Item G. Proposed Adoption of Open Field Burning Rules, OAR 340-26-001 through 340-26-055, as a Revision to the Oregon State Implementation Plan.

This item requested that the State Implementation Plan be amended to incorporate changes to the Field Burning Rules. The changes proposed were to address the problem of smoke from propane field burning, preparatory burning and straw stack burning. Changes were also proposed to promote the use of new techniques for maximizing acres burned while minimizing smoke affects.

Since propane burning has increased to an estimated 30,000 to 60,000 acres a season, the proposed rules prohibit propane flaming of fields when atmospheric conditions are not suitable for smoke dispersal. The rule changes are the first made to regulate propane flaming, and no significant adverse economic impact on the grass seed industry is foreseen.

**DIRECTOR'S RECOMMENDATION:** Based on the summation (in the staff report), it is recommended the Commission adopt the proposed field burning rule changes (OAR 340-26-001 through 340-26-055) as a revision to the State Implementation Plan.

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

Commissioner Denecke asked the Department to send a copy of this staff report to Representative Liz VanLeeuwen.

Agenda Item H. Proposed Adoption of Amendments to the Water Quality Program Permit Fee Schedule (OAR 340-45-070, Table 2).

This item requested a proposed fee increase for the Water Quality program. Historically, the fees for large municipalities have been much less than those for large industrial facilities. Because of the additional staff involvement in municipal facilities, this new fee schedule has narrowed the disparity. Furthermore, the number of new applications for gold cyanidization facilities has created a need for a new category of annual compliance fees. Except for one minor change in the definition of small mining operations, the fee schedule, as proposed at the time of the hearing authorization, is the same.

DIRECTOR'S RECOMMENDATION: Based upon the summation (in the staff report), the Director recommends the Commission adopt the proposed amendment of the Water Quality Permit Fee Schedule.

In response to a question from Chairman Petersen, Kent Ashbaker, Water Quality Division Industrial Waste Manager, advised that permit fees fund approximately 17 percent of the program costs.

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

Agenda Item I. Proposed Adoption of Amendments to the Hazardous Waste Management Rules, OAR 340, Divisions 100 through 102.

This item requested adoption of proposed amendments to the Department's hazardous waste management rules. The amendments were necessary to maintain consistency between the federal and state programs, minimizing confusion within the regulated community. The proposed amendments were also necessary for the Department to continue receiving authorization from the U. S. Environmental Protection Agency for managing a state-operated hazardous waste program.

The proposed amendments included:

- a. The adoption by reference of some new federal rules, including new small quantity generator rules;
- b. The adoption of new rules concerning public availability of information; and
- c. The deletion of existing state small quantity generator rules.

DIRECTOR'S RECOMMENDATION: Based upon the Summation (in the staff report), it is recommended the Commission adopt the proposed amendments to the hazardous waste management rules, OAR Chapter 340, Divisions 100 through 102 (as presented in Attachment IV of the staff report).

Jean Meddaugh, Oregon Environmental Council, said that OEC agrees with the need for consistency. Chairman Petersen said that unless there is a compelling environmental need for rules to be more strict, consistency has merit; at this time, he did not feel a need existed for more stringent rules.

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

Agenda Item J. Informational Report: Individual Aerobic Sewage Treatment Plants.

Mr. C. B. Canoles spoke at the April 17 EQC public forum. He presented a study about the operation of a residential aerobic sewage treatment system installed as a repair to a failing system in Tillamook County. He asked the Commission to consider a 50 percent reduction in the disposal field and to consider eliminating the requirement for a repair/replacement area (when an aerobic plant is used as the method of onsite sewage treatment). The Commission requested the Department to review Mr. Canoles' materials and to prepare an informational report about these issues.

DIRECTOR'S RECOMMENDATION: Based upon staff reservations that aerobic systems will not consistently provide good effluent quality, the Director recommended the Commission not consider reducing drainfield sizing requirements at this time. The Director further recommended that staff be instructed to continue working with Mr. Canoles to see if the staff concerns about operation and maintenance can be

overcome. The Director also recommended the Commission reject further consideration of eliminating the repair area requirement.

Chairman Petersen encouraged the Department to continue investigation of these types of systems. Commissioner Bishop suggested the last sentence of the recommendation be eliminated.

ACTION: It was MOVED by Commissioner Bishop, seconded by Commissioner Denecke and passed unanimously that the Director's recommendation be modified to delete the last sentence and approved as modified.

Agenda Item L. Adoption of Rules for Contested Case Hearing on Senate Bill 662 Landfill Siting Decision.

On May 7, 1987, the Commission voted to provide interested parties an opportunity for a contested case hearing on the Senate Bill 662 landfill siting decision. As a result of this decision, this item requested the Commission adopt the State Attorney General's model rules applicable to conduct of contested case hearings.

The Commission was encouraged to adopt these model rules instead of the EQC administrative rules because the appeal procedures in the EQC's existing rules provide for a lengthy appeal of the hearings officer's final order. A delay would not be appropriate since statutory direction must be complied with. The Attorney General's model rules allow the EQC to conduct the contested case in a manner consistent with protection of interested parties' procedural rights and without unnecessary delays.

DIRECTOR'S RECOMMENDATION: The Director recommended that the Commission adopt the STATEMENT OF NEED AND REASONS IN SUPPORT OF TEMPORARY RULEMAKING as findings, and adopt as a temporary rule, proposed rule OAR 340-11-141 which makes the Attorney General's Model Rules of Procedure for Contested Cases applicable to any contested case hearing conducted by or for the Commission on its order selecting a landfill disposal site pursuant to 1985 Oregon Laws, Chapter 679.

Chairman Petersen asked if the Attorney General's Model Rules should be substituted for the current Commission contested case rules for all cases. Michael Huston, Assistant Attorney General, responded that the present Commission rules allow some additional procedural steps that have been appreciated by the Commission's Hearings Officer and parties in contested cases. However, these procedures tend to lengthen the proceeding, which is not desirable

in this case. Mr. Huston indicated he is working with the department at the Director's request to evaluate the rules and make a recommendation for appropriate changes.

Dave Ellis, Assistant Attorney General, stated the lawyers for the affected parties have been advised and have not voiced any concern about the Commission adopting the model rules.

Steven Janik, Attorney for the Port of Portland, said he saw no problem with the Attorney General's Model Rules. However, he stated that there is also a need to address the procedures for preparation of a draft final order, for parties to comment on the draft final order, for adoption of the final order by the hearings officer, and for appeal of the Hearings Officer's final order to the EQC. Mr. Janik expected these issues to be worked out with the department and David Ellis, Assistant Attorney General. Edward Sullivan, attorney for the Helvetia Mountaintale Preservation Coalition, said that he generally agreed with Mr. Janik and agreed the mechanics of the final order could be worked out.

Chairman Petersen said full authority would be given to the hearings officer, Arno Denecke.

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

There was no further business, and the meeting was adjourned at 12:00.

These minutes are not final until approved by the EQC

MINUTES OF THE ONE HUNDRED SEVENTY-NINTH MEETING

OF THE

OREGON ENVIRONMENTAL QUALITY COMMISSION

April 17, 1987

On Friday, April 17, 1987, the one hundred seventy-ninth meeting of the Oregon Environmental Quality Commission convened in the fourth floor conference room of the Executive Building, 811 S. W. Sixth Avenue, in Portland, Oregon. Present were Commission Chairman James Petersen, Vice-Chairman Arno Denecke, and Commission members Mary Bishop, Wally 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, 811 S. W. Sixth 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

In addition to members of the Commission, legal counsel and Department staff, the breakfast meeting was attended by Edward Sullivan, attorney with Mitchell, Lang and Smith.

Three issues were briefly discussed at the breakfast meeting: TMDLs, Multnomah County sewers and pending legislation.

1. TMDLs: Dick Nichols, Manager, Water Quality Division, provided the Commission with an update of the Northwest Environmental Defense Center lawsuit against EPA. A settlement had been negotiated but was not yet reduced to writing. The settlement was based on TMDLs being established for the Tualatin consistent with the EQC approved schedule. TMDLs will be initiated on 10 other streams within a year and Waste Load Allocations will be completed within 5 years.
2. Mid-Multnomah County Sewers: Michael Huston advised the Commission on the current status of 3 pending suits regarding the EQC order to install sewers in Mid-Multnomah County. The Attorney General's office will be filing motions to dismiss the cases before the Land Use Board of Appeals (LUBA) and the Court of Appeals. The case filed in Marion County Circuit Court is considered to be the appropriate one for reaching the merits of the challenge to the order.



3. Legislation: Fred Hansen, Director, gave the Commission a brief overview of pending legislation, noting that most DEQ bills have cleared the first committee and are either before the Ways and Means Committee or are before the other house. Specific note was made of the following bills:

- Hazardous and Solid Waste Act (HSWA) -- Passed Senate, in House
- State Superfund (liability issue) -- in Ways and Means
- Spill response (dollar issue) -- in Ways and Means
- Asbestos (received modifications; however, all industry groups are now in agreement)
- Civil penalties -- Passed Senate, in House Energy and Environment Committee
- State Revolving Loan Fund -- in Ways and Means

Other bills discussed were as follows:

- o Disposal of tires; this bill proposes incentives for shredding and properly handling used tires
- o Backyard Burning (no hearings are scheduled)
- o Mid-Multnomah County -- a number of bills deal with two basic issues:
  1. Altering the process to require all 4 criteria to be met before a threat to drinking water can be found to exist.
  2. Provide for financial relief to citizens by distributing costs to people outside the affected area and providing state financial assistance.
- o Medford Inspection and Maintenance (introduced to allow a repair cap)
- o Tax Credits -- The current program sunsets in 1988. Industry is pushing to extend the program. The proposal being discussed includes elimination of certification of garbage burners and spill cleanup pending sunset in 1988. After 1988, the program would scale back even further. A revolving loan fund or similar concept would be created to provide assistance after phase out of the tax credits.

#### FORMAL MEETING

#### AGENDA ITEM A: Minutes of the March 10, 1987, Special Conference Call and the March 13, 1987, Regular EQC Meeting

Commissioner Denecke indicated the minutes of the March 13 regular EQC meeting on page 11 did not accurately reflect a discussion between him and the Director regarding designation of yard debris as a recyclable material and proposed legislation to reinstate backyard burning.

The minutes on page 11 should read:

Commissioner Denecke asked about John Charles' (Oregon Environmental Council) letter to Fred Hansen suggesting that yard debris be added to

the list of recyclable materials to head off the bill in the legislature to reinstate backyard burning. He asked if this topic should be discussed at this meeting.

Lorie Parker of the Hazardous and Solid Waste Division said that at this time a report was being prepared on yard debris; however, the Department would like another month to make a final recommendation. Director Hansen indicated that although it is difficult to predict the actions of the legislature, he did not think it likely that bill would pass.

It was MOVED by Commissioner Buist and seconded by Commissioner Bishop and passed unanimously that the minutes of the March 10 special conference call be approved and the minutes of the March 13 meeting be approved as amended.

AGENDA ITEM B: Monthly Activity Report for March 1987.

Commissioner Brill asked about page 13 of the activity report: the potential for recovery of copper from transformers rather than throwing them away. Director Hansen replied that recycling those materials is a choice of the generator and depends upon the cost involved and the levels of contamination. The process of recovering copper involves PCBs which are tightly regulated. Director Hansen said it is often cheaper and less liability occurs when transformers are disposed and not recovered.

Commissioner Bishop asked about McInnis Enterprises. Michael Huston, Assistant Attorney General, told the Commission that it was the Department's position the case should go forward.

Linda Zucker, Hearings Officer, gave some background on the nature of the issue which she felt extended beyond the administrative review process. Ms. Zucker said the real issue is whether it is appropriate to hear the case before the criminal proceedings are resolved.

Commissioner Denecke said the District Attorney's office is backlogged with assaults and violent crimes and may view this as a low priority. Director Hansen indicated it is not a matter of low priority but rather a problem resulting from a change of personnel in the District Attorney's office.

Mr. Huston said the Department will check again with the District Attorney on the status of the criminal case and will return to the hearings officer with a request to schedule the hearing. If the Department is dissatisfied with the hearings officer's decision, it will return to the Commission. Linda Zucker requested the opportunity to brief the Commission on the issue if it comes to the Commission on a motion of the Department.

Director Hansen indicated the Department would like to obtain closure on this case.

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

AGENDA ITEM C: Tax Credit Applications.

Chairman Petersen noted that Tax Credit Application No. T-1840 had been withdrawn from consideration at this meeting.

It was MOVED by Commissioner Denecke, seconded by Commissioner Buist and passed unanimously that the following Director's recommendation be approved:

Director's Recommendation:

It is recommended the Commission take the following action:

1. Issue Tax credit certificates for pollution control facilities:

<u>APPL</u>	<u>APPLICANT</u>	<u>FACILITY</u>
T-1860	PP&L Dairy Substation	Oil spill containment system
T-1862	PP&L Eastside Substation	Oil spill containment system
T-1865	PP&L Henley Substation	Oil spill containment system
T-1866	PP&L Henry Street Substation	Oil spill containment system
T-1867	PP&L Lincoln Substation	Oil spill containment system
T-1871	PP&L Power Operations Headquarters	Oil spill containment system
T-1872	Carl Fenk	Manure control system

2. Revoke Pollution Control Facility Certificate No. 1123 issued to CPEX Pacific, Inc. and reissue the same certificate to Chevron Chemical Company. The company was purchased by Chevron in December 1986.
3. Revoke Pollution Control Facility Certificates 1031 and 1359, issued to Smurfit Newsprint Corporation and reissue the same certificates to Willamina Lumber Company. Smurfit sold four of their lumber manufacturing divisions on December 31, 1986.

PUBLIC FORUM:

Mr. B.C. Canoles, Canoles Concrete Products, submitted a brochure on Jet Aeration sewage treatment plants, which is made a part of the record of this meeting. Mr. Canoles asked the Commission to consider changing the subsurface rules to reduce the size of the required drainfield by 50% and eliminate the requirement for a drainfield replacement area when aerobic treatment plants are used to replace a septic tank. Chairman Petersen asked Dick Nichols, Manager, Water Quality Division, to review the

materials and prepare a report for the Commission in response to Mr. Canoles' request.

Commissioner Buist asked about the life expectancy of the system and the system's motor. Mr. Canoles responded that life expectancy was about 17 years for the system and from 2 to 17 years for the motor. He said it depends on owner's maintenance of the system; however, Canoles Concrete Products provides a service contract for repair of the system.

AGENDA ITEM D: Request for Authorization to Conduct a Public Hearing on Proposed Amendments to the Hazardous Waste Fee Schedules, OAR 340-102-065 and 340-105-113.

This item requested authorization to conduct a public hearing on proposed amendments to rules concerning hazardous waste management fees. The Department is proposing fee increases and amendments to other fee-related rules.

The proposed fee increases are necessary to offset a current revenue shortfall in the hazardous waste program and to maintain the program at the level required for authorization by the U.S. Environmental Protection Agency (EPA). The other proposed amendments were for the purposes of clarification.

Director's Recommendation:

Based upon the Summation in the report, it is recommended the Commission authorize a public hearing to take testimony on the proposed amendments to rules concerning hazardous waste management fees, OAR 340-102-065 and 340-105-113.

Director Hansen told the Commission that the Hazardous Waste Program's Fee Committee had reviewed the program and current fees and had supported the increase because the current base program is underfunded. He noted there would be no fees if the Federal government operated the hazardous waste program in Oregon. Thus, the desire of industry to have the state operate the program and pay fees to help fund that effort is a fairly large commitment. Chairman Petersen said he felt it was important that industry be involved in the process and have the opportunity to express their concerns.

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

AGENDA ITEM E: Proposed Adoption of Amendments to the State Implementation Plan (OAR 340-20-047) Consisting of Changes by Lane Regional Air Pollution Authority to their Permit Fees.

Historically the fee schedule adopted by Lane Regional Air Pollution Authority (LRAPA) for air contaminant discharge permits in Lane County had been identical to the schedule of fees adopted by the Environmental Quality Commission for the rest of the state. However, in March 1986, the EQC

adopted a rule change allowing regional authorities to set fees different from DEQ fees. In December 1986, the IRAPA Board of Directors adopted amendments to their permit fee schedule, which resulted in an overall 17.5 percent increase in fees.

This proposed EQC action incorporates the new IRAPA fee schedule for Lane County into the Clean Air Act Implementation Plan (SIP). The fee schedule contained in the SIP would be kept consistent with the schedule actually in effect in Lane County.

Director's Recommendation:

Based on the report summation, it is recommended the Commission adopt the revised IRAPA permit fee rules as an amendment to the State Implementation Plan.

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

AGENDA ITEM F: Consideration of Petition for Adoption of Rules Regarding Selection of a Solid Waste Disposal Facility Under Senate Bill (SB) 662.

Director Hansen advised the Commission they had received a petition for adoption of rules regarding the selection of a solid waste disposal facility under SB 662. This petition and the proposed rules attached to the petition had been reviewed by the Department and the Attorney General's office. The Attorney General's office prepared a memorandum outlining their position on the petition for adoption of rules as well as a draft order denying that petition if that was the Commission's decision.

Director Hansen indicated that Michael Huston, Assistant Attorney General, would represent the Department in this matter.

Chairman Petersen noted that Mr. Ed Sullivan of Mitchell, Lang, and Smith was present to represent the petitioners.

Michael Huston summarized the material before the Commission regarding this agenda item. He identified two petitions: one was for rulemaking, the other was a request to take deposition. Dave Ellis, Assistant Attorney General, prepared a legal memorandum in response to the petition for rulemaking. Also before the Commission was a draft order to deny the petition for rulemaking. Additional written arguments from Mr. Sullivan were also provided.

Mr. Huston advised the Commission of their options. The Commission has a great deal of discretion in acting on a petition for rulemaking; subject to time limitations contained in statutes and Commission rules, however. He said options available include: granting the petition and initiating the rulemaking process; denying the petition through an order; and postponing action and requesting additional information. Since a 30-day requirement exists for Commission action, the Commission must either act by April 25 or obtain agreement from Mr. Sullivan to allow additional time.

Commissioner Denecke identified a potential conflict of interest by stating he had worked with Mr. Sullivan and had appeared for him in a motion in Circuit Court in Marion County at no charge.

Mr. Edward Sullivan, attorney representing the Helvetia Mountaintale Preservation Coalition, summarized his petition. He asked the Commission to adopt rules which establish standards for a decision and conduct the landfill siting hearings as a contested case. He expressed the view that the Commission has the authority to consider sites outside the Portland Metropolitan area, and that the Commission may select a site that is not on the list of preferred sites.

Mr. Sullivan asked the Commission to look at section 4 of the act. He said there was an obligation to go through rule making if a "delegative" term exists. He felt the April 1986 draft of site ranking criteria was approved by the Commission. However, Mr. Sullivan said, the set of criteria had been changed and the changes had not been approved by the EQC. Neither the criteria nor the changes had been adopted by rule. Detailed hearings were held, but not contested case hearings.

Mr. Sullivan concluded by saying the Commission was required to adopt rules to govern the site selection process. He further noted that these proceedings are involved with peoples rights and obligations and are in the character of a contested case; therefore, a contested case hearing is required. Mr. Sullivan indicated the petition for depositions would be disposed of if the petition for rulemaking and contested case hearing were denied.

Commissioner Buist asked the definition of a contested case. Mr. Sullivan replied this involved formal proceedings where people are under oath and cross examined. A contested case is more in the character of a trial, and a particular conclusion is reached.

Chairman Petersen asked Steve Greenwood, Manager, Facility Siting Section, about the change of criteria. Steve Greenwood said the criteria had not been changed. The criteria adopted in April had been used throughout the process. The criteria state that interpolation between ratings is appropriate in applying the criteria. The Department prepared criteria rating guidelines to guide interpolation between ratings contained in the criteria. He said opponents have implied the scores have been changed, but most scores have decreased rather than increased as a result of using better information to apply the criteria and interpolate between criteria ratings where appropriate.

Mr. Sullivan noted that the public had no opportunity to contest the criteria. Mr. Greenwood advised that the criteria were reviewed by the Commission after numerous meetings with government, communities and environmental groups.

Mr. Huston reviewed the basis for the Commission's decision. He noted that section 4 of SB 662 can be taken literally. These are the only legally binding standards the Commission must take into account in it's decision. He advised that the Department is required by section 3 to conduct a study and submit recommendations to the Commission. The Commission is not bound

to take the Department's advice; however, there is great legal risk if a site is selected that is not considered in the Department's study. The Commission's decision is reviewable by the Supreme Court. It requires elaborate findings supported by substantial evidence in the record. If the Commission picked a site not studied, it is questionable whether the necessary evidence and information would be available to make the required findings to address standards set forth in section 4. In addition, Mr. Huston said, the Court could decide that the EQC must follow the study called for in section 3. He also noted that if a site is outside the 3 county area, approval of the county where the site is located is required. This county approval introduces land use issues into the process.

Mr. Huston concluded that the statute distinguishes between the responsibilities of the Department in section 3 and the Commission in section 4. Section 3 charges the Department with conducting a study. The Department does not have rulemaking authority. Therefore, the legislature did not intend that the Department study be conducted through rulemaking. He said Mr. Sullivan's response was to come to Commission to ask that rule making be performed. Mr. Huston indicated that Mr. Sullivan had also filed a lawsuit in State Supreme Court with the same argument.

Mr. Sullivan summarized by saying that rule making can be obligated or discretionary. He felt it is obligated for the rights of individuals and property. He further said that the April 1986 criteria are rules by default and that interpolation between the criteria is rulemaking.

Chairman Petersen said he was impressed with the thoroughness, fairness and consistency of the process. He said the study produced not perfect results or criteria but generated the fairest possible result. He felt the adoption of rules was not required and would not aid in any way. He said that he did not agree that interpolation between the criteria is a change in criteria.

It was MOVED by Commissioner Buist, seconded by Commissioner Brill and passed unanimously that the petition for adoption of rules be denied.

It was MOVED by Commissioner Bishop, seconded by Commissioner Buist and passed unanimously that the landfill siting process not be considered as a contested case.

Mr. Huston suggested that the draft order denying the petition be amended to include an additional reason the Commission thought it was inappropriate to hold a contested case hearing; specifically that a contested case hearing was not required.

It was MOVED by Commissioner Denecke, seconded by Commissioner Buist and passed unanimously that the draft order as amended by Mr. Huston's suggestion be adopted.

AGENDA ITEM G: Informational Report: Review of FY 88 State/EPA Agreement and Opportunity for Public Comment

Each year the Department and the EPA negotiate an agreement whereby the EPA provides basic grant support to the Department's various environmental programs. This is done in exchange for commitments from the Department to work on planned environmental priorities of the state and federal government.

Director's Recommendation:

It was recommended the Commission:

1. Provide opportunity for public comment at this meeting on the draft State/EPA Agreement; and
2. Provide staff its comments on the policy implications of the draft agreement.

Commissioner Bishop asked about the many Number 1 priorities. Lydia Taylor, Administrator, Management Services Division, said priorities are negotiated with EPA. Most listed items are program maintenance issues and are high priorities that must be provided on a continuous basis. Commissioner Denecke asked about the hazardous and solid waste section of the report. He indicated solid waste was not listed in the section. Ms. Taylor said the Department does not receive federal dollars for solid waste.

Commissioner Bishop asked about maintaining the Portland ozone standard and working with the State of Washington. Tom Bispham, Administrator, Regional Operations, said the Department is coordinating with Washington to meet ozone standards. He said there are two areas both states are interested in: (1) the impacts from slash burning (hydrocarbons reacting in the Portland Metropolitan airshed); and (2) fuel volatility (evaporative losses) and the number of refineries in Washington. Mr. Bispham said the Department will be working with the State of Washington and EPA, Region X, to develop fuel volatility standards. Correcting ozone and volatility problems will give the Portland Metropolitan airshed a greater growth margin. Mr. Bispham indicated Washington had been cooperative. He hopes they will give stronger attention to their slash burning program, and the Department has received a commitment from EPA, Region X, that this will occur.

No public comment was received on this item.

By consensus, the Commission accepted the Director's recommendation.

ADDITIONAL ITEM: USA Rock Creek Waste Treatment Plant Permit Modification:

Director Hansen provided the Commission with a memorandum about an issue which has arisen with respect to modification of the Rock Creek waste discharge permit. The proposed modified permit contains a "reopener clause" which will allow the Department to reopen the permit and insert



appropriate effluent limits and compliance schedules. Representatives of the Northwest Environmental Defense Center are concerned that OAR 340-41-120(3)(c) would hinder the Department's ability to impose timely compliance schedules. This rule provides for deferral of implementation of requirements which are more stringent than federal requirements until facilities are expanded or modified.

The Department interprets the adoption of TMDL's to be to meet federal standards. Therefore, since the TMDL would not be more stringent than federal requirements, the deferral option in subparagraph (c) of the rule would not apply. The Department requested that the Commission concur with the Department's interpretation.

By consensus, the Commission concurred with the Department interpretation that "applicable federal standards" as referred to in OAR 340-41-120(3)(c) would include waste load allocations developed as part of the Department's process to develop total maximum daily loads.

OTHER ITEMS:

Dick Nichols, Administrator, Water Quality Division, introduced Susanne Moeller to the Commission. Susanne is from Denmark, and her husband is in graduate school at Oregon State University. She will be assisting Water Quality for about two or three months.

The Commission established the following dates and tentative locations for future meetings:

May 29 - Portland

June 12 - Portland - Special Meeting (deliberating landfill site)

July 17 - Portland

August 28 - Portland

October 9 - Bend

December 4 - Portland

There was no further business, and the meeting was adjourned.

These minutes are not final until approved by EQC

MINUTES OF THE SPECIAL MEETING  
OF THE  
OREGON ENVIRONMENTAL QUALITY COMMISSION

APRIL 22, 1987

On April 22, 1987, a special meeting of the Environmental Quality Commission convened in Conference Room 4 of the Department of Environmental Quality offices at 811 S. W. Sixth Avenue in Portland, Oregon. Present were Chairman James Petersen, Vice Chairman Arno Denecke and Commissioners Mary Bishop, Sonia Buist and Wallace Brill. Present on behalf of the Department were Fred Hansen, Director, and several members of the Department staff.

The purpose of the special meeting was to consider Departmental reports and comments the Commission received at the Ramsey Lake and Bacona Road Landfill Site hearings held on April 16 and 21, respectively, and to advise the Department of concerns or questions that should be addressed as final reports are prepared. Chairman Petersen stated the record would remain open until April 29 for those who signed up to testify at the April 21, 1987, Bacona Road hearing but were unable to do so due to lack of time.

The Commission discussed information received and raised questions to be clarified. Attached is the Department's list of questions prepared to reflect this discussion. This list of questions is made a part of the record in this matter and these minutes. It was decided that after the Commission received the list of questions and issues, a conference call would be held for further discussion and verification of the questions.

The Commission asked Rick Daniels of Waste Management, Inc., to outline the steps being taken to make their site a viable alternative. Mr. Daniels cited the following:

- o Waste Management has hired a number of consultants to expedite completion of studies and a plan for their proposed site.
- o Waste Management is working with Gilliam County to obtain a conditional land use permit.
- o Waste Management expects the Gilliam County Planning Department to submit the necessary plan amendments to the County Court by May 6.
- o Following adoption by the County Court, the Department of Land Conservation and Development (DLCD) will have 21 days to accept the amendments or hold a public hearing.
- o Waste Management will file a conditional use permit application by May 18.
- o The County would then be required to give 14 days notice of a public hearing on the application. The hearing would be expected to occur in the second or third week of June. A permit would be issued shortly thereafter.

Chairman Petersen asked Michael Huston , Assistant Attorney General, to outline the timetable for an appeal to the Land Use Board of Appeals (LUBA). Mr. Huston said an appeal must be filed within a 21-day period, after final action by the County on the conditional use permit. This action is triggered by issuance of a written order. Mr. Huston said the average LUBA decision takes about four to five months from the filing date.

Mr. Daniels replied that after Waste Management receives the County permit in June, they will seek a solid waste disposal site permit from DEQ. He said Waste Management intends to be operational by March 1989.

Mr. Daniels said Waste Management is working with METRO to incorporate into their plan the use of the existing transfer station in Clackamas County and the proposed transfer station in Washington County. Also, Waste Management would build a transfer station in Multnomah County. He said the solid waste would be baled and taken by rail to the landfill site. Barging would be a potential alternative to rail transport.

Director Hansen asked Mr. Daniels about the siting process with METRO. Mr. Daniels responded that Waste Management will be required to negotiate a contract with METRO to receive the garbage, and to obtain a franchise to operate the transfer stations. Additionally, he said, they must receive permits from the City of Portland and DEQ. Mr. Daniels said that in their opinion, METRO is not obligated to direct waste to the site selected by the EQC.

The Commission asked Mr. Daniels to have Waste Management's legal staff review the legal authority under Senate Bill 622 for the Commission to consider Gilliam County a viable site and to provide the Commission with their analysis.

Chairman Petersen summarized the discussions as follows:

1. The Department would prepare a list of questions and issues and circulate the list to the Commission for review prior to a special conference call meeting.
2. The Department, with assistance of legal counsel, will evaluate the potential and timetable for consideration of alternative sites outside the 3 county area. The Department should be prepared to discuss at the telephone conference meeting whether it is appropriate to request legislative consideration of an extension of the deadline for a Commission decision.

By consensus, the Commission agreed with the Chairman's summary.

The Commissioners discussed a possible tour in May to Mountain View, California, to view the Shoreline Landfill. Commissioners Denecke and Brill were scheduled to tour the Cathcart Landfill in Seattle on April 28, 1987.

There was no further discussion, and the meeting was adjourned.

E.Q.C. LANDFILL QUESTIONS

<u>Issue</u>	<u>Status</u>	<u>Additional Work</u>
1. What is the amount of rainfall at Bacona Road?	No on-site recording stations. Report data based on information from Buxton, Vernonia, and Timber and from published maps of anticipated average annual rainfall. Anticipated average annual rainfall estimate of 67" is considered to be a conservatively high estimate.	No additional work planned.
2. Does DEQ have an agreement with Unified Sewerage Agency about the projected costs and its commitment to accept Bacona Road site's leachate?	Numerous discussions have been held with U.S.A. staff and management, and technical information (i.e. leachate quality - quantity - pre-treatment, etc.) have been reviewed. No indication of problems or lack of willingness to cooperate have been noted.	U.S.A. Board of Directors (Washington County Commissioners) will be contacted concerning issues of cost, willingness to accept, etc. - Legal considerations will be reviewed, and written agreement of understanding will be requested.
3. How accurate are DEQ's estimates of Bacona Road leachate quantity and surface water runoff?	Estimates contained in report have been developed from standard, commonly used accepted models. Data fed into the models has been conservative to very conservative. For example, the design <u>average</u> flow of leachate used in the study was the <u>maximum</u> flow (141 gpm) estimated to occur during the design life of the facility. The assumed peak design flow is twice the design average flow (282 gpm).	The issue of the impact of rapid snow melt on these estimates will be reviewed by the consulting team.
4. What is the possibility of leachate treatment by U.S.A. limiting development in Washington County by exceeding or approaching TMDL's and sewage capacity for the region?	The proposed leachate management plan (winter discharge only) was developed in response to discussions with DEQ Water Quality section and U.S.A. No development impacts were expected to occur if this plan was implemented.	This issue will be discussed specifically with U.S.A. and DEQ representatives.

Issue	Status	Additional Work
5. How adequate are the proposed liner systems and what is their susceptibility to tears, punctures, fire, chemical attack, rodents, etc. Potential for failure and ability to repair?	Liner system proposed at Bacona Road and Ramsey Lake sites is state-of-the-art. "Prevent system" designed to provide best possible protection and to complement the site's natural groundwater protection features. No liner can be guaranteed not to fail.	Consultant team is preparing technical memo on the liner systems - history, specifications, and suitability for landfill applications, to be included in final report. Proposed liner for Ramsay Lake may be upgraded to include compacted clay layer in addition to 2 HDPE membrane layers.
6. Are there landslides at the Bacona Road site?	Landslide activity has been identified on site, and the conceptual site plan and operation plan take the landslide issue into account. Consulting team believes that additional information could impact design and capacity, but not feasibility of site.	Considerable additional work has been and will be completed on this issue. A summary of the current understanding of landslide areas and proposals for site design and operation will be included in the final report.
7. There is a need for creative thinking for N.P.P.	The ideas contained in the NPP are DEQ's response to specific concerns raised by site opponents or its technical staff.	The staff and consultant team are working on proposals to expand and improve the NPP.
8. Who handles the maintenance of Highway 47?	Assumed to be the responsibility of the State Highway Department.	No additional work planned - will confirm state responsibility.
9. Will there be improvements to Highway 47 - e.g intersections with Highway 26 and site access road widening?	These issues were evaluated during development of the Draft Report.	Consultant team will carefully review and report on possible improvements to Highway 47 and the intersection of 47 and 26.
10. What about site operation at Bacona during bad weather and backup disposal sites?	Numerous measures incorporated in site design and operation plan and Neighborhood Protection Plan will allow the site to be operational during inclement weather. Other Metro facilities would be used in the event of short-term closure of site.	No significant additional work planned; however a contingency plan will be included in final report.
11. Are Bacona fire protection proposals adequate? Does the site place an additional load on existing emergency service providers (financial or otherwise)?	Extensive fire protection measures proposed in Draft Report resulted from discussions with State Forestry officials and other fire department personnel.	Additional discussion will be held with local fire departments on adequacy of proposed equipment, personnel and water supply to fight fires until backup could arrive.
12. Do Highway 26 traffic projections take Washington County future growth into account?	Yes.	Assumptions used in projecting traffic numbers will be reviewed and outlined in the final report.

Issue	Status	Additional Work
13. Will the quality of the Nehalem River and drainage basin be impacted?	Work to date indicates no significant potential for water quality impacts to Nehalem system.	Additional work is underway to further characterize the groundwater characteristics of the Bacona Road site. Results of these studies will be included in the final report.
14. Has DEQ fully defined groundwater system on and off-site?	A significant amount of information has been generated on the groundwater characteristics of both sites. The system at Bacona Road is very complex and was not fully characterized at the Draft Report stage. Off-site work at both sites has been limited to review of existing well log data and geologic/hydrogeologic maps.	Additional work is being conducted at Bacona Road that will provide significant additional information. No additional work is planned at Ramsey Lake.
15. What about the proposed Banks/Vernonia Linear Park?	Was not addressed in the Draft Report.	Discussions will be held with Oregon State Parks Department and others knowledgeable about the proposal.
16. What about impacts to the proposed Hamill Observatory?	Considerable effort has been put into developing site design and operation plans that limit the potential impacts to the observatory. Based on this work, Department and consultants feel that impacts to the observatory would be insignificant.	Issue of thermal impacts presented at hearing will be reviewed and discussion of limited impact will be expanded in Final Report.
17. Will there be a financial analysis of both sites?	Was not included in Draft Report.	Financial analysis will be conducted for both sites and included in final report.
18. Will there be economic impacts to local school districts due to lost property values (i.e. Cedar Hills, Washington site)?	Property value research indicated no significant impact on adjacent property if site designed and operated properly. School district impacts were not evaluated.	Estimates of tax base loss to school districts will be developed. Property value information from Cedar Hills will be reviewed, if available.
19. Should residual value estimates be incorporated into the cost analysis?	Rather than incorporate residual values, the cost model in the Draft uses a per-ton rate that takes varying site lives into account.	Additional discussions will be held with economists from Metro, City of Portland, and consulting team to ensure best "apples-to-apples" comparison.
20. Is it expected that Section 404 wetland permits will be obtainable? (U.S.F.W. letter recommending denial of Ramsey Permit).	Numerous discussions have been held with permitting agencies, and cooperation level and exchange of ideas has been good.	Additional discussions with state and federal resource agencies will be held and the wetlands mitigation proposals will be expanded and given more detail in the Final Report.
21. Who made what promises about St. Johns Landfill not being expanded, and when were they made?	No information in Draft Report. State law discusses only filling of Smith and Bybee Lakes.	Port of Portland and City of Portland records and other sources of information on this issue will be reviewed.

Issue	Status	Additional Work
22. What about the comments made about the geotechnical issues at Ramsey Lake?	There is considerable information contained in Draft Report that is based on detailed site specific studies.	All of the geotechnical data and site design and operation proposals will be reviewed in detail to ensure their accuracy.
23. Why are there discrepancies in cost estimates?	Cost information in Draft Report is based on conservative data and cost model that has been reviewed by numerous groups and individuals.	Cost estimates prepared by site opposition groups will be reviewed to make sure "apples and apples" are being compared. All the assumptions used in the Department's model will be described. A number of cost inputs to the model will be revised in final version.
24. What impact will result from removing heavy industrial land, at Rivergate, from the market? What exactly is available? What is its value? What other similar land is or may be available.	The Department feels the information in the Draft Report is accurate but recognizes the controversial nature of this issue, and the difficulty of predicting impacts.	Additional discussions will be held with Port of Portland representatives and other knowledgeable individuals to better determine extent of demand for heavy industrial land.
25. Can ash disposal area be used for future development?	Not discussed in detail in Draft Report. Little information available on this issue.	Additional research will be conducted and a discussion of the issue will be included in the Final Report.

SM978

These minutes are not final until approved by EQC.

MINUTES OF THE SPECIAL MEETING  
OF THE  
OREGON ENVIRONMENTAL QUALITY COMMISSION

MAY 7, 1987

On May 7, 1987, at 2:00 p.m., a special telephone conference call of the Oregon Environmental Quality Commission convened. Present by conference call connection were Chairman James Petersen in Bend, Vice Chairman Arno Denecke in Salem, Commissioner Wallace Brill in Medford, Commissioner Sonia Buist in Portland, and Director Fred Hansen in Salem. Present in Conference Room 4 of the Department of Environmental Quality offices at 811 S. W. Sixth Avenue in Portland, Oregon, were Commissioner Mary Bishop, Assistant Attorney General Michael Huston, Assistant Attorney General Dave Ellis, several members of the Department staff, and a number of citizens including representatives of the Ramsey Lake and Bacona Road community organizations.

The purpose of this special conference telephone call was to discuss the listing of questions and issues raised by the Commission at the April 22 special EQC breakfast meeting and to further consider whether a contested case hearing should be held.

Chairman Petersen asked the Commissioners if they had any questions about the EQC Landfill Questions summary. Of the Commissioners, Chairman Petersen had the following comments about the questions.

Question No. 20 --

The Oregon Department of Fish and Wildlife comments about the Ramsey Lake and Bacona Road sites should be obtained in writing and incorporated into the final report.

Question No. 21 --

Any promises made by DEQ or others (including legislation sponsored by former Representative Chrest) about terminating landfilling in the St. Johns area should be documented and incorporated in the final information.

Question No. 23 --

Discrepancies in cost estimates need to be clearly delineated and clarified or refuted.

Chairman Petersen asked if the citizen groups had an opportunity to review and to provide comments on the question summary. Steve Greenwood, Manager, Facility Siting Section, said the summary had been sent to the site groups. He had not received any comments. The site group from Ramsey Lake indicated they had not received the summary; the Bacona Road site group said they had received the summary but had not been solicited for any comments. Director Hansen noted



that the questions had been prepared in response to the request of the Commission. Steve Greenwood stated that the final question summary would be made available to the citizen groups.

By consensus, the Commission accepted the list of questions with the further comments noted by the Chairman.

The next item discussed was the issue of holding a contested case hearing for the landfill site selected by the Commission. Michael Huston, Assistant Attorney General, briefly summarized the steps that lead up to this issue. He said that Mr. Edward Sullivan, attorney for the opponents of the Bacona Road site, had argued that a contested case hearing was required. Mr. Sullivan also had filed an argument in the State Supreme Court asserting that a contested case hearing was required. Mr. Huston indicated that although he had advised that a contested case hearing was not required, further study by the Attorney General's office suggested the argument had serious merit. Therefore, the Commission may wish to reconsider the matter.

Mr. Huston then described the contested case process. He said a contested hearing was statutorily prescribed under Oregon law in certain circumstances so that affected parties could have an opportunity to question and cross-examine an agency making a decision. The steps involved are: (1) notice is given and affected persons are given an opportunity to request a contested case hearing; (2) a hearing is convened before a hearings officer appointed by the Commission; (3) the agency's evidence is presented and agency witnesses may be cross-examined by the parties in the hearing; and (4) the other parties have an opportunity to present evidence and their witnesses are cross-examined.

Mr. Huston suggested a possible process involving a contested case hearing. The Commission could continue with the scheduled June 12 meeting and tentatively select a site. This decision would be the subject of the contested case hearing before a hearings officer if a request was filed. He envisioned a hearing of four to five days in duration; however, the length would be subject to the discretion of the hearings officer. The Commission could authorize DEQ staff to prepare special procedural rules to govern such a hearing, since it would be different from the normal contested case hearing held by the EQC. Mr. Huston suggested the Attorney General's model rules would be appropriate for this occasion. The EQC would also be able to adopt additional criteria that could be applied at the contested case hearing if they chose to do so. Vice Chairman Arno Denecke was suggested as the Commission's hearings officer.

Chairman Petersen said he does not believe the landfill site selection is a contested case issue. However, he said he would go along with a contested case hearing in order to make the decision more final. Vice Chairman Denecke agreed with the Chairman.

Director Hansen recommended the Commission allow an opportunity for a contested case hearing and adopt the following process:

1. The Department would work with both site groups and the hearings officer to define procedural regulations.
2. A tentative decision about a landfill site selection would be made by June 12, subject to the opportunity for a contested case hearing.

3. At the conclusion of the contested case, a hearings officer's report would be prepared and presented to the Commission.

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

The Commission also discussed the Waste Management, Inc., request that their site be considered. Vice Chairman Denecke asked if METRO would be free to choose a site other than the one selected by the Commission. Director Hansen replied that METRO had flow control and can direct waste to any site they choose.

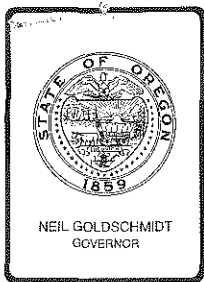
Commissioner Bishop asked if it would be possible to condition the Commission's decision to urge METRO to consider other sites that may be available. Chairman Petersen responded yes.

Chairman Petersen reminded the Commission that the law requires the EQC to select an environmentally suitable site -- not the best site. Therefore, he concluded that the Commission should proceed to make a decision and not to seek a delay of the statutory deadline. The consensus was that the Commission should proceed to a decision.

Waste Management indicated they expect to submit all information about their site by June 12. Commissioner Bishop commented that even if that occurred, it would not give the Commission adequate time to study the material. Chairman Petersen said he does not want to impede private action to offer a landfill site. Commissioner Bishop said, however, that she felt the Portland Metropolitan area should take care of their own garbage.

In addition to the landfill siting issues, the Commission discussed the location of their July 17 meeting. Director Hansen suggested the meeting be held in Coos Bay. All Commissioners agreed, however, Commissioner Brill indicated he would not be able to attend the July 17 meeting.

There was no further business, and the meeting was adjourned.



## Environmental Quality Commission

811 SW SIXTH AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

### MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Agenda Item No. B, May 29, 1987, EQC Meeting  
March 1987 Program Activity Report

### Discussion

Attached is the March, 1987 Program Activity Report.

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 and status of variances.

### 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

SCheW:p  
MD26  
229-6484  
Attachment

DEPARTMENT OF ENVIRONMENTAL QUALITY

Monthly Activity Report

March, 1987

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DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

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

March 1987  
 (Month and Year)

SUMMARY OF PLAN ACTIONS

	Plans Received		Plans Approved		Plans Disapproved		Plans Pending
	Month	FY	Month	FY	Month	FY	
<u>Air</u>							
Direct Sources	10	55	8	34	0	0	25
Small Gasoline Storage Tanks Vapor Controls	-	-	-	-	-	0	-
Total	10	55	8	34	0	0	25
<u>Water</u>							
Municipal	16	104	12	120	0	0	27
Industrial	11	77	9	73	0	0	11
Total	26	181	21	198	0	0	38
<u>Solid Waste</u>							
Gen. Refuse	1	16	-	10	-	-	20
Demolition	-	2	-	2	-	-	2
Industrial	2	12	-	14	-	-	13
Sludge	-	1	-	1	-	-	1
Total	3	31	0	27	0	0	36
<u>Hazardous Wastes</u>	-	0	-	0	-	-	-
<u>GRAND TOTAL</u>	40	267	29	267	0	0	99

DEPARTMENT OF ENVIRONMENTAL QUALITY  
 AIR QUALITY DIVISION  
 MONTHLY ACTIVITY REPORT  
 DIRECT SOURCES  
 PLAN ACTIONS COMPLETED

Permit Number	County	Plan Action Number	Source Name	Process Description	Date Rcvd	Status Assigned
18	0074	KLAMATH 198	KLAMATH PACIFIC CORP		01/13/87	APPROVED
26	2068	MULTNOMAH 202	ESCO CORPORATION PLANT 1	NEW FURNACE AND B/H	03/03/87	APPROVED
31	0002	UNION 205	BOISE CASCADE CORP	BAGHOUSE REPLACE	03/06/87	APPROVED
20	7451	LANE 206	STATES VENEER - FOCH ST	BAGHOUSE CYCLONE REPLACE	02/20/87	APPROVED
20	7471	LANE 207	SOUTHWEST FOREST IND.	BAGHOUSE/BOILER	03/03/87	APPROVED
15	0004	JACKSON 209	BOISE CASCADE CORP	BOILER ASH DUST SUPPRESSION	03/12/87	APPROVED
17	0029	JOSEPHINE 211	TIM-PLY CO.	BAGHOUSE	03/12/87	APPROVED
09	0001	DESCHUTES 213	DAW FOREST PRODUCTS CO	SCRUBBER FOR BOILER	02/13/87	APPROVED
TOTAL NUMBER QUICK LOOK REPORT LINES				8		

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Air Quality Division  
(Reporting Unit)

March 1987  
(Month and Year)

SUMMARY OF AIR PERMIT ACTIONS

	Permit Actions Received		Permit Actions Completed		Permit Actions Pending	Sources Under Permits	Sources Reqr'g Permits
	Month	FY	Month	FY			
<u>Direct Sources</u>							
New	3	19	4	20	13		
Existing	2	25	6	19	16		
Renewals	8	87	17	108	53		
Modifications	<u>3</u>	<u>38</u>	<u>2</u>	<u>44</u>	<u>14</u>		
Total	16	169	29	191	96	1385	1414
<u>Indirect Sources</u>							
New	1	13	1	16	5		
Existing	0	0	0	0	0		
Renewals	0	0	0	0	0		
Modifications	1	2	0	2	1		
Total	2	15	1	18	6	266	271
<u>GRAND TOTALS</u>	18	184	30	209	102	1651	1685

Number of  
Pending Permits

Comments

14	To be reviewed by Northwest Region
10	To be reviewed by Willamette Valley Region
1	To be reviewed by Southwest Region
5	To be reviewed by Central Region
2	To be reviewed by Eastern Region
14	To be reviewed by Program Operations Section
33	Awaiting Public Notice
<u>17</u>	Awaiting end of 30-day Public Notice Period
96	

DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION

MONTHLY ACTIVITY REPORT

DIRECT SOURCES  
PERMITS ISSUED

County Name	Source Name	Permit Number	Appl. Rcvd.	Status	Date Achvd.	Type Appl.
LINN	ENTEK MANUFACTURING INC.	22	6024 12/08/86	PERMIT ISSUED	02/25/87	NEW
CLACKAMAS	PARK PL WOOD PRODUCTS INC	03	9504 05/23/86	PERMIT ISSUED	03/10/87	EXT N
MULTNOMAH	CITY OF GRESHAM WWTP	26	3228 08/26/86	PERMIT ISSUED	03/10/87	NEW
MULTNOMAH	LAKESIDE INDUSTRIES	26	3229 10/13/86	PERMIT ISSUED	03/10/87	EXT N
CLACKAMAS	CHARLES GRANT CO.	03	2726 10/21/86	PERMIT ISSUED	03/11/87	EXT N
MARION	RIVER BEND SAND & GRAVEL	24	5945 12/22/86	PERMIT ISSUED	03/11/87	RNW N
MULTNOMAH	US VETERANS ADMIN	26	2955 12/08/86	PERMIT ISSUED	03/11/87	MOD N
UNION	IDAHO TIMBER CORP.	31	0038 10/10/85	PERMIT ISSUED	03/11/87	EXT N
WASHINGTON	FOREST GROVE LUMBER CO	34	2081 12/10/86	PERMIT ISSUED	03/11/87	RNW Y
WASHINGTON	C F TIGARD SCHOOL	34	2450 12/22/86	PERMIT ISSUED	03/11/87	RNW N
WASHINGTON	CARNATION CO PET FOODS	34	2532 12/24/86	PERMIT ISSUED	03/11/87	RNW N
WASHINGTON	R.A. BROWN JUNIOR HIGH	34	2572 12/22/86	PERMIT ISSUED	03/11/87	RNW N
WASHINGTON	QUALI-COTE, INC.	34	2696 10/20/86	PERMIT ISSUED	03/11/87	EXT Y
WASHINGTON	TRUS JOIST CORPORATION	34	2736 07/29/86	PERMIT ISSUED	03/11/87	EXT N
DOUGLAS	INTERNATIONAL PAPER CO.	10	0036 03/21/86	PERMIT ISSUED	03/12/87	RNW Y
MARION	CITY VIEW CEMETERY ASSO.	24	4314 11/19/86	PERMIT ISSUED	03/16/87	RNW N
MORROW	READY-MIX SAND & GRAVEL	25	0017 09/18/86	PERMIT ISSUED	03/16/87	RNW N
MULTNOMAH	HEARTH CRAFT INC	26	3037 00/00/00	PERMIT ISSUED	03/16/87	Y
PORT.SOURCE	COLUMBIA WESTERN CRUSHING	37	0365 01/20/87	PERMIT ISSUED	03/16/87	NEW Y
DOUGLAS	HERBERT LUMBER COMPANY	10	0043 09/03/86	PERMIT ISSUED	03/17/87	RNW N
MARION	HUMANE SOCIETY WILL VALLY	24	2327 12/01/86	PERMIT ISSUED	03/17/87	RNW Y
MULTNOMAH	VANRICH CASTING CORP.	26	2016 06/05/86	PERMIT ISSUED	03/19/87	RNW Y
WASHINGTON	ALOHA HIGH SCHOOL	34	2567 10/21/86	PERMIT ISSUED	03/19/87	RNW N
WASHINGTON	OREGON ROSES, INC	34	2633 11/25/86	PERMIT ISSUED	03/19/87	RNW Y
YAMHILL	PURINA MILLS INC	36	5027 11/20/85	PERMIT ISSUED	03/19/87	RNW N
PORT.SOURCE	STAR CONCRETE	37	0284 03/09/87	PERMIT ISSUED	03/19/87	RNW Y
JACKSON	BOISE CASCADE CORP	15	0020 02/23/87	PERMIT ISSUED	03/20/87	MOD Y
LAKE	OIL-DRI PRODUCTION CO.	19	0018 06/12/86	PERMIT ISSUED	03/20/87	RNW Y
MARION	NORPAC FOODS, INC.	24	1011 10/20/86	PERMIT ISSUED	03/20/87	RNW Y

TOTAL NUMBER QUICK LOOK REPORT LINES



## DEPARTMENT OF ENVIRONMENTAL QUALITY

## MONTHLY ACTIVITY REPORT

Air Quality Division  
(Reporting Unit)March 1987  
(Month and Year)PERMIT ACTIONS COMPLETED

* County	* Name of Source/Project	* Date of	* Action	*
*	* /Site and Type of Same	* Action	*	*
*	*	*	*	*

Indirect Sources

Washington	Beaverton-Hillsdale Commercial Center, 624 spaces, File No. 34-8615	03/13/87	Final Permit Issued
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MAR.6  
AA5324



DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

<u>Water Quality</u>	<u>March 1987</u>
(Reporting Unit)	(Month and Year)

PLAN ACTIONS COMPLETED -21

* County	* Name of Source/Project	* Date of	* Action	*
*	* /Site and Type of Same	* Action	*	*
*	*	*	*	*

MUNICIPAL WASTE SOURCES - 12

Deschutes	Redmond Valleyview Subdivision	3-24-87	Comments to Engineer
Marion	Woodburn WWTP-RBC Return Channel	3-27-87	Provisional Approval
Josephine	Redwood SSS District M.F. Fish Subdivision	3-26-87	Provisional Approval
Marion	Silverton South Water Street Project 418	3-26-87	Provisional Approval
Tillamook	NTCSA Laneda Extension (Library)	3-26-87	Provisional Approval
Curry	Bandon Caprice Motel	3-26-87	Provisional Approval
Coos	Lakeside Sewerage Improvements, Phase II	3-26-87	Provisional Approval
Lincoln	Lincoln City South Anchor Ct	3-26-87	Provisional Approval
Clackamas	West Linn Ann Estates Subdivision	3-12-87	Provisional Approval
Douglas	Canyonville Fat Harvey's Etc. Connection	3- -87	Comment Letter to Engineer
Douglas	Canyonville Holding Tank for Fat Harvey's	3-28-87	Comments to Region
Statewide	Ringlace USA, Inc. BIOMAX KH-6 Unit	3-16-87	Comments to Manufacturer

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Water Quality Division  
(Reporting Unit)

March 1987  
(Month and Year)

PLAN ACTIONS COMPLETED - 21

* County	* Name of Source/Project * /Site and Type of Same	* Date of * Action	* Action	* *
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INDUSTRIAL WASTE SOURCES - 9

Washington	Tektronix, Inc. Groundwater Pump-back System	3-6-87	Application withdrawn	
Washington	Tektronix, Inc. Building 02 Remedial Cleanup	3-6-87	Application withdrawn	
Lincoln	Road and Driveway Co. Oil/water Separators, Settling Ponds	12-24-86	Approved	
Linn	Pope & Talbot Pulp 3 - 75HP aerators	2-24-87	Approved	
Clatsop	Wait Dairy Manure Control System	3-24-87	Approved	
Washington	Intel Corporation Storm Drain Improvements	3-17-86	Approved	
Lake	M.K. Ferguson Co. #3 Retention Basin	3-9-87	Approved	
Tillamook	Fairview Acres Dairy Manure Control Facility	3-24-87	Approved	
Marion	Norpak Foods Additional Aeration & Clarifier Prior to Land Application	3-26-87	Approved	

Summary of Actions Taken  
On Water Permit Applications in MAR 87

Source Category & Permit Subtype	Number of Applications Filed						Number of Permits Issued						Applications Pending Permits Issuance (1)			Current Number 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		3		1	12			2		1	8		4	13				
RW				1			1			1			1	1				
RWO	2	1		41	29		7	4		29	16		43	34				
MW										1			2					
MWO				5	7		2	2		3	8		7	2				
Total	2	4		48	48		10	8		35	32		57	50		229	173	29
Industrial																		
NEW	2	2		7	11	22		1	2	2	4	28	9	12	4			
RW				1						1			1					
RWO	1	3		27	15		3	3		21	12		17	12				
MW										1								
MWO	2	1		6	2	4	3		1	13		5		3	2			
Total	5	6		41	28	26	6	4	3	38	16	33	27	27	6	163	132	352
Agricultural																		
NEW					1									1				
RW																		
RWO				1	1					1	1			1				
MW																		
MWO																		
Total				1	2					1	1			2		2	11	56
Grand Total	7	10	0	90	78	26	16	12	3	74	49	33	84	79	6	394	316	437

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-87.

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	SUB- TYPE	FACILITY	FACILITY NAME	CITY	COUNTY/REGION	DATE ISSUED	DATE EXPIRES
<u>General: Cooling Water</u>								
IND	100	GEN01 MWO	14719/B	WASHINGTON ASPHALT CO., INC.	PORTLAND	MULTNOMAH/NWR	09-MAR-87	31-DEC-90
<u>General: Placer Mining</u>								
IND	600	GEN06 NEW	102677/A	SMITH, JACK H.		JOSEPHINE/SWR	10-MAR-87	31-JUL-91
<u>General: Suction Dredges</u>								
IND	700	GEN07 NEW	102683/A	PECK, LEONARD J. & PHILLIPS, PAUL D.		JACKSON/SWR	10-MAR-87	31-JUL-91
<u>NPDES</u>								
DOM	100289	NPDES RWO	69500/A	PIER POINT INN INVESTORS, A CALIFORNIA LIMITED PARTNERSHIP	FLORENCE	LANE/WVR	04-MAR-87	30-NOV-91
IND	3565	NPDES MWO	72634/A	SMURFIT NEWSPRINT CORPORATION	OREGON CITY	CLACKAMAS/NWR	06-MAR-87	31-AUG-87
IND	3618	NPDES MWO	72615/A	SMURFIT NEWSPRINT CORPORATION	NEWBERG	YAMHILL/WVR	06-MAR-87	30-NOV-87
DOM	3746	NPDES MWO	58805/B	CLACKAMAS COUNTY SERVICE DISTRICT NO. 1	WELCHES	CLACKAMAS/NWR	10-MAR-87	31-OCT-88
DOM	100295	NPDES RWO	89103/A	TOLEDO, CITY OF	TOLEDO	LINCOLN/WVR	17-MAR-87	31-MAR-92
DOM	100296	NPDES RW	27866/A	ESTACADA, CITY OF	ESTACADA	CLACKAMAS/NWR	17-MAR-87	29-FEB-92
DOM	100297	NPDES RWO	10696/A	BRANDY BAR LANDING INC.	REEDSPORT	DOUGLAS/SWR	17-MAR-87	31-DEC-91
DOM	100299	NPDES RWO	81276/A	SILETZ, CITY OF	SILETZ	LINCOLN/WVR	17-MAR-87	31-MAR-92

CAT	PERMIT NUMBER	TYPE	SUB- TYPE	FACILITY	FACILITY NAME	CITY	COUNTY/REGION	DATE ISSUED	DATE EXPIRES
DOM	100300	NPDES	RWO	90659/A	UMATILLA, CITY OF	UMATILLA	UMATILLA/ER	17-MAR-87	31-JAN-92
DOM	100110	NPDES	MWO	6836/A	BEAR CREEK VALLEY SANITARY AUTHORITY	CENTRAL POINT	JACKSON/SWR	18-MAR-87	31-MAY-90
DOM	100301	NPDES	RWO	93769/A	WARRENTON, CITY OF	WARRENTON	CLATSOP/NWR	18-MAR-87	31-MAR-92
DOM	100302	NPDES	RWO	3780/A	ASHLAND, CITY OF	ASHLAND	JACKSON/SWR	27-MAR-87	31-OCT-91
IND	100303	NPDES	RWO	3690/A	ASH GROVE CEMENT WEST, INC.	PORTLAND	MULTNOMAH/NWR	27-MAR-87	31-MAR-92
IND	100304	NPDES	RWO	32670/A	GEORGIA-PACIFIC RESINS, INC.	COOS BAY	COOS/SWR	27-MAR-87	31-MAR-92
IND	100305	NPDES	RWO	96225/A	WEYERHAEUSER COMPANY	NORTH BEND	COOS/SWR	27-MAR-87	31-MAR-92
IND	100061	NPDES	MWO	34855/B	WESTNUT INC.	DUNDEE	YAMHILL/WVR	30-MAR-87	31-MAR-90

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WPCF

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DOM	3797	WPCF	MWO	20600/B	UNION COUNTY ECONOMIC DEVELOPMENT CORPORATION	LA GRANDE	UNION/ER	04-MAR-87	31-JAN-89
DOM	100290	WPCF	RWO	24600/A	DONALD, CITY OF	DONALD	MARION/WVR	04-MAR-87	30-NOV-91
DOM	100291	WPCF	NEW	100099/A	OJA, RICHARD A., DBA	KNAPPA	CLATSOP/NWR	04-MAR-87	29-FEB-92
DOM	100292	WPCF	RWO	6134/A	BARNHART PROPERTIES, INC.	PENDLETON	UMATILLA/ER	04-MAR-87	31-DEC-91
IND	100293	WPCF	RWO	68872/A	PERMAPOST PRODUCTS CO.	HILLSBORO	WASHINGTON/NWR	04-MAR-87	31-JAN-92
IND	100294	WPCF	RWO	74244/A	READY-MIX SAND AND GRAVEL CO., INC.	MILTON FREEWATR	UMATILLA/ER	10-MAR-87	31-JAN-92
DOM	100239	WPCF	MWO	100141/B	CHILES, EARLE M. AND VIRGINIA H.	PORTLAND	MULTNOMAH/NWR	11-MAR-87	30-JUN-91
DOM	100298	WPCF	NEW	100175/A	OREGON STATE DEPT OF TRANSPORTATION		LINN/WVR	17-MAR-87	31-DEC-91
IND	100306	WPCF	RWO	64810/A	OREGON STATE BOARD OF HIGHER EDUCATION	CORVALLIS	BENTON/WVR	27-MAR-87	31-MAR-92
DOM	100307	WPCF	RWO	40260/A	JACKSON COUNTY PARKS & RECREATION DEPARTMENT	ASHLAND	JACKSON/SWR	27-MAR-87	31-MAR-92
IND	100308	WPCF	NEW	102596/A	MONTMORE TIMBER PRODUCTS, INC.	COOS BAY	COOS/SWR	31-MAR-87	31-JAN-92

CAT	PERMIT NUMBER	TYPE	SUB- TYPE	FACILITY	FACILITY NAME	CITY	COUNTY/REGION	DATE ISSUED	DATE EXPIRES
DOM	100309	WPCF	RWO	27125/A	JACKSON COUNTY PARKS AND RECREATION DEPARTMENT	EMMIGRANT LAKE	JACKSON/SWR	31-MAR-87	31-MAR-92



DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Hazardous and Solid Waste Division  
(Reporting Unit)

March 1987  
(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			
<u>General Refuse</u>							
New	-	2	-	3	-		
Closures	-	1	-	2	3		
Renewals	-	11	-	13	19		
Modifications	1	11	1	12	-		
Total	1	25	1	30	22	182	182
<u>Demolition</u>							
New	-	1	-	2	-		
Closures	-	-	-	-	-		
Renewals	-	1	-	-	2		
Modifications	-	2	-	3	-		
Total	0	4	0	5	2	13	13
<u>Industrial</u>							
New	-	4	1	9	6		
Closures	1	4	-	-	3		
Renewals	-	5	4	12	5		
Modifications	3	10	3	10	-		
Total	4	23	8	31	14	103	103
<u>Sludge Disposal</u>							
New	-	2	-	3	2		
Closures	-	-	-	-	-		
Renewals	1	1	-	-	-		
Modifications	-	1	-	1	-		
Total	1	4	0	4	2	16	16
Total Solid Waste	6	56	9	70	40		

Hazardous Waste

Outputs currently under revision.

## DEPARTMENT OF ENVIRONMENTAL QUALITY

## MONTHLY ACTIVITY REPORT

Hazardous and Solid Waste Division  
(Reporting Unit)

March 1987  
(Month and Year)

PERMIT ACTIONS COMPLETED

#	County	#	Name of Source/Project /Site and Type of Same	#	Date of Action	#	Action	#
	Lane		Bohemia, Inc. Cascade Landfill Existing industrial waste landfill		3/4/87		Permit renewed.	
	Lincoln		Georgia-Pacific Corp. Toledo Landfill Existing industrial waste landfill		3/4/87		Permit renewed.	
	Clackamas		Metropolitan Service Dist. Clackamas Transfer & Recycling Center Existing transfer station		3/10/87		*Permit amended.	
	Douglas		C & D Lumber Company C & D Lumber Company Lndfl. Existing industrial waste landfill		3/10/87		*Permit amended.	
	Douglas		P & M Lumber Products P & M Lumber Landfill Existing industrial waste landfill		3/10/87		*Permit amended.	
	Jackson		Medford Corporation Medco Disposal Site Existing industrial waste landfill		3/10/87		*Permit amended.	
	Douglas		Louisiana-Pacific Corp. Round Prairie Lumber Co., Landfill Existing industrial waste landfill		3/16/87		Permit renewed.	
	Columbia		Boise Cascade South 80 Landfill New industrial waste landfill		3/20/87		Permit issued.	
	Lane		Davidson Industries, Inc. Sweet Creek Landfill Existing industrial waste landfill		3/26/87		Permit renewed.	

\* Permit amended by the Department to extend expiration date. These actions are intended to simplify the renewal process when no significant changes in the permit are required.

MAR.6 (5/79) SB6600

DATE	WASTE TYPE	SOURCE	DISPOSE ANNUALLY
17-MAR-87	PCB CONTAMINATED SOIL & SOLIDS	PCB REMOVAL & CLEANUP ACTIVITY	4 CU YD
17-MAR-87	PCB ARTICLE DRAINED	PCB REMOVAL & CLEANUP ACTIVITY	1 CU YD
17-MAR-87	PCB LIQUID	PCB REMOVAL & CLEANUP ACTIVITY	1.2 CU YD
3 Request(s) approved for generators in Alaska			
10-MAR-87	PCB EQUIPMENT	FEDERAL GOV'T	0.27 CU YD
27-MAR-87	WASTE DDT	ENV. SERVICES CONTRACTORS	8 CU YD
2 Request(s) approved for generators in Idaho			
10-MAR-87	2,4-DICHLOROPHEMOXYACETIC ACID	RCRA SPILL CLEANUP	2.7 CU YD
1 Request(s) approved for generators in Montana			
04-MAR-87	LAB PACK - POISON B	OTHER GOVERNMENT AGENCY	0.28 CU YD
10-MAR-87	SPRAY BOOTH SLUDGE	SAWMILLS & PLANING MILLS	3.2 CU YD
10-MAR-87	FURNACE BAGHOUSE DUST	BLAST FURNACES & STEEL MILLS	60 CU YD
18-MAR-87	LAB PACK - MISC WASTE	PRIMARY PRODUCTION OF ALUMINUM	2 CU YD
18-MAR-87	MACHINE PARTS CLEANER	SWITCHGEAR & -BOARD APPARATUS	0.27 CU YD
18-MAR-87	LAB PACK - MISC WASTE	PRIMARY PRODUCTION OF ALUMINUM	0.27 CU YD
27-MAR-87	LAB PACK - CORROSIVE	SEMICONDUCTORS	1.08 CU YD
27-MAR-87	EMPTY CANS LAST CONTAINING MALATHION	FARM SUPPLIES & FEED	10 CU YD
27-MAR-87	FILTER ELEMENTS	SEMICONDUCTORS	0.27 CU YD

9 Request(s) approved for generators in Oregon

DATE	WASTE TYPE	SOURCE	DISPOSE ANNUALLY
04-MAR-87	PCB CONTAMINATED SOLIDS	ELECTRIC SERVICES	2.7 CU YD
04-MAR-87	LAB PACK - WASTE CORROSIVE ACIDS	COLLEGES & UNIVERSITIES	3.24 CU YD
04-MAR-87	LAB PACK - ORM-A	COLLEGES & UNIVERSITIES	0.54 CU YD
04-MAR-87	WASTE GRAPHITE DUST	AIRCRAFT	500 CU YD
04-MAR-87	LAB PACK - POISON B	OTHER GOVERNMENT AGENCY	0.27 CU YD
04-MAR-87	TANK BOTTOM SLUDGE / PENTACHLOROPHENOL SOLUTION	WOOD PRESERVING	54 CU YD
10-MAR-87	WASTE CYANIDE	RCRA SPILL CLEANUP	25 CU YD
10-MAR-87	MERCURY CONTAMINATED WASTE	DEPARTMENT OF DEFENSE	13.5 CU YD
10-MAR-87	WASTE CERAMIC TAPE	CERAMIC WALL & FLOOR TILE	30 CU YD
10-MAR-87	LAB PACK - OXIDIZER	COLLEGES & UNIVERSITIES	0.27 CU YD
10-MAR-87	LAB PACK - TOXIC	COLLEGES & UNIVERSITIES	0.27 CU YD
10-MAR-87	SOIL & DEBRIS CONTAMINATED WITH PENTACHLOROPHENOL	SUPERFUND SITE CLEANUP	200 CU YD
10-MAR-87	SOLID PENTACHLOROPHENOL SLUDGE	SUPERFUND SITE CLEANUP	202.5 CU YD
10-MAR-87	DEBRIS CONTAMINATED WITH PENTACHLOROPHENOL	SUPERFUND SITE CLEANUP	90 CU YD
10-MAR-87	SOLID PENTACHLOROPHENOL SLUDGE	SUPERFUND SITE CLEANUP	16.2 CU YD
18-MAR-87	PRETREAT FACILITY SLUDGE	AIRCRAFT PARTS	9.72 CU YD
27-MAR-87	FIBER REINFORCED PLASTIC CELL TOPS	ALKALIES & CHLORINE	40 CU YD
27-MAR-87	CLOTHING, RAGS, GLOVES	ALKALIES & CHLORINE	4.05 CU YD
27-MAR-87	PHTHALIC ANHYDRIDE	OTHER INDUS. ORGANIC CHEMICALS	6.75 CU YD
27-MAR-87	BLASTING ABRASIVE MATERIALS	ALKALIES & CHLORINE	30 CU YD
27-MAR-87	PCB CONTAMINATED SOILS & SOLIDS	PCB REMOVAL & CLEANUP ACTIVITY	100 CU YD

21 Request(s) approved for generators in Washington

16

36 Requests granted - Grand Total

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Noise Control Program  
(Reporting Unit)

March, 1987  
(Month and Year)

SUMMARY OF NOISE CONTROL ACTIONS

Source Category	New Actions Initiated		Final Actions Completed		Actions Pending	
	<u>Mo</u>	<u>FY</u>	<u>Mo</u>	<u>FY</u>	<u>Mo</u>	<u>Last Mo</u>
Industrial/ Commercial	9	83	5	64	224	220
Airports			0	6	1	1

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Noise Control Program	March, 1987
(Reporting Unit)	(Month and Year)

FINAL NOISE CONTROL ACTIONS COMPLETED

County	Name of Source and Location	Date	Action
Multnomah	Burlington Northern Railroad, Portland	03/87	In Compliance
Lane	Fircrest Foods, Inc., Creswell	03/87	In Compliance
Douglas	D. R. Johnson Lumber Company, Riddle	03/87	In Compliance
Jackson	Special Products of Oregon, Phoenix	03/87	In Compliance
Josephine	Spalding and Son, Inc., Grants Pass	03/87	In Compliance

CIVIL PENALTY ASSESSMENTS  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
1987

CIVIL PENALTIES ASSESSED DURING MONTH OF MARCH, 1987:

<u>Name and Location of Violation</u>	<u>Case No. &amp; Type of Violation</u>	<u>Date Issued</u>	<u>Amount</u>	<u>Status</u>
Walter Fern Dallas, Oregon	AQOE-WVR-87-21 Unauthorized open burning of commercial waste	3/23/87	\$250	Awaiting response to notice.
Mallorie's Dairy, Inc. Silverton, Oregon	WQ-WVR-87-10 Negligent discharge of animal waste into public waters	3/23/87	\$5,000	Respondent does not contest the penalty, but requests addi- tional time to pay.

VAK:b  
GB6608





March, 1987  
DEQ/EQC Contested Case Log

<u>ACTIONS</u>	<u>LAST MONTH</u>	<u>PRESENT</u>
Preliminary Issues	0	0
Discovery	0	0
Settlement Action	2	2
Hearing to be scheduled	2	0
Department reviewing penalty	0	0
Hearing scheduled	0	0
HO's Decision Due	2	4
Briefing	0	0
Inactive	<u>4</u>	<u>4</u>
SUBTOTAL of cases before hearings officer.	10	10
HO's Decision Out/Option for EQC Appeal	1	0
Appealed to EQC	3	4
EQC Appeal Complete/Option for Court Review	0	0
Court Review Option Taken	0	0
Case Closed	<u>0</u>	<u>0</u>
 TOTAL Cases	 14	 14

15-AQ-NWR-87-178      15th Hearing Section case in 1987 involving Air Quality Division violation in Northwest Region jurisdiction in 1987; 178th enforcement action in the Department in 1987.

§                      Civil Penalty Amount

ACDP                Air Contaminant Discharge Permit

AGl                 Attorney General l

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

HW                  Hazardous Waste

HSW                Hazardous and Solid Waste Division

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

March 1987

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.
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.
McINNIS ENTERPRISES, LTD., et al.	10/25/83	10/26/83		Prtys	59-SS-NWR-83-33290P-5 SS license revocation	Hearing deferred.
FUNRUE, Amos	03/15/85	03/19/85	06/20/85	Dept	05-AQ-FB-84-141 Civil Penalty of \$500	EQC affirmed \$500 penalty June 13, 1986. Department of Justice to draft final order reflecting EQC action.
22 DANT & RUSSELL, INC.	05/31/85	05/31/85	03/21/86	Prtys	15-HW-NWR-85-60 Hazardous waste disposal Civil Penalty of \$2,500	Settlement action.
BRAZIER FOREST PRODUCTS	11/22/85	12/12/85	02/10/86	Dept	23-HSW-85 Declaratory Ruling	EQC issued declaratory ruling July 25, 1986. Department of Justice to draft final order reflecting EQC action.
NULF, DOUG	01/10/86	01/13/86	05/05/86	Dept	01-AQFB-85-02 \$500 Civil Penalty	Nulf appealed decision imposing \$300 civil penalty.

CONTES.T

March 1987

DEQ/EQC Contested Case Log

<u>Pet/Resp Name</u>	<u>Hrng Rqst</u>	<u>Hrng Rfrrl</u>	<u>Hrng Date</u>	<u>Resp Code</u>	<u>Case Type &amp; No.</u>	<u>Case Status</u>
VANDERVELDE, ROY	06/06/86	06/10/86	11/06/86	<u>Resp.</u>	05-WQ-WVR-86-39 \$5,500 Civil Penalty	<u>Appealed to EQC.</u>
MALLORIE'S DAIRY, INC.	09/08/86	09/08/86	<u>04/10/87</u>	<u>Prtys</u>	07-WQ-WVR-86-91 WPCF Permit violations \$2,000 Civil Penalty	<u>Decision due.</u>
MALLORIE'S DAIRY, INC.	09/08/86	09/08/86	<u>04/10/87</u>	<u>Prtys</u>	08-AQOB-WVR-86-92 \$1,050 Civil Penalty	<u>Decision due.</u>
MONTEZUMA WEST	10/09/86	10/09/86		<u>Prtys</u>	10-HW-SWR-86-46	Settlement action.
M & W FARMS, INC.		12/28/86	02/20/87	<u>Hrgs</u>	12-AQ-FB-86-11 \$300 civil penalty	<u>Decision due.</u>
RICHARD KIRKHAM dba, WINDY OAKS RANCH		01/07/87	03/04/87	<u>Hrgs</u>	1-AQ-FB-86-08 \$680 civil penalty	<u>Decision due.</u>

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DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

VARIANCE LOG

* Source and * * Permit No. * *	* Location *	* Variance * From (Rule) *	* Date * Granted *	* Date * Expires *	* Status *
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SOLID WASTE DISPOSAL SITES

Halfway (181)	Baker County	Open Burning Standards OAR 340-61-040(2)	6/13/86	5/31/91	On Schedule
Richland (323)	"	"	"	"	"
Powers (160)	Coos County	"	"	"	"
Dayville (332)	Grant County	"	"	"	"
Long Creek (127)	"	"	"	"	"
Monument (324)	"	"	"	"	"
Seneca (201)	"	"	"	"	"
Adel (4)	Lake County	"	"	"	"
Christmas Valley (9)	"	"	"	"	"
Fort Rock (276)	"	"	"	"	"
Paisley (178)	"	"	"	"	"
Plush (10)	"	"	"	"	"

# Source and #	#	# Variance	# Date	# Date	#	#
# Permit No. #	Location	# From (Rule)	# Granted	# Expires	#	Status
#	#	#	#	#	#	#

SOLID WASTE DISPOSAL SITES

Silver Lake (184)	Lake County	Open Burning Standards OAR 340-61-040(2)	6/13/86	5/31/91		On Schedule
Summer Lake (183)	"	"	"	"	"	"
Jordan Valley (295)	Malheur County	"	"	"	"	"
Juntura (272)	"	"	"	"	"	"
McDermitt (310)	"	"	"	"	"	"
Imnaha (300)	Wallowa County	"	"	"	"	"
Troy (192)	"	"	"	"	"	"
Mitchell (175)	Wheeler County	"	"	"	"	"

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

VARIANCE LOG

April 1987

LOG OF WATER QUALITY STIPULATED CONSENT ORDERS

The water quality program supplements its permit program by use of stipulated consent orders establishing time schedules for construction of waste treatment facilities. The following consent orders are in force.

<u>Source and Permit No.</u>	<u>Location</u>	<u>Purpose</u>	<u>Date Granted</u>	<u>Date Expires</u>	<u>Status</u>
(Municipal Sources)					
Happy Valley	Clackamas County	Establish compliance schedule	2/17/78	None	Must be renegotiated
Silverton	Marion County	Establishes compliance schedule	1/14/83	4/1/85	Facility on line, in compliance with order
Tangent	Linn County	Establishes compliance schedule	11/1/83	1/1/86	Construction initiated, permit out for public notice
Coos Bay Plant #1	Coos County	Establishes compliance schedule	7/86	None	Conditions being achieved as of 4/87
(Industrial Waste Sources)					
Northwest Aluminum	The Dalles	Establishes compliance schedule	9/18/86	12/31/89	Conditions being achieved as of 4/87
Reynolds Metals Co.	Troutdale	Establishes compliance schedule	3/25/86	6/1/89	Conditions being achieved as of 4/87
Pennwalt Corporation	Portland	Establishes compliance schedule	3/24/86	7/1/87	Conditions being achieved as of 4/87
Smith Frozen Foods	Weston	Establishes compliance schedule	8/12/86	12/1/87	Conditions being achieved as of 4/87
Jeld Wen, Inc.	Klamath Falls	Establishes compliance schedule	4/14/87	None	Conditions being achieved as of 4/87

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

VARIANCE LOG

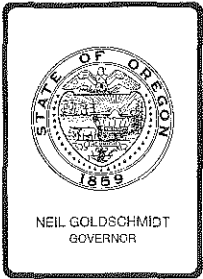
March, 1987

* Source and	* Location	* Variance	* Date	* Date	* Status
* Permit No.		* From (Rule)	* Granted	* Expires	
*	*	*	*	*	*

AIR QUALITY

Brand-S Corporation (Leading-Plywood) (02-2479)	Benton County	Veneer Dryer Stds OAR 340-25-315 (1) (b)	1/31/86	12/01/86	On compliance schedule.
Mt. Hood Oil Company (26-3015)	Multnomah County	Gasoline vapor bal. Requirements OAR 340-22-120 (1) (b)	6/13/86	12/13/86	In compliance.





## Environmental Quality Commission

811 SW SIXTH AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

### MEMORANDUM

To: Environmental Quality Commission  
From: Director  
Subject: Agenda Item C, May 29, 1987, EQC Meeting

### TAX CREDIT APPLICATIONS

### Director's Recommendations

It is recommended that the Commission take the following action:

1. Issue tax credit certificates for pollution control facilities:

<u>Appl. No.</u>	<u>Applicant</u>	<u>Facility</u>
T-1840	Portland General Electric	Replacement of PCB capacitors
T-1874	Portland General Electric	Oil spill containment system

2. Revoke Pollution Control Facility Certificates 853 and 1034 issued to Champion International and reissue to Hanel Lumber Co. (letters attached).

Fred Hansen

S. Chew:p  
(503) 229-6484  
May 7, 1987  
MP660

EQC Agenda Item C  
May 29, 1987  
Page 2

Proposed May 29, 1987 Totals:

Air Quality	\$ - 0 -
Water Quality	462,427.83
Hazardous/Solid Waste	- 0 -
Noise	- 0 -
	<u>\$ 462,427.83</u>

1987 Calendar Year Totals not including Tax Credits Certified at  
this EQC meeting.

Air Quality	\$ 131,118.63
Water Quality	798,885.45
Hazardous/Solid Waste	61,564.00
Noise	- 0 -
	<u>\$ 991,568.08</u>

S. Chew:p  
(503) 229-6484  
May 7, 1987  
MP660

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

---

1. Applicant

Portland General Electric Company  
121 S. W. Salmon Street  
Portland, OR 97204

The applicant owns and operates an electric utility company with distribution lines throughout Oregon.

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

2. Description of Facility

The project consists of the replacement and disposal of PCB filled pole mounted capacitors. Each unit was replaced with a capacitor filled with non-PCB insulating oil.

Claimed Facility Cost: \$ 447,284.97  
(Accountant's Certification was provided).

3. Procedural Requirements

The facility was completed after December 31, 1983, so it is governed by ORS 468.150 through 468.190 in effect on January 1, 1984, and by OAR 340-16-015 (effective July 13, 1984; amended March 21, 1985).

The facility met all statutory deadlines in that:

- a. The request for preliminary certification was filed July 23, 1985 less than 30 days before installation commenced on July 29, 1985. The application was reviewed by DEQ staff and the applicant was notified that the application was complete and that installation could commence.
- b. The request for preliminary certification was approved before application for final certification was made.
- c. Installation of the facility was substantially completed on December 12, 1985 and the application for final certification was found to be complete on September 8, 1986 within 2 years of substantial completion of the facility.

4. Evaluation of Application

- a. Although this project may ultimately reduce PGE's liability for spill cleanup, the facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the federal Environmental Protection Agency to prevent water pollution.

This prevention is accomplished by equipment replacement to eliminate the potential of PCB releases to the environment.

In accordance with federal law the use of PCB capacitors outside restricted-access electrical substations is prohibited after October 1, 1988. The applicant has replaced approximately 206 pole mounted capacitors with non-PCB units at various locations in Clackamas, Columbia, Marion, Multnomah, Polk, Washington and Yamhill Counties. The PCB units were removed and, as required by federal regulations, sent to an EPA approved incinerator in Arkansas for final destruction.

- b. Analysis of Eligible Costs

ORS 340-16-030(2) lists five factors which must be considered in establishing the percent of the pollution control facility cost allocable to pollution control.

Factor (a), the extent to which the facility is used to recover and convert waste products into a salable or usable commodity is not applicable here since there is no waste conversion.

Factor (b), the estimated annual percent return on investment in the facility, would result in 100 percent allocable, if used, since there is no return on investment. Because these capacitors are like for like replacement, there is no benefit to PGE's overall return on investment other than the early equipment replacement. In this case the use of other factors would be more applicable since they accurately reflect the gain to PGE from installation of the new capacitors.

Factor (c), alternative methods, equipment and costs for achieving the same pollution control objective, is not applicable since no alternatives to replacement of the capacitors have been identified.

Factor (d), related savings or increase in costs which occur or may occur as a result of the installation of the facility is the most appropriate factor to use in this case.

Factor (e), other factors which are relevant in establishing the portion of the facility cost properly allocable to pollution control, is not applicable since there are no other factors.

PGE does realize some savings from the project. Since the useful life of capacitors is about 27 years and the average age of the replaced capacitors was 11 years the applicant benefitted by obtaining new electrical distribution equipment.

The costs associated with this project are for labor, overhead, equipment and PCB treatment. The Department viewed the costs for PCB treatment as fully allocable for pollution control, but prorated the labor, overhead, and equipment costs based on the average years of remaining life (16 years). The portion of the facility cost that is allocable for pollution control is calculated as follows:

PCB incineration	\$ 33,924.60
Labor (16/27 x 31,178.13)	18,457.45
Overhead (16/27 x 170,830.85)	101,131.86
Includes construction supervision, engineering, accounting	
Equipment (16/27 x 211,351.39)	<u>125,120.02</u>
	278,633.93

$$\$278,633.93/\$447,284.97 = 0.622 \text{ or } 62\%$$

In accordance with OAR 340-16-030(4), the portion of costs properly allocable for pollution control must be in increments of one percent.

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for final tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the federal Environmental Protection Agency to prevent water pollution and accomplishes this purpose by equipment replacement or redesign to eliminate the potential for toxic releases to the environment.
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 62%.

6. Director's Recommendation

Based upon the findings in the Summation, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$447,284.97 with 62% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-1840.

MC:p

MP488

March 31, 1987

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

---

1. Applicant

Portland General Electric Company  
121 S.W. Salmon street  
Portland, OR 97204

The applicant owns and operates an electric utility company with substations throughout Oregon.

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

2. Description of Facility

The facility is an oil spill containment system at the Denny Substation in Beaverton, Oregon. The facility consists of 353 feet of pressure treated 2 x 16 lumber, 37 yards of mason's sand, and 22 yards of 3/4 minus crushed rock.

Claimed Facility Cost: \$15,142.86

3. Procedural Requirements

The facility was completed after December 31, 1983, so it is governed by ORS 468.150 through 468.190 in effect on January 1, 1984, and by OAR 340-16-015 (effective July 13, 1984; amended March 21, 1985).

The facility met all statutory deadlines in that:

- a. The request for preliminary certification was filed October 9, 1984 more than 30 days before construction commenced on January 15, 1985.
- b. The request for preliminary certification was approved before application for final certification was made.
- c. Construction of the facility was substantially completed on February 14, 1986 and the application for final certification was found to be complete on February 10, 1987 within 2 years of substantial completion of the facility.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the federal Environmental Protection Agency to prevent water pollution.

This prevention is accomplished by the containment of industrial waste as defined in ORS 468.700.

In accordance with federal law, electric utility companies must provide oil spill containment facilities at substations where oil filled equipment is utilized.

Three sides of the Denny Substation have been trenched and backfilled with mason's sand. A 2 x 16 pressure treated wood timber has been partially buried in the sand to act as a containment berm. The sand has been covered with crushed rock.

The untrenched side of the substation is upgradient. Normal storm runoff will flow towards the trenches and pass through the sand under the timber. In the event of an oil spill, the sand would retard the oil and provide time for the cleanup crew to be dispatched to the site. Equipment monitors would warn crews of any failure. The crews would remove the oil and contaminated sand, and reconstruct the facility following site cleanup.

- b. Analysis of Eligible Costs

There is no return on investment for this facility. One hundred (100) percent of the cost of the facility is allocated to pollution control.

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for final tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the federal Environmental Protection Agency to prevent water pollution and accomplishes this purpose by the containment of industrial waste as defined in ORS 468.700.
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.



6. Director's Recommendation

Based upon the findings in the Summation, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$15,142.86 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-1874.

L. D. Patterson:c

WC1786

(503) 229-5374

March 27, 1987

State of Oregon  
Department of Environmental Quality

REISSUANCE OF POLLUTION CONTROL FACILITY CERTIFICATION

1. Certificates issued to:

Champion International Corporation  
Champion Building Products Division  
P.O. Box 10228  
Eugene, OR 97401

The Certificates were issued for water quality and solid waste pollution control facilities.

2. Summation:

In 1977 and 1979, the EQC issued pollution control facility certificates 853 and 1034 to Champion International. Champion International sold the Neal Creek plant in Odell, Oregon to Hanel Lumber Co. in February 1983. Hanel has requested that the two tax credits associated with the acquisition be reissued under their name.

3. Director's Recommendation:

It is recommended that Certificate Numbers 853 and 1034 be revoked and reissued to Hanel Lumber Co., Inc., the certificates to be valid only for the time remaining from the date of the first issuance.

S. Chew:p  
229-6484  
May 7, 1987  
MP661

GRANT L. VEILE  
CERTIFIED PUBLIC ACCOUNTANT  
7100 S.W. HAMPTON ST., SUITE 235  
TIGARD, OREGON 97223  
TELEPHONE (503) 620-6872

April 15, 1987

Department of Enviromental Quality  
811 S. W. 6th  
Portland, Oregon 97204

Attn: Sherry Chew

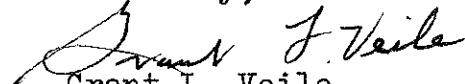
Dear Ms Chew:

In accordance with your request, I am enclosing a letter from Champion International Corporation to Hanel Lumber Co., Inc. dated January 23, 1985 together with copies of pollution control facility Certificate #853, dated 11/28/77 and Certificate #1034, dated 12/14/79. The plant was acquired by Hanel from Champion the end of February of 1983.

I understand from you that these certificates will have to be reissued to Hanel Lumber Co., Inc. in order for the remaining credits to be claimed. Please mail the reissued certificates to Hanel Lumber Co., Inc. 4865 Highway 35, Hood River, Oregon 97031, with a copy to Grant L. Veile, 7100 S. W. Hampton St. Suite 235, Tigard, Oregon 97223. Please indicate to me whether the balances on Champions letter of January 23, 1985 are still available and for what periods.

Your early attention to this matter will be appreciated, because a filing of Oregon tax return on Hanel is due shortly. Hanel Lumber Co., Inc. has not used any of the unused credits to date.

Sincerely,

  
Grant L. Veile

GLV/ev  
Encls.

cc: Robert L. Hanel



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:

<u>Certificate No.</u>	<u>Remaining Credit</u>	<u>Bal. of 1983</u>	<u>Yearly 1984 on</u>
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

## 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:  Neal Creek Plant Odell, Oregon
As: <input type="checkbox"/> Lessee <input checked="" type="checkbox"/> Owner	
Description of Pollution Control Facility:  Log deck sprinkling water recycle	
Type of Pollution Control Facility: <input type="checkbox"/> Air <input type="checkbox"/> Noise <input checked="" type="checkbox"/> Water <input type="checkbox"/> Solid Waste	
Date Pollution Control Facility was completed: <u>11/1/76</u> Placed into operation: <u>5/1/77</u>	
Actual Cost of Pollution Control Facility:        \$ <u>31,199.00</u>	
Percent of actual cost properly allocable to pollution control: <p style="text-align: center;"><u>80% or more</u></p>	

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 *Joe B. Richards*

Title Joe B. Richards, Chairman

Approved by the Environmental Quality Commission on  
the 18th day of November, 19 77

## POLLUTION CONTROL FACILITY CERTIFICATE

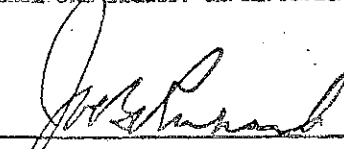
Issued To: Champion International Corp. Champion Building Products P. O. Box 10228 Eugene, Oregon 97440	Location of Pollution Control Facility:  Odell, Oregon
As: <input type="checkbox"/> Lessee <input checked="" type="checkbox"/> Owner	
Description of Pollution Control Facility:  Wood residue processing equipment including a West Salem Classifier, conveyors, motors, structural steel and concrete.	
Type of Pollution Control Facility: <input type="checkbox"/> Air <input type="checkbox"/> Noise <input type="checkbox"/> Water <input checked="" type="checkbox"/> Solid Waste <input type="checkbox"/> Hazardous Waste <input type="checkbox"/> Used Oil	
Date Pollution Control Facility was completed: <u>6/30/78</u> Placed into operation: <u>6/30/78</u>	
Actual Cost of Pollution Control Facility:        \$ <u>54,150.00</u>	
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.

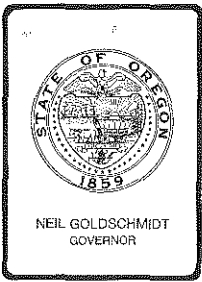
Therefore, this Pollution Control Facility Certificate is issued this date subject to compliance with the statutes of the State of Oregon, the regulations of the Department of Environmental Quality and the following special conditions:

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



## Environmental Quality Commission

811 SW SIXTH AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

### MEMORANDUM

To: Environmental Quality Commission  
From: Director  
Subject: Agenda Item D, May 29, 1987, EQC Meeting

Request for Issuance of an Environmental Quality Commission  
Compliance Order for the North Albany County Service  
District

### Background and Problem Statement

The North Albany Area has about 4,000 residents and a projected year 2000 population of 7,500. Efforts to provide sewers to the area began on December 29, 1972, when the Benton County Board of Commissioners ordered the formation of the North Albany County Service District.

Little progress toward sewerage has been made since 1972. The major issues relate to land use and jurisdictional questions. North Albany is within Benton County, but has been included in the City of Albany's urban growth boundary. Albany has been identified as the ultimate provider of urban services; however the majority of North Albany residents do not wish to become part of the City of Albany. Attachment A is a map showing the North Albany area and the City's urban growth boundary.

Residents of North Albany depend entirely on septic tanks and drainfield systems for sewage treatment and disposal, with the exception of Riverview Heights Subdivision. Riverview Heights is within the District, but the 123-home subdivision is served by a small sewage treatment plant now owned and operated by the District.

North Albany has a long history of sewage and drinking water problems. Although drinking water issues have been resolved by consolidation of water districts and obtaining water from Pacific Power and Light (facility now owned by Albany), the potential health hazards and surface water contamination due to the failing on-site systems remain.

During the winter of 1979/1980, the Department and Benton County conducted a door-to-door sanitary survey to assess the failure rates for the on-site systems. Bacteriological sampling and/or dye testing was included. A high failure rate was found for an area of 240 homes, known as area II-A. Area II-A had an overall failure rate of 36%, with one segment of 46 homes showing 75% of the systems failing. The bacteriological sampling and/or dye testing confirmed the presence of human sewage contamination in yards, streets, water meter boxes, roadside ditches and seasonal tributary streams. Additional bacteriological sampling in 1984 and 1987 again confirmed the presence of sewage contamination, a violation of ORS 468.770. Documentation of the survey results and the contamination is summarized in Attachment B. Area II-A was also found to have little potential for

successful repairs to the on-site systems due to its concave topography, very poorly drained soils and seasonal high ground water at or near the surface.

In addition to the failing on-site systems, the Department has recently documented major violations and deficiencies at the Riverview Heights sewage treatment and disposal facilities. Riverview Heights lacks an outfall to a suitable receiving stream and depends on land irrigation year around for effluent disposal. Sewage contamination in runoff from the irrigation site has been documented through sampling and reaches roadside ditches, drainageways and Crocker Creek. Excessive inflow and/or infiltration in the sewage collection system contributes to the problem by reducing treatment efficiency and resulting in raw sewage bypasses to the irrigation site when heavy rains cause a surge pond to overflow directly to the irrigation pond. Documentation of the violations of ORS 468.770 and of the conditions of the District's NPDES permit prohibiting runoff from the irrigation site and requiring disinfection of final effluent are summarized in Attachment C.

Extensive studies and planning efforts in 1967, 1974, 1980 and 1986 have not resulted in the construction of needed sewage collection and treatment facilities. All of the studies have proposed annexation or agreements with the City of Albany as the preferred alternative over construction of separate sewage treatment facilities in North Albany. Two annexation proposals were soundly defeated in 1986 by votes of 60% and 79% against annexation.

The District, the Benton County Board of Commissioners and the City of Albany are currently reviewing these five alternatives for providing sewer service to Area II-A:

<u>Alternative</u>	<u>Description</u>
A	Seek waiver of Albany's annexation requirement and use conventional sewers to transport sewage to Albany.
B	Expand or replace the Riverview plant and use conventional sewers.
C-1	Seek waiver of Albany's annexation requirement and use septic tank/effluent pumping sewer system (STEP System) to transport sewage to Albany.
C-2	Expand or replace the Riverview Heights plant and use STEP system.
D	Initiate mandatory health hazard annexation process.



The District is proposing to select an alternative and form a local improvement district (LID) by July 20, 1987 in order to provide the funding needed. Federal construction grant funding has not been pursued by the District for financing of proposals in recent years.

The Department has issued a Notice of Violation (Attachment D) to the District and has requested an achievable compliance proposal and schedule be submitted by July 1, 1987. Given the long history of unsuccessful efforts to provide the needed sewerage facilities, the Department is requesting the Commission to issue a compliance order to the District, as discussed in the Alternatives and Evaluation section.

Ultimately, the annexation issue must be resolved before any solution can be implemented. Albany is exploring alternatives, such as annexation at the time of sale of the property, but is reluctant to waive the requirement. Further, any proposal calling for construction of sewers and treatment facilities within the urban growth boundary must receive land use concurrence from Albany, which is not likely. Therefore, the alternative most attractive to North Albany residents would violate State land use laws. Mandatory annexation under ORS Chapter 222 could be initiated by the County, the City of Albany or any eleven affected residents of the area.

#### Alternatives and Evaluation

Department staff discussed several alternatives to promote compliance prior to selecting the Commission Order as the appropriate mechanism. These alternatives were:

1. Take no Department or Commission action beyond the Notice of Violation.
2. Assess civil penalties against the District.
3. Issue a Department Order requiring corrective action in accordance with a compliance program and schedule to be submitted by the District.
4. Request a Commission Order requiring the compliance program and schedule.

The first three alternatives were eliminated. No further action by the Department or Commission will likely result in additional long delays in solving North Albany's sewage problems. Civil penalties are regarded as inappropriate for addressing unsewered areas, particularly where solutions are politically complex and publicly sensitive. A Department Order was initially considered, but given the magnitude of the issues, Commission action was deemed appropriate.

An additional major consideration supported the selection of a Commission Order. Under ORS 454.235, the Commission can seek an order in circuit court for self-liquidating bonds to finance construction. Should the District fail to call an election for local financing or if electors fail to support a bond election, the Commission Order becomes the basis for the application to circuit court.

Without the ability to seek the self-liquidating bonds, no mechanism of financing the sewer project would exist unless residents approve the LID formation. Since the only alternatives meeting State land use requirements entail annexation to Albany, approval by North Albany residents is unlikely.

The Department requests the Environmental Quality Commission to issue an Order under authority of ORS 468.090 through 468.110 and in accordance with ORS 183.310 to 183.550 requiring the District to construct sewage collection and treatment facilities for Area II-A, including Riverview Heights. The order should require submittal of an achievable compliance program and schedule to be prepared by the District, with construction to be initiated in 1988.

#### Summation

1. Studies by the Department and Benton County in 1979, 1980, 1984 and 1987 have confirmed the presence of human sewage in North Albany roadside ditches, seasonal tributary streams and drainageways. The sources of the sewage contamination are failing on-site sewage disposal systems and deficiencies at the Riverview Heights Subdivision sewage treatment and disposal facilities. The primary area of concern is an area of 240 homes on septic tanks known as II-A. The discharges of raw or inadequately treated sewage to waters of the State are in violation of ORS 468.770.
2. Repairs to the failing on-site systems are not likely to be successful, due to the concave topography, very poorly drained soils and seasonal high groundwater tables that occur at or near the ground surface in Area II-A. Sewage collection and treatment is needed to resolve the problem of area-wide failures of on-site systems.
3. Extensive sewer studies and planning efforts began for North Albany in 1967 and formation of the North Albany County Service District was ordered by Benton County in 1972. Studies and planning efforts in 1967, 1974, 1980 and 1986 have not resulted in construction of sewage collection and treatment facilities. Two annexation elections in 1986 for all of North Albany were soundly defeated (votes of 60% and 79% against).

4. The North Albany area has been included in the City of Albany Urban Growth Boundary, following a public participation process and adoption of the Albany Comprehensive Plan in 1980. The City of Albany has been identified as the ultimate and logical provider of urban services.
5. The District, Benton County and Albany are currently evaluating five alternatives for providing sewer service to Area II-A and to correct deficiencies at Riverview Heights Subdivision. Two of the alternatives entail a trunk line to Albany; two involve construction of separate sewage treatment facilities in North Albany; and the final alternative is mandatory health hazard annexation.
6. If construction of sewer lines and treatment facilities is to occur in North Albany, the City of Albany would be required to grant land use concurrence. Construction without Albany's concurrence would be in violation of the adopted comprehensive plan, be subject to appeal before the Land Use Board of Appeals and necessary permits could not be issued by the Department.
7. The City of Albany currently requires annexation or commitments to annex before providing city services beyond the existing city limits. The District has begun discussions with Albany on waiver of the annexation requirement or other means to provide the needed sewage treatment without immediate annexation. Given the land use constraints, resolution of the annexation question is crucial to providing sewer service in North Albany.
8. The District has projected a tentative schedule which calls for selection of an alternative and creation of a local improvement district (LID) for financing by July 20, 1987. Residents of Area II-A will have the right to remonstrate against the LID formation. Any option selected by the District will prove unpopular with either Albany or the Area II-A residents. Ultimately, mandatory health hazard annexation may be required to solve Area II-A's sewage problem. The mandatory process could be initiated by the Benton County Board of Commissioners (County Board of Health), the City of Albany or any eleven affected residents of the area.
9. Appropriate enforcement action against the District is now needed to assure the local issues are resolved and construction of sewerage facilities is done in a reasonable, but expeditious manner. The Department has issued a Notice of Violation to the District and has considered civil penalties, a Department Order and a Commission Order.

10. The Department views the Commission Order as the appropriate enforcement response, given the political complexity and public sensitivity of any of the solutions now being proposed. In addition, should the District fail to provide a local financing means, the Commission may utilize ORS 454.235 to seek self-liquidating bonds in circuit court. Use of ORS 454.235 requires a Commission Order initially.

Director's Recommendation

Based upon the summation, it is recommended that the Commission issue an Environmental Quality Commission Compliance Order as discussed in the alternatives and evaluation section, by signing the document prepared as Attachment E. The Commission may utilize ORS 454.235 to seek self-liquidating bonds to finance the needed sewerage facilities in the event local financing efforts fail.



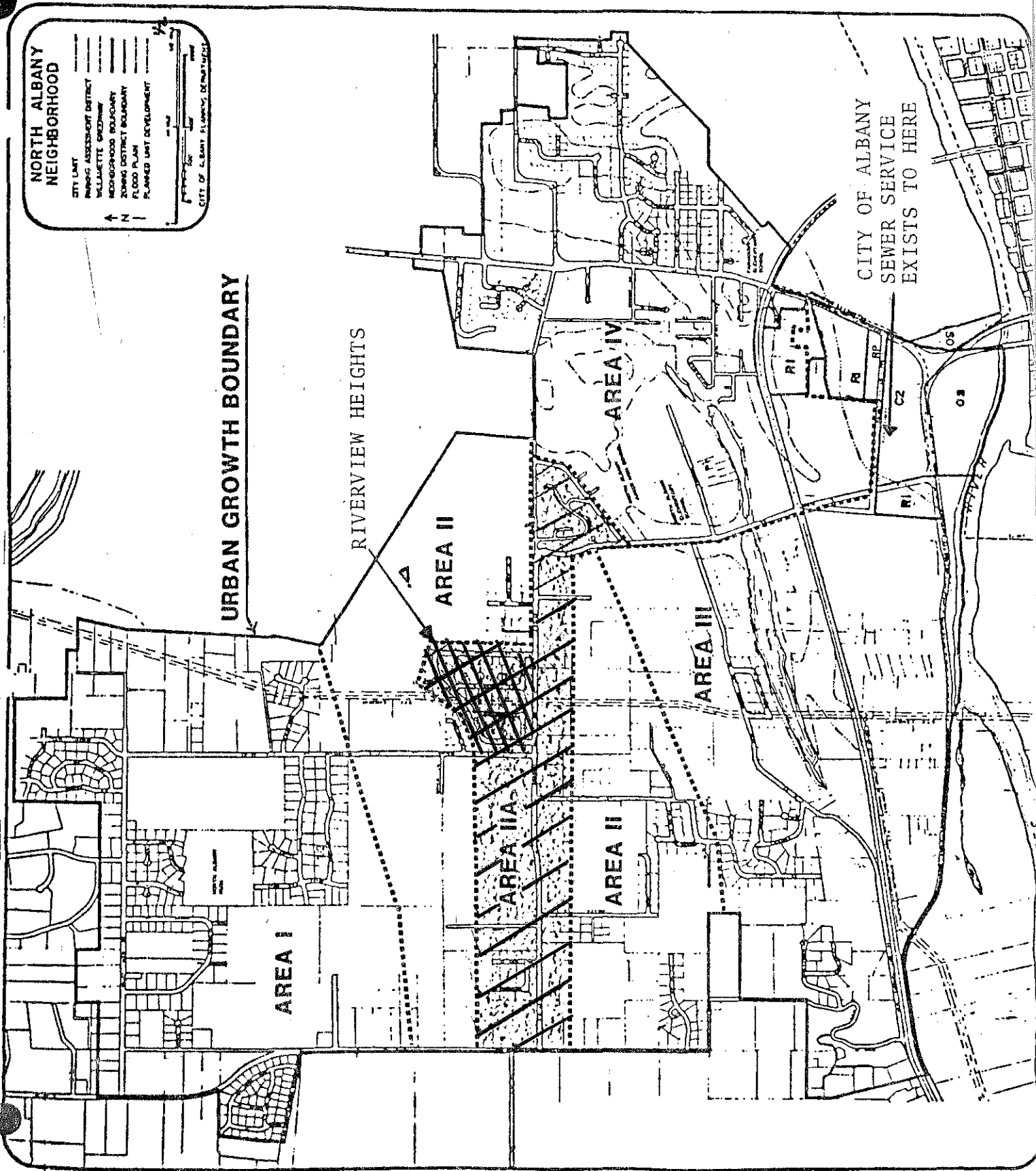
Fred Hansen

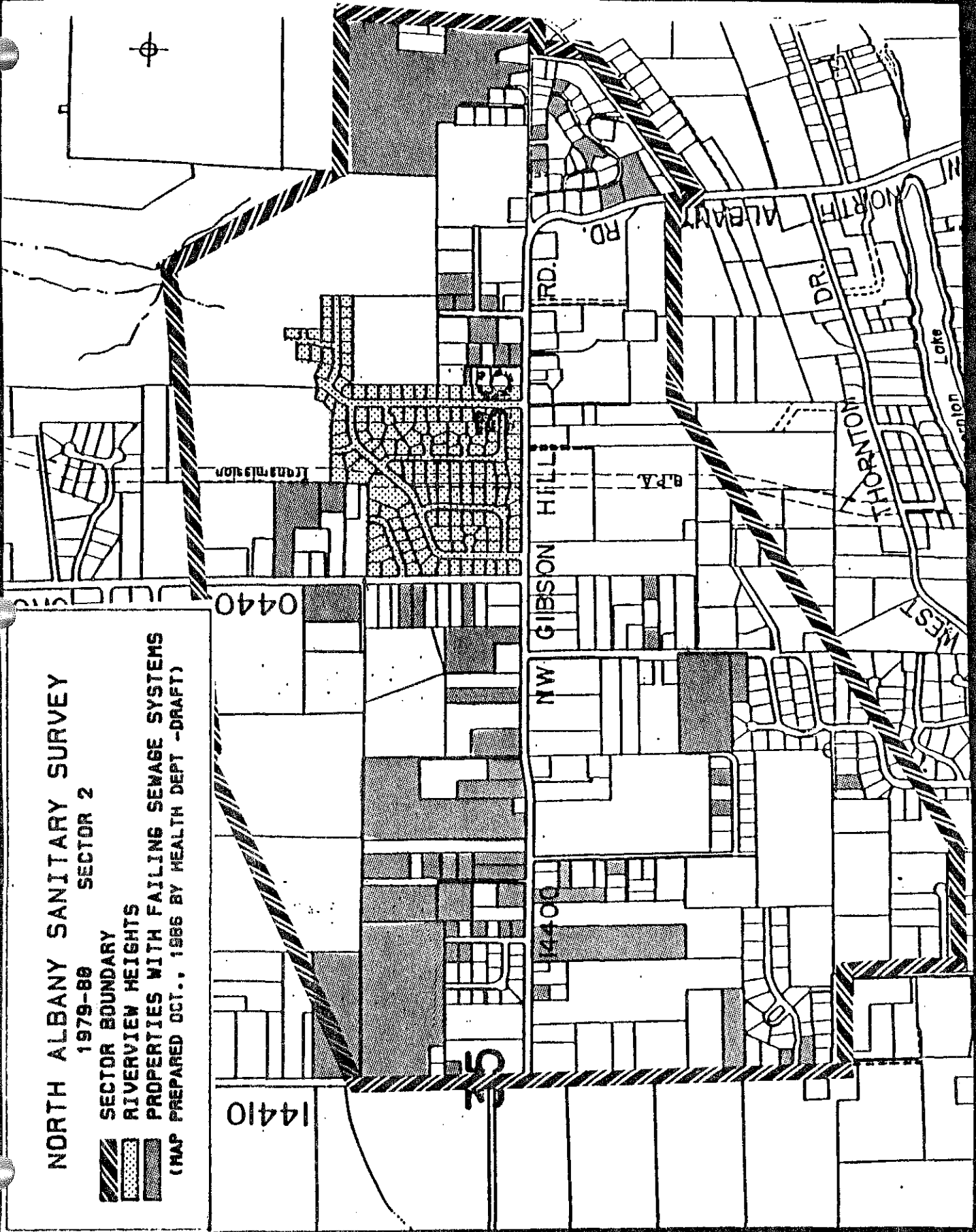
Attachments

- A. Map of North Albany Showing City of Albany Urban Growth Boundary, Riverview Heights Subdivision and Area II-A.
- B. Map Showing Results of Sanitary Survey for Area II, Summary of Documented Failing On-Site Disposal Systems, and Documentation of Surface Water Bacteriological Contamination.
- C. Documentation of Violations and Problems at Riverview Heights and Current NPDES Permit.
- D. Notice of Violation Issued to North Albany County Service District in May, 1987.
- E. Environmental Quality Commission Compliance Order.

D.W. St. Louis:p  
ROP687  
378-8240  
May 14, 1987

MAP A





Summary of Documented Failing On-Site Systems

And Documentation of Surface Water Bacteriological Contamination

Septic Tank/Drainfield System Failures

The primary public health and environmental issue still unresolved in North Albany is the large number of failing on-site disposal systems in portions of North Albany. No actual health hazard finding has been made by State Health Division; however the Department and the Benton County Health Department conducted a door-to-door sanitary survey of 597 homes during the winter of 1979/1980. The results of the survey showed the following and are portrayed graphically on the map on the preceding page.

<u>Area</u>	<u>Percent Failing Systems</u>
I	18 of 258 homes, or 7%
II	68 of 187 homes, or 36%
III	20 of 152 homes, or 13%

Further review of the Area II-A results showed several individual segments with significantly higher failure rates:

<u>Area II Segment</u>	<u>Percent Failing Systems</u>
6	18 of 24 homes, or 75%
9	10 of 21 homes, or 47%
11	11 of 28 homes, or 39%
12	5 of 15 homes, or 33%
17	2 of 4 homes, or 50%

Based on the significantly higher failure rates in portions of Area II, an Area "II-A" was designated by the Department and Benton County as having the highest potential public health impacts and was to be given the highest priority for sewage collection and treatment. Area II-A also has the lowest potential for on-site repairs due to its concave topography, very poorly drained soils and seasonal high ground water at or near the ground surface throughout the winter and early spring months.

The 1979/1980 sanitary survey consisted of a visual inspection of the septic tank and drainfield areas of each home; a dye test to confirm whether or not sewage was surfacing or discharging from the drainfield; bacteriological sampling; and an assessment of whether on-site repairs were feasible. The survey revealed the following specific problems that were common in Area II-A.

- a. Sewage from failing on-site systems was observed surfacing and ponding in yards.
- b. Water meters were found submerged under ponded, sewage-contaminated surface waters.
- c. Owner-constructed relief lines that discharged directly to roadside ditches were common. The lines had been installed to prevent sewage from backing up into household plumbing due to failure of the septic tank and drainfield system.
- d. Sewage was observed flowing into storm drainageways.
- e. Surfacing sewage was observed flowing across driveways and into public rights-of-way.
- f. Sumps and pumps were found installed under single-story dwellings without basements to keep sewage-contaminated ground waters from flooding plumbing fixtures and foundations. These installations discharged directly to paved public streets.
- g. On-site repairs to the failing systems were deemed not feasible due to the poorly drained soils and high seasonal ground water.

Attached is a memo from the Benton County Health Department summarizing the results of the sanitary survey and the prioritization of the areas for sewage collection and treatment.

Surface Water Bacteriological Contamination

Bacteriological sampling during the 1979/1980 sanitary survey confirmed the presence of human sewage, and in May 1980, the Benton County Health Department posted signs warning North Albany area residents of the potential for contact with sewage in roadside ditches, drainageways and public rights-of-way. Additional sampling in 1984 and 1987 again confirmed the sewage contamination in Area II-A. The following summary from the 1984 sampling shows the typical level of contamination found and the actual sample results are attached.

<u>Sample Number</u>	<u>Runoff Source</u>	<u>Sample Location</u>	<u>Fecal Coliform/ Fecal Strep.</u>
7	II-A	North Culvert, east side of Senic Drive	1700/400
18	II-A	Crocker Creek at gravel road east of Riverview Heights	1300/200
19	II-A	Culvert on North side of gravel road, between gate and Riverview STP.	400/100
21	II-A	North of Quarry Road at North Albany Road.	1300/600



The sampling in 1979/1980 and 1987 showed similar levels of sewage contamination. The contamination is generally above the levels recommended for waters of the State and is in violation of ORS 468.770. This statute prohibits the discharge of inadequately treated sewage to waters of the State.

# benton county health department

benton county public service building  
530 N.W. 27th Street  
Corvallis, Oregon 97330

General Health Administration/Information  
757-6835 & Vital Statistics  
Community Health Programs  
757-6837  
Environmental Health Programs  
757-6841  
Mental Health Programs  
757-6844

On March 19, 1980 the following people met to discuss 1980 survey results of North Albany: John Borden, Gary Messer and Daryl Johnson, Department of Environmental Quality; Roger Heyden, Ron Smith and Sue Sorensen, Benton County Environmental Health Department; Sandy Young, North Albany Planner, Craig Greenleaf, LCDC, Greg Wolf, Linn-Benton Coordinator, Jim Blair, Gary Fuerstein of the Benton County Public Works Department.

The surveyed area involved 597 homes and based on topography, was divided into 4 sectors. Sector 1: Bounded on the North by Valley View St. and on the South by the lowest part of the drainage basin (just North of Gibson Hill).

Sector 2: Bounded on the North by the low point of the drainage basin and on the South by the Ridge and including Laurel Heights to the East.

Sector 3: Bounded on the North by the Ridge and to the South by Highway 20.

Sector 4: The lower area bounded to the West by North Albany Road. Sector 4 was not surveyed due to the positioning and little or no problems with septic systems.

The results of the survey were:

- Sector 1: 18 failures out of 258 residences = 7% failures
- Sector 2: 68 failures out of 187 residences = 36% failures
- Sector 3: 20 failures out of 152 residences = 13% failures

Sectors 1, 2 and 3 considered:

## OPTIONS

### I. Sewer all Sectors 1, 2 and 3

- A. Regional sewers hooked up to either Albany or a Regional Sewer.
- B. Interim sewage treatment plant(s) (S.T.P.)
  1. Cluster sand filters.
  2. Lagoons with land disposal.
  3. Upgrade Riverview Heights sewage treatment plant.
  4. Combination of above.

### II. Sector 1

- A. Individual on-site repairs (repair and tolerate). (Standard repairs, individual sand filters, easements, capping fills, low pressure distribution)
  1. If sewers more than 10 years away, go with full repair.
  2. If sewers less than 5 years away, less repair.
  3. Consider hardships with judgment.
- B. Sewer Sector I

### III. Sector 2

- A. Individual on-site repairs - only feasible for approximately 4 failures.
- B. Cluster systems.
  1. Sand filters - technical concerns due to lack of long-term data on sand filters and possible liability for failure.

*Community work letters w/ 1*

- 2. Individual sand filters with community effluent disposal.
- 3. Individual septic tanks with further effluent collecting, treatment and disposal.

C. Sewer

- 1. Regional oversize pipes for permanent connection.
  - a. Local sewage treatment plant - upgrade Riverview
  - b. Albany

IV. Sector 3

- A. Individual on-site repairs (upgrade and tolerate).
  - 1. Dewatering, fills - would not help most in Sector 3.
  - 2. Easements to individual disposal areas.
- B. Cluster Remedies
  - 1. Collect and pump to Sector II (only gets 5-8 failures). Clusters not feasible due to acreage lots.
- C. Sewer - doesn't look good due to:
  - 1. Low density of failures and other existing development.
  - 2. Rough terrain requiring many pump stations.

PLAN OF ACTION

Sector 1

Repair and tolerate those that can't be repaired.

Sector 3

(If sewers are more than 10 years away, full repairs needed and if less than 5 years away, then less expensive repairs.)

Repair with idea that sewers may be available within 5 years, thus less than full repair may not be needed for every problem.

Sector 2

Sewer plan with oversize lines as part of joint Benton County and Albany effort for:

- (1) Planning (sewer) update, design, construction, design and operation and maintenance and
- (2) Capitol Improvement Plan for other urban services such as storm drainage.

Public Information Program: Identify the hazard and identify the solution (sewers) and encourage interim voluntary repairs.

Health Department Action:

Meetings with Benton County Planning, Health, Public Works for consensus, then meet with political bodies.

External Concerns:

- Albany's destiny
- Urban growth boundaries
- Lot sizes (interim small, interim large, permanent large)
- Design life of sewage treatment plant
- Ownership of collection system and sewage treatment plant (construction, operation and maintenance)
- Existing water system
- Economic base (interest rates, etc)
- Compliance with Albany codes

NORTH ALBANY SURVEY RESULTS

	BLOCK #	FAILURES TOTAL	%
<u>Sector 1</u>	1	4/60	6%
	2	2/34	6%
	3	4/40	10%
	4	0/16	0%
	5	2/17	12%
	6	0/7	0%
	7	2/60	3%
	8	4/24	16%

18 failures out of 258 residences = 7%

<u>Sector 2</u>	6	18/24	75%
	8	2/6	33%
	9	10/21	47%
	11	11/28	39%
	12	5/15	33%
	13	7/33	21%
	14	6/28	21%
	15	7/26	27%
	16	0/2	0%
	17	2/4	50%

68 failures out of 187 residences = 36%

<u>Sector 3</u>	14	6/13	46%
	16	7/21	33%
	17	1/21	4%
	18	3/59	5%
	29	2/10	20%
	31	1/28	3%

20 failures out of 152 residences = 13%

TOTAL FOR ALL SECTORS - 106 failures out of 597 residences = 17%

Surface Water Sampling  
January - March ,1984

In February, 1984 23 water samples were collected in Area II and analyzed for microbiological content, specifically: Total Coliform, Fecal Coliform, and Fecal Streptococcus bacteria. The samples were taken on two days. The first day was just after a major winter storm. The second day was after the storm waters had receded. The sample points are specified below and correspond to Map 4.

Sample Locations  
February, 1984

1. East end of Thornton Lake Drive
2. West Side of bridge on North Albany Drive
3. West side of North Albany Road, North side of Thornton Lake Bridge. 100 feet to north by 1st driveway. South side of culvert.
4. Ramp off southwest corner Thornton Lake Loop.
5. Ditch to East of Boll's property at Thornton Lake Drive
6. South culvert on east side of Scenic Drive approximately 40 feet south of where Scenic Drive meets Gibson Hill Road.
7. North culvert at same location as #6.
8. Drainage just west of Oakgrove School on Oakgrove Road, North side culvert.
9. 150 yards south of where Metge Road and Oakgrove Road meet on north side of Oakgrove Road.
10. Culvert 100 yards to the south of point #9 on Oakgrove Road, north side.
11. Culvert on southwest side of Scenic and 25th.
12. Ditch on northwest side of 25th and Happy Street (Princeton Heights).
13. South side of Meadowwood drainage in swale (at culvert).
14. Southeast side culvert at 2700 Robinhood.
15. 150' south of intersection of Robinhood and Crocker Lane on west side of road.

16. Crocker Creek from east side of Crocker Road at 2211 Crocker mailbox.
17. 110 feet east of 2652 Gibson Hill Road on north side.
18. Crocker Creek - gravel road beyond Riverview Heights on east side.
19. Culvert on north side of gravel road between gate and Riverview Heights sewage treatment plant.
20. Lake 1/4 mile northeast of Riverview Heights sewage treatment plant.
21. North of Quarry Road at junction of North Albany Road.
22. Crocker Creek off Springhill Road on east side - 1st major culvert 200 yards south of mile post 3.
23. Culvert 100 feet north of mile post 3, west side of Springhill Road.

Table 3: North Albany Area II Sampling Results  
February 14 & 21, 1984.

Sample Location (Map 4)	February 14, 1984			February 21, 1984	
	T.C.	F.C.	F.S.	T.C.	F.C.**
#1	34,000	600*	300*	430	< 30
#2	6,600	200*	1,700*	2,410	2,400
#3	8,000	220	1,700*	11,000	4,600
#4	2,300	110*	3,800	230	91
#5	6,300	260*	200*	430	230
#6	19,000*	400*	600*	4,600	930
#7	23,000	1,700*	400*	11,000	230
#8	23,000	4,700*	59,000	930	430
#9	4,100	1,100*	1,600*	390	91
#10	6,900	70*	90*	930	150
#11	4,100	1,100*	200*	930	36
#12	44,000	3,100*	540	11,000	2,400
#13	3,600	200*	300*	BROKEN	
#14	3,600	500*	210	430	230
#15	6,700	70*	90*	390	91
#16	6,300	210*	< 100	4,600	2,400
#17	20,000	190*	100*	930	930
#18	2,900	1,300*	200*	930	430
#19	2,400	400*	100*	91	< 30
#20	9,900*	200*	< 1,000	36	< 30
#21	17,000*	1,300*	600*	2,400	2,400
#22	40,000	900*	1,400*	73	73
#23	15,000*	10	30	36	36

\*Estimated

\*\*Due to lack of media no Fecal Strep was analyzed for this date. Points 10, 10 and 20 are not affected by sewage. This is not surprising as these samples were taken from drainages that did not pass through areas where septic systems were installed. Map 4 indicates the sampling locations and a comparison of laboratory results. Samples were not taken from Sunny Lane and Laura Vista as in the 1987 sampling noted earlier. Sample point # 12 reflects a major impact of water quality from the drainage from the Princeton Heights Subdivision.



### Documentation of Problems at Riverview Heights

The Riverview Heights sewage treatment plant is a small, activated sludge plant serving the 120 homes in the Riverview Heights Subdivision. Until 1980, the plant discharged treated, disinfected sewage to an unnamed slough of the Willamette River. The Department has issued NPDES permit No. 3728-J (Copy Attached) to the North Albany County Service District, which authorizes construction and operation of a wastewater collection, treatment and disposal system. The following violations and deficiencies are known to exist at the Riverview Heights sewerage facility:

- A. The NPDES permit would normally allow a discharge of adequately treated and disinfected effluent to waters of the State. The current permit, however, prohibits any discharge for the following reasons and Riverview Heights must rely entirely on a substandard irrigation site for effluent disposal:
  1. The sewage treatment plant lacks an outfall directly to the Willamette River. The receiving "stream" is an unnamed, seasonally flowing slough of the Willamette River; which likely cannot meet the dilution requirement of OAR 340-41-445. The prior NPDES permit required the District to install an outfall line by November 1, 1982; however the line has not been installed.
  2. In 1979, during effluent discharge to the slough, an outbreak of 148 cases of gastrointestinal illnesses occurred. Studies confirmed the water system serving Riverview Heights was at fault and the supply wells were adjacent to the slough. The exact source of the bacteriological contamination was not found. Because of the strong possibility of a hydraulic connection between the plant discharge and the well field, the Environmental Protection Agency ordered Riverview Heights to divert its effluent from the slough area.
- B. Additional problems at the Riverview Heights facility have been documented and are the following:
  1. Severe inflow and/or infiltration of groundwater occurs in the sewage collection system and results in flows far above the treatment plant's hydraulic capacity. Any flows over 70,000 gallons per day are diverted to a surge pond; and if high flows continue, the surge pond overflows raw sewage directly to the irrigation pond. This is a common occurrence during all high rainfall periods.

An inspection of the plant on March 24, 1987 revealed the plant to be suffering from hydraulic overload and raw sewage was being bypassed directly to the irrigation pond. The fecal coliform level in the final, irrigated effluent on March 24, 1987, exceeded 1200 fecal coliform per 100 milliliters; a violation of Schedule A, Condition 1 of the NPDES Permit.

2. The spray irrigation site utilized for disposal has unmanageable runoff due to slope, springs, slow surface infiltration capacity of soils and lack of adequate acreage in use to accommodate a year around irrigation program. Schedule D, Condition 2 of the NPDES permit prohibits any runoff from the irrigation site. The March 24 inspection and bacteriological sampling confirmed the presence of human sewage in runoff from the irrigation site that was traced to offsite drainageways, roadside ditches and Crocker Creek.

Permit Number: 3728-J  
 Expiration Date: 7/31/88  
 File Number: 61407  
 Page 1 of 5 Pages

Expiration Date: 7/31/88  
 File Number: 61407  
 Page 2 of 5 Pages

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

WASTE DISCHARGE PERMIT  
 Department of Environmental Quality  
 522 Southwest Fifth Avenue, Portland, OR  
 Mailing Address: Box 1760, Portland, OR 97207  
 Telephone: (503) 229-5696

Issued pursuant to ORS 468.740 and The Federal Clean Water Act

ISSUED TO:	SOURCES COVERED BY THIS PERMIT:										
North Albany County Service District 360 S.W. Avery Corvallis, OR 97333	<table border="0"> <tr> <td>Type of Waste</td> <td>Outfall Number</td> <td>Outfall Location</td> </tr> <tr> <td>Treated Sewage</td> <td>001</td> <td>Willamette R.M. 114.2 (new outfall)</td> </tr> </table>	Type of Waste	Outfall Number	Outfall Location	Treated Sewage	001	Willamette R.M. 114.2 (new outfall)				
Type of Waste	Outfall Number	Outfall Location									
Treated Sewage	001	Willamette R.M. 114.2 (new outfall)									
PLANT TYPE AND LOCATION:	RECEIVING SYSTEM INFORMATION:										
Sewage Treatment Plant Riverview Heights Subdivision Benton County	<table border="0"> <tr> <td>Major Basin:</td> <td>Willamette</td> </tr> <tr> <td>Minor Basin:</td> <td>-</td> </tr> <tr> <td>Receiving Stream:</td> <td>Willamette River</td> </tr> <tr> <td>County:</td> <td>Benton</td> </tr> <tr> <td>Applicable Standards:</td> <td>OAR 340-41-445</td> </tr> </table>	Major Basin:	Willamette	Minor Basin:	-	Receiving Stream:	Willamette River	County:	Benton	Applicable Standards:	OAR 340-41-445
Major Basin:	Willamette										
Minor Basin:	-										
Receiving Stream:	Willamette River										
County:	Benton										
Applicable Standards:	OAR 340-41-445										

Issued in response to Application No. OR-202887-8 received 7/12/83.

William H. Young, Director      SEP 1 1983  
 Date

PERMITTED ACTIVITIES

Until this permit expires or is modified or revoked, the permittee is authorized to construct, install, modify, or operate a waste water collection, treatment, control and disposal system and discharge to public waters adequately treated waste waters only from the authorized discharge point or points established in Schedule A and only in conformance with all the requirements, limitations, and conditions set forth in the attached schedules as follows:

	<u>Page</u>
Schedule A - Waste Disposal Limitations not to be Exceeded...	2
Schedule B - Minimum Monitoring and Reporting Requirements...	3
Schedule C - Compliance Conditions and Schedules.....	4
Schedule D - Special Conditions.....	5
General Conditions.....	Attached

Each other direct and indirect discharge to public waters is prohibited.

This permit does not relieve the permittee from responsibility for compliance with any other applicable federal, state, or local law, rule, standard, ordinance, order, judgment, or decree.

SCHEDULE A

1. Waste Discharge Limitations not to be Exceeded After Permit Issuance.

Outfall Number 001 (Treated Sewage)

Parameter	Average Effluent Concentrations		Monthly Average lb/day	Weekly Average lb/day	Daily Maximum lbs
	Monthly	Weekly			
June 1 - October 31: *					
BOD	20 mg/l	30 mg/l	8.4	12.5	16.8
TSS	20 mg/l	30 mg/l	8.4	12.5	16.8
FC per 100 ml	100	200			
November 1 - May 31: *					
BOD	30 mg/l	45 mg/l	12.5	18.7	25
TSS	30 mg/l	45 mg/l	12.5	18.7	25
FC per 100 ml	100	200			

Other Parameters (year-round)

Limitations

pH      Shall be within the range 6.0-9.0

Average dry weather flow to the treatment facility      0.05 MGD

2. Notwithstanding the effluent limitations established by this permit, no wastes shall be discharged and no activities shall be conducted which will violate Water Quality Standards as adopted in OAR 340-41-445 except in the following mixing zone:

The mixing zone shall be that portion of the Willamette River within a radius of 35 feet from the point of discharge.

\* No discharge to surface waters is permitted until outfall has been relocated to the Willamette River. See Condition 2, Schedule D.

SCHEDULE B

Minimum Monitoring and Reporting Requirements

(unless otherwise approved in writing by the Department)

Outfall Number 001 (sewage treatment plant outfall)

<u>Item or Parameter</u>	<u>Minimum Frequency</u>	<u>Type of Sample</u>
Total Flow (MGD)	Daily	Continuous
Quantity Chlorine Used	Daily	Grab
Effluent Chlorine Residual	Daily	Grab
BOD-5 (influent)	2 per month	Composite
BOD-5 (effluent)	2 per month	Composite
TSS (influent)	2 per month	Composite
TSS (effluent)	2 per month	Composite
pH (influent and effluent)	3 per month	Grab
Fecal Coliform (effluent)	<del>1 per week</del>	Grab
Average Percent Removed (BOD & TSS)	Monthly	

*2 per month - approved 9/83 by S&S*

Monitoring reports shall include a record of the location and method of disposal of all sludge and a record of all applicable equipment breakdowns and bypassing.

Reporting Procedures

Monitoring results shall be reported on approved forms. The reporting period is the calendar month. Reports must be submitted to the Department by the 15th day of the following month.

SCHEDULE C

Compliance Conditions and Schedules

- In accordance with the following schedule, the permittee shall rehabilitate the sewer system to eliminate excessive wet weather flows:
  - By December 1, 1983, the permittee shall have conducted a detailed I/I study of the sewer system to identify problems.
  - By March 1, 1984, the permittee shall have cleaned and conducted a television inspection of the collection system and established a maintenance based program for replacement and/or repair of deteriorated sewers.A progress report shall be submitted to the Willamette Valley Regional Office (Salem) no later than 14 days following each lapsed compliance date.
- In accordance with the following schedule, the permittee shall upgrade and/or expand the treatment facilities and sewer system to provide adequate sewage services to the practicable service area; Riverview Heights Subdivision and designated septic tank failure Area IIA:
  - By October 1, 1983, the permittee shall have completed the correction of immediate facility needs as identified by the Department (ref: June 7, 1983 memo).
  - By January 1, 1984, the permittee shall have submitted an approvable project proposal for Department review. This proposal shall include a financing plan and timetable for project implementation.
  - By April 1, 1984, the permittee shall have submitted final engineering plans for the upgrade and/or expansion for Department review.
  - By September 31, 1984, the permittee shall have completed construction of the project.
  - By October 1, 1984, the facilities shall have attained full operational status.
- The permittee shall take all reasonable steps to assure adequate sewage treatment is provided interim to treatment facility improvements pursuant to Schedule C, Conditions 1 and 2.
- The permittee is expected to meet the compliance dates which have been established in this schedule. Either prior to or no later than 14 days following any lapsed compliance date, the permittee shall submit to the Department a notice of compliance or noncompliance with the established schedule. The Director may revise a schedule of compliance if he determines good and valid cause resulting from events over which the permittee has little or no control.

NPDES GENERAL CONDITIONS

SCHEDULE D

Special Conditions

1. The permittee's proposed waste treatment and disposal facilities are considered to be interim facilities and the use thereof shall be terminated and connection made to an approved areawide sewerage system as soon as service is available.
2. No discharge of effluent to surface waters shall be made until the outfall has been relocated to the Willamette River. Prior to relocation of outfall, all effluent shall be distributed on land for dissipation by evapotranspiration and controlled seepage by following sound irrigation practices so as to prevent:
  - a. Prolonged ponding of effluent on the ground surface; and
  - b. Surface runoff or subsurface drainage through drainage tile.

- G1. All discharges and activities authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant more frequently than or at a level in excess of that identified and authorized by this permit shall constitute a violation of the terms and conditions of this permit.
- G2. Monitoring records:
  - a. All records of monitoring activities and results, including all original strip chart recordings for continuous monitoring instrumentation and calibration and maintenance records, shall be retained by the permittee for a minimum of three years. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the permittee or when requested by the Director.
  - b. The permittee shall record for each measurement or sample taken pursuant to the requirements of this permit the following information: (1) the date, exact place, and time of sampling; (2) the dates the analyses were performed; (3) who performed the analyses; (4) the analytical techniques or methods used; and (5) the results of all required analyses.
  - c. Samples and measurements taken to meet the requirements of this condition shall be representative of the volume and nature of the monitored discharge.
  - d. All sampling and analytical methods used to meet the monitoring requirements specified in this permit shall, unless approved otherwise in writing by the Department, conform to the Guidelines Establishing Test Procedures for the Analysis of Pollutants as specified in 40 CFR, Part 136.
- G3. All waste solids, including dredgings and sludges, shall be utilized or disposed of in a manner which will prevent their entry, or the entry of contaminated drainage or leachate therefrom, into the waters of the state, and such that health hazards and nuisance conditions are not created.
- G4. The diversion or bypass of any discharge from facilities utilized by the permittee to maintain compliance with the terms and conditions of this permit is prohibited, except (a) where unavoidable to prevent loss of life or severe property damage, or (b) where excessive storm drainage or runoff would damage any facilities necessary for compliance with the terms and conditions of this permit. The permittee shall immediately notify the Department in writing of each such diversion or bypass in accordance with the procedure specified in Condition G12.
- G5. The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State, or local laws, or regulations.

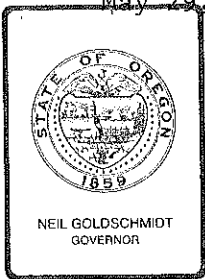
- G6. Whenever a facility expansion, production increase, or process modification is anticipated which will result in a change in the character of pollutants to be discharged or which will result in a new or increased discharge that will exceed the conditions of this permit, a new application must be submitted together with the necessary reports, plans, and specifications for the proposed changes. No change shall be made until plans have been approved and a new permit or permit modification has been issued.
- G7. After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked in whole or in part during its term for cause including but not limited to the following:
- Violation of any terms or conditions of this permit or any applicable rule, standard, or order of the Commission;
  - Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts;
  - A change in the condition of the receiving waters or any other condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.
- G8. If a toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307(a) of the Federal Act for a toxic pollutant which is present in the discharge authorized herein and such standard or prohibition is more stringent than any limitation upon such pollutant in this permit, this permit shall be revised or modified in accordance with the toxic effluent standard or prohibition and the permittee shall be so notified.
- G9. The permittee shall, at all reasonable times, allow authorized representatives of the Department of Environmental Quality:
- To enter upon the permittee's premises where an effluent source or disposal system is located or in which any records are required to be kept under the terms and conditions of this permit;
  - To have access to and copy any records required to be kept under the terms and conditions of this permit;
  - To inspect any monitoring equipment or monitoring method required by this permit; or
  - To sample any discharge of pollutants.
- G10. The permittee shall maintain in good working order and operate as efficiently as practicable all treatment or control facilities or systems installed or used by the permittee to achieve compliance with the terms and conditions of this permit.
- G11. The permittee shall provide an adequate operating staff which is duly qualified to carry out the operation, maintenance and testing functions required to insure compliance with the conditions of this permit.
- G12. The Department of Environmental Quality, its officers, agents, or employees shall not sustain any liability on account of the issuance of this permit or on account of the construction or maintenance of facilities because of this permit.
- G13. In the event the permittee is unable to comply with all the conditions of this permit because of a breakdown of equipment or facilities, an accident caused by human error or negligence, or any other cause such as an act of nature, the permittee shall:
- Immediately take action to stop, contain, and clean up the unauthorized discharges and correct the problem.
  - Immediately notify the Department of Environmental Quality so that an investigation can be made to evaluate the impact and the corrective actions taken and determine additional action that must be taken.
  - Submit a detailed written report describing the breakdown, the actual quantity and quality of resulting waste discharges, corrective action taken, steps taken to prevent a recurrence, and any other pertinent information.
- Compliance with these requirements does not relieve the permittee from responsibility to maintain continuous compliance with the conditions of this permit or the resulting liability for failure to comply.
- G14. If the permittee wishes to continue an activity regulated by the permit after the expiration date of this permit, the permittee must apply for and obtain a new permit.
- G15. All applications, reports, or information submitted to the Director shall be signed and certified in accordance with 40 CFR 122.6.
- G16. This permit is not transferable except as provided in OAR 340-45-045.
- G17. Definitions of terms and abbreviations used in this permit:
- BOD means five-day biochemical oxygen demand.
  - TSS means total suspended solids.
  - mg/l means milligrams per liter.
  - kg means kilograms.
  - m<sup>3</sup>/d means cubic meters per day.
  - MGD means million gallons per day.
  - Composite sample means a combination of samples collected, generally at equal intervals over a 24-hour period, and apportioned according to the volume of flow at the time of sampling.
  - FC means fecal coliform bacteria.
  - Averages for BOD, TSS, and Chemical parameters based on arithmetic mean of samples taken.
  - Average Coliform or Fecal Coliform is based on geometric mean of samples taken.

(GC 3-20-81)

Revised 6/16/81

May 29, 1987

ATTACHMENT D



## Department of Environmental Quality

811 S.W. SIXTH AVENUE, PORTLAND, OREGON 97204 PHONE (503) 229-5696

May 14, 1987

Ms. Charline R. Carr, Chairperson  
Benton County Board of Commissioners  
180 NW 5th Street  
Corvallis, OR 97333

RE: NOTICE OF VIOLATION  
ENF-WQ-WVR-87-33  
North Albany County Service District  
File No. 61407

Dear Commissioner Carr:

Our purpose in issuing this notice of violation is to formally place the North Albany County Service District on notice for water quality standards violations in the area known as "II-A"; and at the Riverview Heights sewage treatment facilities. This notice also requires submission of a schedule and plan for corrective action.

The violations due to failing on-site sewage disposal systems in area II-A have been documented on a number of occasions, including the door-to-door sanitary survey conducted during the winter of 1979. The survey confirmed failure rates as high as 75% in a portion of II-A; and an overall failure rate for II-A of 36%. The survey revealed the following specific problems:

- a. Surfacing sewage from failing on-site systems was observed in yards.
- b. Water meters were submerged under ponded, sewage-contaminated surface waters.
- c. Owner-constructed relief lines that discharged directly to roadside ditches were noted. Owners had installed the lines to prevent sewage from backing up into household plumbing due to failure of the septic tank/drainfield systems.
- d. Surfacing sewage was observed flowing across driveways and into public rights-of-way.
- e. Sewage was observed flowing into storm drainageways.
- f. Sumps and pumps were found that had been installed under single story homes without basements to prevent sewage contaminated groundwaters from flooding fixtures and foundations.

Ms. Charline R. Carr, Chairperson  
Benton County Board of Commissioners  
Page 2

All of the above constitute potential public health hazards and result in discharges of human sewage to waters of the State. Bacteriological sampling in 1980, 1984 and 1987 has confirmed the presence of human sewage in North Albany area roadside ditches, drainageways and seasonal tributary streams. These raw sewage discharges are in violation of Oregon Revised Statute 468.770.

We recognize the extensive efforts undertaken by the Albany-Benton County Intergovernmental Advisory Committee and the Citizens Advisory Committee over the past three years to initiate corrections. With the defeat of the two annexation proposals, we are now compelled to take a much more aggressive stand to assure a solution is provided in a reasonable, but expeditious manner for Area II-A. Therefore, we request by no later than July 1, 1987, the District submit a compliance schedule and firm proposal for providing the needed sewerage facilities for Area II-A. The schedule must include the following and construction must be initiated in 1988:

- Selection of alternative
- Means of financing
- Design of proposed facilities
- Initiation of construction
- Completion of construction
- Connection of system to homes in Area II-A

The violations related to the Riverview Heights sewage treatment and disposal facilities were only recently documented by the Department. On March 24, staff conducted an inspection of the plant and sampled the runoff from the irrigation site and surrounding drainageways.

The results of the inspection are reported on the attached inspection report and sketch showing the areas sampled. In summary, bacteriological contamination from human sewage was found in runoff from the irrigation site and was traced to roadside ditches and Crocker Creek. These discharges are in violation of ORS 468.770; and on the day of the inspection, the final effluent applied to the irrigation site showed a fecal coliform count of over 1200 fecal coliform per 100 milliliters. The NPDES permit issued to Riverview Heights requires disinfection to 200 fecal coliform per 100 milliliters, as a weekly average.

Runoff from the irrigation site appears to be due to the slope, springs in the area, slow surface infiltration capacity of soils and lack of sufficient acreage to accommodate a year around irrigation program. An adequate means of effluent disposal does not exist, given the current irrigation site limitations and lack of an outfall line to the Willamette River. In September 1982, a compliance condition was added to the Riverview Heights permit requiring installation of an outfall line to the Willamette River by no later than November 1, 1982. The outfall installation did not occur.



We are also concerned about the excessive inflow and/or infiltration of groundwater into the sewage collection system in Riverview Heights and its effect on sewage treatment plant performance. On March 24, staff found the surge pond overflowing raw sewage directly to the irrigation pond and land applied effluent did not meet the previously mentioned disinfection requirements. In addition, later we were advised that an unknown party had entered the plant compound and had diverted the entire raw sewage flow to the surge pond, which would have increased the bypassing of raw sewage to the irrigation pond and irrigation site.

We recognize the efforts your plant operators are making to assure the subject treatment and disposal facilities are operated in the best manner possible. Given the inflow and/or infiltration conditions in the collection system and the unsuitability of the irrigation site, their task is indeed difficult. Major corrective action is needed at Riverview Heights and must consist of the following:

1. A diagnostic evaluation of the collection system and sewage treatment plant in order to determine the capability to convey and adequately treat sewage flows from Riverview Heights and identify performance limiting factors. The evaluation should include review of operation and maintenance practices to determine if further commitment would improve treatment capability.
2. An assessment of interim measures to reduce violations now occurring, such as immediate flow reduction work in the collection system and immediate expansion of the irrigation site land area and repairs to the sprinkler system to assure more even distribution of effluent.
3. Installation of an outfall line directly to the Willamette River if a discharge is proposed as replacement for the irrigation system.

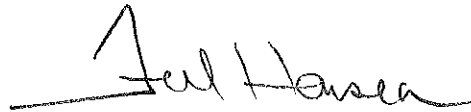
By no later than July 1, 1987, the District is requested to submit a compliance schedule and proposal for accomplishing corrective action at Riverview Heights. Since Riverview Heights is within Area II-A, any solution for providing the needed sewerage facilities for II-A may include Riverview Heights.

The Department is clearly committed to solving the sewage problems in North Albany. We are prepared to proceed to the Environmental Quality Commission for issuance of a Commission Order to assure the needed facilities are constructed and placed on-line.

Ms. Charline R. Carr, Chairperson  
Benton County Board of Commissioners  
Page 4

Your prompt attention to the compliance proposals and schedules will be appreciated.

Sincerely,

A handwritten signature in cursive script that reads "Fred Hansen". The signature is written in dark ink and is positioned above the typed name and title.

Fred Hansen  
Director

FH:ts

Attachments:

Inspection Reports  
Sketch of Drainages  
Sample Results

cc Tom Holman, Mayor of Albany  
Water Quality Division, DEQ  
Regional Operations Division, DEQ  
Willamette Valley Region, DEQ

DEPARTMENT OF ENVIRONMENTAL QUALITY

SOURCE INSPECTION FORM

WQ  
 SW  
 AQ  
 NC

COUNTY: Benton

SOURCE NAME: North Albany County Service Dist. (Riverview heights STP)  
 SOURCE ADDRESS: c/o Benton Co. Public Works Dept.  
 360 SW Avery  
 Corvallis, OR 97330

OFFICIAL CONTACTED: Dick Dalke, Engineer

File 61407

TABLE A PARA	PREP. TIME	TRANS TIME	INSPECTION TIME	PAPER TIME
	5	20	15	15

PERMIT NUMBER		POINT	ACTION		DATE SCHEDULED			DATE ACHIEVED			RESULT	INSPEC. NO.
CO.	SOURCE		NO.	TYPE	MO.	DAY	YR.	MO.	DAY	YR.		
	3728-J		7					03	24	87	X	F03

8.1  
 8.2  
 8.3  
 8.4

COMPLIANCE STATUS (RESULT CODE)	TREATMENT/PROCESS EQUIPMENT - ADDITIONAL REMARKS - OPERATING CONDITIONS																																								
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	IN COMP.	NOT IN COMPLI- ANCE	ON SCHEDULE																																						
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See comments to right.																																									
Operator is likely doing the best job possible with these facilities; given the high infiltration/inflow to the collection system and deficiencies in the irrigation site (springs, tight soils, slope.) Facility needs to be phased out or upgraded.																																									

David St Louis/Gary Messer

cc: Jim Blair, Benton Co. Public Work  
 cc: Dick Dalke/Dave Davis, Operator

SIGNATURE OF INSPECTOR AND DATE

SIGNATURE OF PERSON INTERVIEWED AND DATE



## STATE OF OREGON

## INTEROFFICE MEMO

TO: File

DATE: April 8, 1987

FROM: Dave St. <sup>DSL</sup>Louis/Gary Messer

cc: Mary Halliburton

SUBJECT: WQ-Inspection of Riverview Heights STP  
NPDES No. 3728-J, File No. 61407  
Benton County

On March 24, 1987, we met with Dick Dahlke, Benton County Public Works Engineer at 10:00 am to inspect the Riverview Heights STP, and collect surface water runoff and stream samples from areas adjacent to the land irrigation system.

Upon arrival, we observed that incoming flows were within an inch of overflowing into the bypass line that connects into the surge pond. Upon inspection of the surge pond, we observed that a gravel lined trench had been constructed some time ago, to connect directly into the irrigation pond via a 6 inch diameter discharge pipe at the end of the trench. The irrigation pond is supposed to only receive treated and chlorinated waste waters, as the waters from the pond are directly land irrigated for final disposal. The connecting trench had significant slime and filamentous bacteria growths indicating that raw sewage has, for some time, commonly overflowed from the surge pond into the irrigation pond. The discharge pipe from the trench was flowing approximately 1/3 full at an estimated rate of 1 foot per second. Calculated out over a 24 hour period, this represents a volume of over 10,000 gallons per day. The weather was clear and sunny on the date of our investigation. Mr. Dahlke indicated this connection was necessary in order to keep the raw sewage surge pond from overflowing during the winter, when severe I/I problems occur. Normal practice is to pump back into the STP; however, once raw sewage is bypassed, this would be impossible.

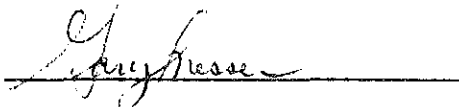
Inspection of the treatment plant indicated minor biological treatment of the sewage was likely occurring. The aeration chamber was very "watery" and contained large amounts of suspended "clumps". The final clarifier waters were marginally clear, due presumably to extreme dilution with I/I waters, rather than a good treatment process. The chlorine contact chamber was channeling most waters to the irrigation pond; however, it still has the old outfall line to the slough and a cracked bottom, which was discharging some of the waters -- presumably to Crocker Creek or the slough via the old outfall line.

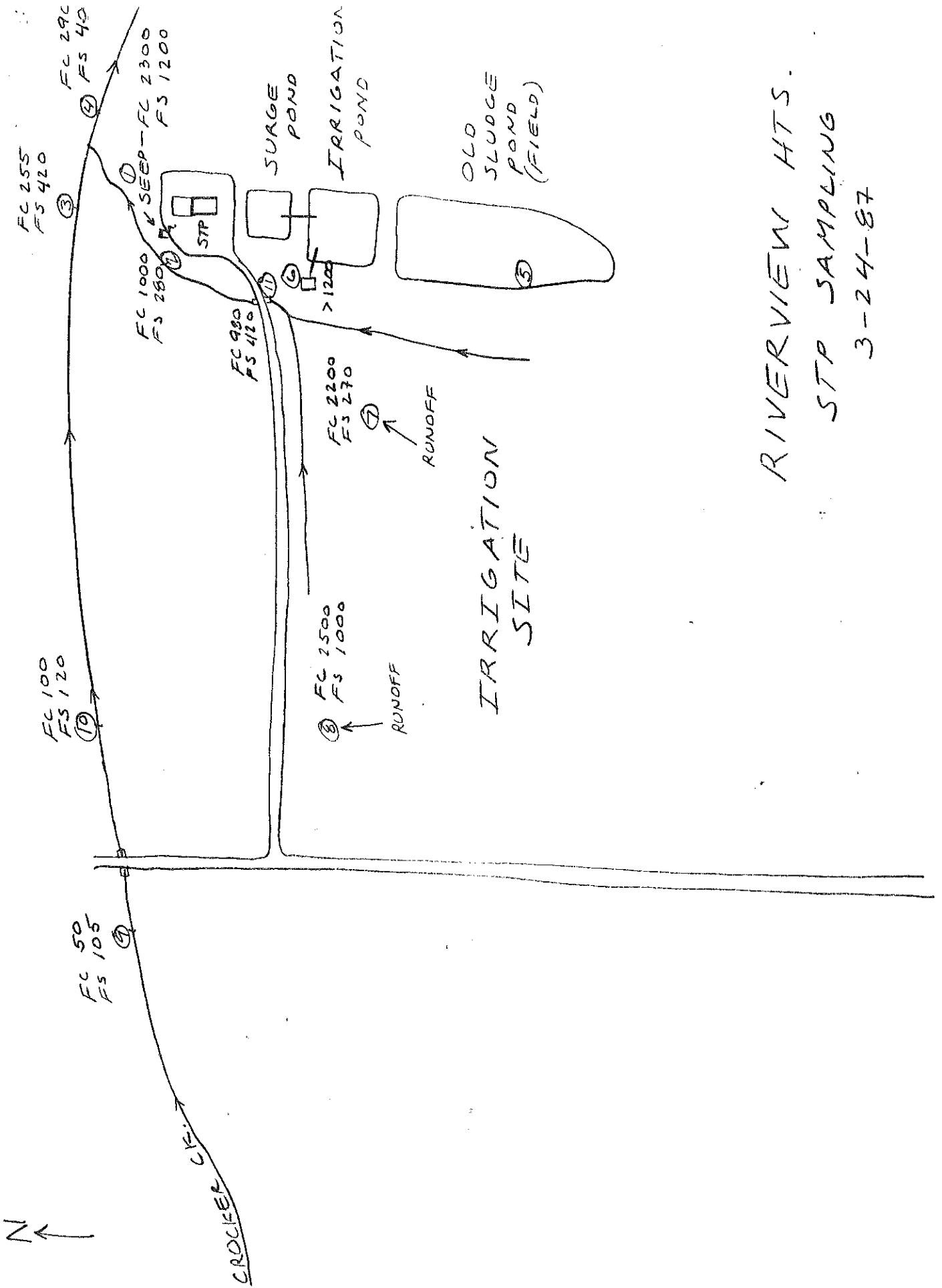
We then inspected the land irrigation disposal area which is located on an elevated knoll area southwest of the plant site. The system uses a series of spring loaded sprinklers, each of which irrigates a circular area approximately 50 feet in diameter. Significant surface runoff was occurring at both the northwest and northeast portions of the irrigation area. The northwest flows enter a drainageway and then enter on old tiling system, which appears to discharge into Crocker Creek. The northeast flows enter an actively flowing drainageway that discharges into Crocker Creek below the plant site. Considering the date of this inspection, it's fairly safe to conclude that these runoffs occur throughout the winter periods.

Water quality bacteriological samples were collected at the runoff points of the irrigation areas, in adjacent drainageways, and at three locations along Crocker Creek, to determine potential impacts of current irrigation practices.

On March 25, 1987, Dave Davis, one of the plant operators, called in to report that following our inspection, "someone" had removed an incoming sewage flow bypass gate at the headworks. As such, all raw sewage flows entered the surge pond, which in turn overflowed into the irrigation pond. He indicated he corrected this as soon as he saw it, but in case their samplings showed high numbers for March 24 and beyond, he wanted to alert us ahead of time. The samples we collected will show what the conditions are normally like, as the gate was in place during our inspection.

Our inspection generally is reflective of conditions commonly observed during past inspections. The system has severe I/I problems; the plant has limited treatment capability; and land irrigation practices during winter and spring, cannot be conducted without surface runoff to public waters occurring. This source cannot be expected to operate properly and within the limits of it's permit conditions. It needs significant upgrade or total phase out.

  
GWM/ss



RIVERVIEW HTS.  
 STP SAMPLING  
 3-24-87

DSL 4-18-87

## DEPARTMENT OF ENVIRONMENTAL QUALITY

Request for Analysis

Laboratory No. 87-0230Location/Site: North Albany  
County Service Dist. Date: 3-24-87Date Received Lab: MAR 24 1987Collected By: St. Louis / Messer Program: WA SOURCE COMPLIANCE <sup>3256M</sup>Date Reported: MAR 27 1987Purpose: Assess bacteriological impact fromReport Data To: St. Louis / Salem  
Holliburton / WADComments: Riverview Heights STP irrigation site.

lab prepared

\* Basic (P) unpreserved; Nutrient (R) add H<sub>2</sub>SO<sub>4</sub> in field; Metals (Tm) HNO<sub>3</sub> added in lab--don't rinse; Organic(X) mason jar

Item No.	Sampling Point Description (include time)	*Sample Container (bottle) #'s				Test Required
		Nutrients Basic	DO BOD	Metals Organic		
1	Sidehill seep below NW corner of STP. 10:00 AM				151	Total Coliform / Fecal Coliform / Enterococci / Fecal strep.
2	Drainage below STP just prior to Crocker Ck. 10:05 AM				041	SAME
3	Crocker Ck., 15 FT upstream of above drainage. 10:07 AM				137	SAME
4	Crocker Ck., 100 FT downstream of above drainage. 10:10 AM				114	SAME
5	Irrigation site, runoff to field SW of lower pond. 10:20				105	SAME
6	Effluent sample from irrigation pump 10:30				107	SAME

Laboratory comments \_\_\_\_\_

## DEPARTMENT OF ENVIRONMENTAL QUALITY

Request for Analysis

Laboratory No. 87-0230Location/Site: North Albany  
County Service Disc.Date: 3-24-87 (Cont.)Date Received Lab: MAR 24 1987Collected By: St. Louis / MesserProgram: WQ SOURCE  
COMPLYDate Reported: MAR 27 1987Purpose: Assess bacteriological impact fromReport Data To: St. Louis @ Salem  
Holliberton @ WQDComments: Riverview Hts. STP Irrigation site.

lab prepared

\* Basic (P) unpreserved; Nutrient (R) add H<sub>2</sub>SO<sub>4</sub> in field; Metals (Tm) HNO<sub>3</sub> added in lab--don't rinse; Organic(X) mason jar

Item No.	Sampling Point Description (include time)	*Sample Container (bottle) #'s				Test Required
		Nutrients Basic	DO BOD	Metals Organic		
7x	Irrigation runoff on site at NE corner 10:30 AM				182	<del>Fecal Coliform</del> / Fecal Coliform / Fecal Strept / Enterococci
8x	Irrigation runoff on site at NW corner. 10:40 AM				184	SAME
9x	Crocker Cr. @ Gravel road, upstream sample. 10:47				093	SAME
10A	Crocker Cr., 100' downstream of culvert 10:57				171	SAME
11x	S. End culvert @ road near STP. 11:10				117	SAME
6						

Laboratory comments \_\_\_\_\_



DEPARTMENT OF ENVIRONMENTAL QUALITY  
Water Bacteriological Membrane Filter Analysis

Location/Site: NORTH Albany Co. Serv. Dist. Laboratory No.: 87-0230

Date/Time Tested: 3-25-87/1030

Collected By: ST. LOUIS

Program Code: 3256M

Date Reported: 3-27-87

Date Collected: 3/24/87

Date/Time Received: 3/24/87 15:00

Reported By: P.L. Kincaid

COMMENTS:

ITEM #	BOTTLE #	SAMPLING POINT DESCRIPTION (time)	IN LAB #	ENTEROCOCCI			FECAL COLIFORMS			FECAL STREPTOCOCCI		
				Dil. (ml)	MF Count	No. /100 ml	Dil. (ml)	MF Count	No. /100 ml	Dil. (ml)	MF Count	No. /10
1	151	Sideline seep below NW corner STP Cl <sub>2</sub> _____ Turb. <u>3</u>	123	50 <del>25</del> 10 1 <del>0.1</del>	<del>/</del> <del>/</del> TNTC 0	<100	50 <del>25</del> 10 1 <del>0.1</del>	<del>/</del> <del>/</del> TNTC 23	2300	50 <del>25</del> 10 1 <del>0.1</del>	<del>/</del> <del>/</del> TNTC 12	EST. 10
2	041	Drainage below STP near Crocker Creek Cl <sub>2</sub> _____ Turb. _____	124	50 <del>20</del> <del>10</del> 1 0.1	<del>/</del> 27 7	135	50 <del>20</del> <del>10</del> 1 0.1	<del>/</del> TNTC 50	1000	50 <del>20</del> <del>10</del> 1 0.1	<del>/</del> 64 14	EST. 2
3	137	Crocker Creek 15 ft. above drainage Cl <sub>2</sub> _____ Turb. _____	125	50 <del>20</del> <del>10</del> 1 0.1	<del>/</del> 58 16	290	50 <del>20</del> <del>10</del> 1 0.1	<del>/</del> 51 12	255	50 <del>20</del> <del>10</del> 1 0.1	<del>/</del> 82 21	EST. 420
4	114	Crocker Creek 100' downstream of drainage	126	50 <del>20</del> <del>10</del> 1	<del>/</del> 63 17	EST. 340	50 <del>20</del> <del>10</del> 1	<del>/</del> 58 16	290	50 <del>20</del> <del>10</del> 1 0.1	<del>/</del> 74 20	40

DEPARTMENT OF ENVIRONMENTAL QUALITY  
Water Bacteriological Membrane Filter Analysis

Location/Site: NORTH ALBANY Co S. Dist.

Laboratory No.: 87-0230

Date/Time Tested: 3-25-87 / 1030

Collected By: ST Lewis

Program Code: 3256M

Date Reported: 3-27-87

Date Collected: 3/24/87

Date/Time Received: 3/24/87 1500

Reported By: M.L. Rivera

COMMENTS: IOG = interfering overgrowth

ITEM #	BOTTLE #	SAMPLING POINT DESCRIPTION (time)	IN LAB #	ENTEROCOCCI			FECAL COLIFORMS			FECAL STREPTOCOCCI		
				Dil. (ml)	MF Count	No. /100 ml	Dil. (ml)	MF Count	No. /100 ml	Dil. (ml)	MF Count	No. /100
5	105	Irrigation site, runoff to field SW of lower pond. Cl <sub>2</sub> Turb. <u>3+</u>	127	50	/	see comments	50	/	see comments	50	/	see comments
				<del>25</del>			<del>25</del>			<del>25</del>		
				10	IOG		10	IOG		10	IOG	
				1	IOG		1	IOG		1	IOG	
				<del>0.1</del>			<del>0.1</del>			<del>0.1</del>		
6	107	Effluent sample from irrigation pump. Cl <sub>2</sub> Turb. _____	128	50		>1200	50		71200	50		71200
				<del>20</del>	TNTC		<del>20</del>	TNTC		<del>20</del>	TNTC	
				<del>10</del>	TNTC		<del>10</del>	TNTC		<del>10</del>	TNTC	
				1			1			1		
				0.1			0.1			0.1		
7	182	Irrigation runoff on site @ NE corner Cl <sub>2</sub> Turb. <u>2</u>	129	50	/	250	50	/	2200	50	/	270
				<del>25</del>			<del>25</del>			<del>25</del>		
				10	25		10	TNTC		10	27	
				1	2		1	22		1	2	
				<del>0.1</del>			<del>0.1</del>			<del>0.1</del>		
8	184	Irrigation runoff on site @ NW corner Cl <sub>2</sub> Turb. <u>2</u>	130	50	/	EST. 100	50	/	2500	50	/	EST. 100
				<del>25</del>			<del>25</del>			<del>25</del>		
				<del>10</del>			<del>10</del>			<del>10</del>		
				1	1		1	25		1	10	
				<del>0.1</del>			<del>0.1</del>			<del>0.1</del>		

DEPARTMENT OF ENVIRONMENTAL QUALITY  
Water Bacteriological Membrane Filter Analysis

Location/Site: NORTH ALBANY Co S. Dist.

Laboratory No.: 87-0230

Date/Time Tested: 3-25-87/1020

Collected By: ST. LOUIS

Program Code: 3256M

Date Reported: 3-27-87

Date Collected: 3/24/87

Date/Time Received: 3/24/87 1500

Reported By: L. K. Wiersma

COMMENTS:

ITEM #	BOTTLE #	SAMPLING POINT DESCRIPTION (time)	IN LAB #	ENTEROCOCCI			FECAL COLIFORMS			FECAL STREPTOCOCCI			
				Dil. (ml)	MF Count	No. /100 ml	Dil. (ml)	MF Count	No. /100 ml	Dil. (ml)	MF Count	No. /100	
9	093	Crocker Ck. @ gravel road (upstream samples) Cl <sub>2</sub> _____ Turb. _____	131	50		EST. 65	50		EST. 50	50		105	
			20	13			20	10			20		21
			105	4			105	4			105		4
			1				1				1		
			0.1				0.1				0.1		
10	171	Crocker Ck. 100' downstream of culvert Cl <sub>2</sub> _____ Turb. _____	132	50		EST. 35	50		100	50		120	
			20	7			20	20			20		24
			105	4			105	5			105		6
			1				1				1		
			0.1				0.1				0.1		
11	117	S. End culvert @ road near STP Cl <sub>2</sub> _____ Turb. _____	133	50		110	50		980	50		420	
			20	22			20	TNTC			20		72
			105	5			105	49			105		21
			1				1				1		
			0.1				0.1				0.1		
			50			50			50				
			25			25			25				
			10			10			10				
			1			1			1				

BEFORE THE ENVIRONMENTAL QUALITY COMMISSION  
OF THE STATE OF OREGON

IN THE MATTER OF SEWERAGE FACILITY	)	FINAL ORDER
CONSTRUCTION BY NORTH ALBANY	)	NO. EQC-WVR-87-02
SANITARY DISTRICT	)	
	)	
	)	
	)	
	)	
	)	

FINDINGS

Pursuant to ORS 468.090 through 468.110, and ORS 183.310 through 183.550, the Environmental Quality Commission makes the following findings:

1. On December 19, 1972, the Benton County Board of Commissioners ordered formation of the North Albany County Service District (District) in accordance with ORS 198.820 for the purpose of providing sewerage facilities in North Albany. The Board further ordered the boundary of the District shall be as described in an exhibit, "ATTACHMENT A" to their order; a boundary that closely corresponds to the adopted City of Albany (City) Urban Growth Boundary in Benton County.

2. Extensive sewerage facility planning efforts have been undertaken, including studies in 1967, 1974, 1980 and 1986. None of the studies have resulted in construction of sewage collection and treatment facilities. In 1986, voters of the District defeated two, separate annexation proposals. Since North Albany is in the City's Urban Growth Boundary, the City has been identified as the ultimate and logical provider of services.

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1 e. Sewage was observed flowing into storm drainageways.

2 f. Sumps and pumps were found installed under single story homes  
3 without basements to prevent sewage-contaminated groundwaters from flooding  
4 fixtures and foundations.

5 5. Bacteriological sampling during the 1979/1980 survey and in 1984  
6 and 1987 confirmed the presence of human sewage in roadside ditches,  
7 seasonal tributary streams and drainageways. The discharge of inadequately  
8 treated sewage to waters of the state is in violation of ORS 468.770 and  
9 constitutes a potential public health hazard.

10 6. On March 24, 1987, the Department conducted an inspection of the  
11 Riverview Heights Subdivision sewage treatment facility and documented the  
12 following deficiencies and violations. Riverview Heights has 123 homes, is  
13 within Area II-A and the sewerage facilities are owned and operated by the  
14 District.

15 a. Sewage contamination of off-site drainageways, seasonal tributary  
16 streams and Crocker Creek was documented, in violation of ORS 468.770. The  
17 source of the contamination was runoff of inadequately treated and  
18 disinfected sewage applied to the irrigation site. The fecal coliform  
19 levels in the final effluent exceeded 1200 fecal coliform per 100  
20 milliliters, in violation of Schedule A, Condition 1 of NPDES Permit  
21 No. 3728-J issued to the District. This contaminated runoff would be  
22 expected to occur throughout the late fall, winter and early spring months  
23 of each year.

24 b. Excessive inflow and/or infiltration in the sewage collection  
25 system results in impaired treatment capability and bypassing of raw sewage  
26 from a surge pond directly to the irrigation pond. On March 24, the surge

1 pond was overflowing raw sewage directly to the irrigation pond. Such  
2 bypassing would be expected to occur commonly throughout the late fall,  
3 winter and early spring months of each year.

4 c. The spray irrigation site (placed into emergency use in 1980 when  
5 EPA ordered the plant's effluent discharge be removed from a slough  
6 suspected of being linked to a drinking water source) was found to be  
7 unsuitable for year around irrigation of effluent. The site has  
8 unmanageable runoff due to slope, slow surface infiltration capacity of  
9 soils, springs and lack of adequate acreage. The runoff is a violation of  
10 Condition D3 of NPDES Permit No. 3728-J, which prohibits any runoff from  
11 the irrigation site.

12 d. The sewage treatment plant lacks the physical equipment and  
13 capacity to adequately treat and dispose of sewage in a manner which  
14 protects public health and meets water quality requirements.

15 7. Until sewage collection and treatment facilities are constructed  
16 for Area II-A, the potential public health hazards and the violations of  
17 ORS 468.770 will continue. Further, until corrective action is  
18 implemented, the violations and deficiencies at Riverview Heights sewerage  
19 facilities will continue. At this time, the District is evaluating  
20 alternatives to resolve these issues.

21 8. The Environmental Quality Commission has the authority to issue  
22 an Order under ORS 468.090 through 468.110 to require the District to  
23 resolve these violations and prevent future violations. In the event local  
24 financing efforts fail, the Commission may seek self-liquidating bonds  
25 under ORS 454.235 to finance the needed sewerage facilities.

26 ///

ORDER

Based on these findings, IT IS HEREBY ORDERED THAT:

1. By July 1, 1987, the District shall submit an achievable compliance proposal and time schedule for constructing the needed sewerage facilities in Area II-A. The schedule shall include milestones for the following:

- a. Selection of alternative
- b. Method of financing
- c. Design of proposed facilities
- d. Initiation of construction (by June 15, 1988)
- e. Completion of construction
- f. Connection of homes to system

2. By no later than June 15, 1988, the District shall initiate construction of sewerage facilities.

3. The District shall complete construction and connection of residences in accordance with the schedule submitted under Item No. 1 and approved by the Department.

4. Until the deficiencies and violations at the Riverview Heights Subdivision are corrected or alternative sewage treatment and disposal provided, no additional connections or increases in sewage flows to the Riverview Heights system shall occur.

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1 IT IS SO ORDERED:

2  
3 ENVIRONMENTAL QUALITY COMMISSION  
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5  
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7 \_\_\_\_\_  
Date

\_\_\_\_\_ James E. Petersen, Chairman

8  
9  
10 \_\_\_\_\_  
Date

\_\_\_\_\_ Mary V. Bishop, Member

11  
12  
13 \_\_\_\_\_  
Date

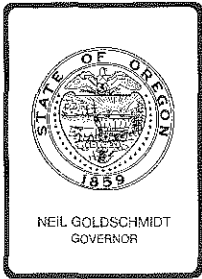
\_\_\_\_\_ Wallace B. Brill, Member

14  
15  
16 \_\_\_\_\_  
Date

\_\_\_\_\_ Arno H. Denecke, Member

17  
18  
19 \_\_\_\_\_  
Date

\_\_\_\_\_ A. Sonia Buist, M.D., Member



## Environmental Quality Commission

811 SW SIXTH AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

### MEMORANDUM

To: Environmental Quality Commission  
From: Director  
Subject: Agenda Item E, May 29, 1987, EQC Meeting

Public Hearing and Proposed EQC Adoption of Temporary Rule  
Amending Solid Waste Permit Application Processing Fee for  
Large General Purpose Domestic Waste Landfills,  
OAR 340-61-120

### Background

By September 1987, the Department is expecting to receive Solid Waste Facility Permit applications for two new, very large general purpose landfills in north central Oregon. Attachment 1 describes a proposal by Waste Management, Inc. (WMI) near Arlington and Attachment 2 describes a proposal by Tidewater Barge Lines (TBL) near Boardman. Both sites are being proposed as alternatives to siting a landfill in the Portland Metropolitan area. A major transfer station (separate permit necessary), in the Portland area, will likely be an integral part of either project.

These proposals pose a dilemma for the Department. The type and intensity of the review necessary to evaluate a proposed landfill of the size and complexity of the two applications we expect requires substantial resources, as demonstrated by the budget associated with the SB662 siting effort. On the other hand, our current solid waste fee schedule doesn't contemplate such a situation.

The Department has not received an application for a major solid waste disposal site in several years. The SB662 siting process has set a new level of investigation, review and public expectations for major solid waste disposal sites. This is especially true for any proposed landfill to serve the Portland metro area. The Department has already told the engineers for WMI that the detail and level of study for its site is expected to be similar to the SB662 work.

The Department has gained significant knowledge and experience in solid waste disposal site investigation and evaluation through the SB662 siting process. The additional resources needed to adequately deal with these new permit applications are estimated to be similar in level and technical competence to those required for the SB662 project:

1. A hydrogeologist to guide the development of and review and analyze geotechnical studies and site evaluations. This work is essential to ensure that the Department gets the information needed to adequately review the permit application and so that applicants do not spend time and money needlessly.
2. An engineer to be the lead staff person on the technical aspects of the sites including plan and feasibility study reviews, final design approval and drafting permits.

The time demands on the present Solid Waste Section staff will be substantial. Besides the technical investigations and reviews, staff will be called upon regularly to attend public meetings, consult with local government representatives and generally represent the Department. The choice of a Portland area landfill site as part of the SB662 process will add to the section's workload as well. As SB662 staffing ends and Metro begins preparation of an environmental impact statement for wetlands and submits a permit application for the 662 site, the Solid Waste Section will be required to respond (although these activities would be funded by the SB662 fee).

The Solid Waste Section currently does not have adequate staff resources to deal with investigating and processing the proposed permit applications for the WMI and TBL sites. Present personnel (3 staff) in the section are totally committed. The Department couldn't anticipate the current competition among several large landfill projects for the Portland area garbage and, therefore, didn't budget the resources necessary to complete the work that is imminent.

The Department is proposing to raise the Solid Waste Permit Application Fees, provided for by ORS 468.065 and ORS 459.235, to meet this critical staffing need. The Statement of Need for Rulemaking, required by ORS 183.335(5) is Attachment 3 to this report.

#### Alternatives and Evaluation

Present Division rules (OAR 340-61-120) require a \$1000 application fee for major facilities (facilities receiving more than 25,000 tons of solid waste per year). This fee is to be used to pay the Department's costs for investigating proposed landfills and determining whether to issue or deny a solid waste permit. In actuality, a \$1,000 application fee will only pay a small portion of the Department's costs for processing a permit application for a facility like that proposed by WMI or TBL.

The permit application fee could be raised to cover a major portion or all of the Department's costs. This could be accomplished by establishing a new category for major general purpose domestic waste landfills designed to receive more than 100,000 tons per year of waste and greater than 100 acres in size. The new application fee would be \$85,000 and apply to all such permit applications received after May 29, 1987.

An emergency (temporary) rule change would be necessary in order to assure the increased fee is in place before a complete permit application is submitted. A temporary rule remains in effect for 180 days. The intent would be to make the rule permanent so that other proposals similar to the WMI and TBL sites would pay the same fee. A proposed temporary rule is included as Attachment 4.

While the permanent rulemaking option would normally be preferred it will take several months to complete and therefore not meet the WMI and TBL application schedules. The Department must begin to assemble the additional resources now to be prepared to respond to the WMI and TBL projects in a timely manner. Failure to bring the staff on board quickly will adversely affect the applicants due to long delays in processing the permit applications and adversely affect the public interest by leaving the Department unable to adequately review the technical information and protect the environment. WMI is on a fast-track to obtain local land use approvals and submit a complete solid waste permit application to the Department. TBL also now has commenced this process with Morrow County. Therefore, the temporary rule is the approach of choice.

WMI, TBL and other interested parties have been contacted regarding the proposed \$85,000 permit application processing fee. Naturally, some concern was expressed, but there was understanding that adequate Department staff must exist to investigate and review such major proposals and move the process along in a timely manner.

#### Summation

1. The Department expects to soon receive at least two solid waste facility permit applications for very large general purpose landfills proposed by private operators to receive solid waste from the Portland area.
2. The Department has determined that two full-time staff and professional services (\$175,000) will be required to give the level of investigation and review equivalent to that established by the Department in the SB662 siting process experience, to adequately meet the public's interests and protect the environment.
3. Staffing in the Department's Solid Waste Section is not adequate to deal with the anticipated new permit applications. Hydrogeologic expertise does not exist in the section and is not available on loan sufficient to evaluate major new sites.

4. A temporary rule can be adopted which increases the solid waste facility permit application processing fee required by OAR 340-61-120 for a major facility, sufficient to cover the Departments costs of investigating and making a final decision on the permit application.
5. If the temporary rule is not adopted, the Department will not have adequate resources to provide a competent and timely review of the WMI and TBL permit applications. Therefore, the environment would not be adequately protected and processing of the permit application would be seriously delayed, resulting in serious prejudice to the public interest and the interest of the parties concerned (WMI and TBL).

Director's Recommendation

Based upon the findings in the Summation, it is recommended that the Commission hold a public hearing and, based on that public hearing, adopt the proposed temporary rule amending OAR 340-61-120 as set forth in Attachment 5. It is also recommended that the Commission authorize the Department to hold public hearings on the issue of whether to make the temporary rule permanent.

  
Fred Hansen

Attachments 5

- Attachment 1 - Memo of February 17, 1987 to Mike Downs from Ernie Schmidt, Subject: Morrow County Solid Waste Disposal Project. (TBL)
- Attachment 2 - Memo of March 12, 1987 to File from Ernie Schmidt, Subject: Proposed Waste Management Landfill Near Arlington, Oregon (WMI)
- Attachment 3 - Statement of Need for Rulemaking and Fiscal and Economic Impact Land Use Consistency Statement
- Attachment 4 - Proposed Temporary Rule
- Attachment 5 - Public Hearing Notice on Proposed Temporary Rule

Ernest A Schmidt:f  
229-5157  
May 11, 1987  
SF2000

TO: Mike Downs

DATE: February 17, 1987

FROM: Ernie Schmidt

*ERNIE*

SUBJECT: Morrow County Solid Waste Disposal Project

We have been presented a preliminary permit application and feasibility report prepared by Seton, Johnson and Odell Engineers, on behalf of Tidewater Barge Lines, Inc. (TBL) and Wastech, Inc., for a proposed large privately owned municipal waste landfill in Morrow County. The site would receive solid waste from ports-of-call on the Columbia River system, which has been transported by barge and unloaded across the Port of Morrow dock at Boardman. TBL is the largest barge and terminal company operating on the Columbia/Snake River system.

The permit application was submitted incomplete, to get some early review by the Department and guidance as to how to complete the application.

Background

In October 1986, TBL submitted a proposal to Clark County, Washington in response to that county's Request for Qualifications for a Municipal Solid Waste Disposal Facility. The county generates about 550 tons/day of solid waste. As proposed, a transfer station would be constructed at TBL's dock on the Vancouver side of the Columbia River. Residential garbage, some demolition and some commercial/industrial waste, would be compacted and pushed into standard unit size enclosed shipping containers, 8' X 8' X 40' long or optionally 20' long. The containers would then be stacked onto a relatively small barge (900 ton) to be included with other barges in regular tows upriver. Two such barges each 3 days would handle Clark County. This would be a small addition to commodity transport on the Columbia River.

Wastech, Inc. is a new firm being split out of the GSX (Genstar) group. Principles are Wayne Trehitt, President, Ted Rattray (British Columbia operations) and Merle Irvine (Oregon operations). They operate the Metro CTRC, transport the waste to St. Johns Landfill, and operate the Oregon Processing and Recovery Center (OPRC) materials recovery facility. They run similar facilities in British Columbia and have very recently been awarded a contract to operate a new landfill at Cache Creek - including transportation of waste 250 miles one way from Vancouver, B.C. and wood chips back for Georgia-Pacific.

Wastech proposes to expand OPRC (in Portland) to receive from Clark County, select loads of commercial, industrial and demolition loads which are processible to recover paper products and a densified refuse derived fuel (DRDF). The paper products recovery (with trommels) has been successful for some time. Wastech has demonstrated the preparation of DRDF prepared at Tacoma, Washington and trial burned it at three locations, including the Smurfit (Publishers) Newberg Paper Mill. Reportedly, combustion characteristics were promising. The talks are continuing with Smurfit.

At Boardman, the existing dock and offloading equipment is designed to handle the proposed containers and is under-utilized. Containers would be set on trailers for transport to the disposal site. The Port is willing to provide long-term rate and service guarantees.

A longer term consideration possible at Boardman is construction of an energy recovery facility to provide steam to the food processing plants in the Port industrial area. They reportedly can use about 280,000 lb./hr. of steam. By comparison, the Marion County incinerator is rated at 132,000 lb./hr., both boilers combined.

The estimated annual operating cost (gate fee at transfer station) in 1986 dollars was proposed to Clark County at \$32/ton. This is roughly split \$10/ton for landfill and \$22/ton for handling and transportation prior to the landfill.

#### Landfill Site

I visited the proposed landfill site on January 6, 1986, with the landowner Larry Lindsey, Bryan Johnson of Seton, Johnson and Odell, Wayne Trewitt and Merle Irvine, Wes Hickey of TBL, and Bob Miller of the Port of Morrow. The conceptual proposal involves 230 acres on the southwest side of Finley Buttes, 16 miles from Boardman. Access is direct from the port area to the site via Bombing Range Road, bordering the east side of the bombing range. No residences are passed en-route.

The site is located within 10,000 acres owned by Mr. Lindsey and is zoned agricultural. The Finley Buttes are an erosional landmark with slopes up to 10%. It is proposed to area-fill across several draws - the maximum depth to be 85'. The draws are grassed over and gentle in shape. They appear to have been formed over a very long time by infrequent storm events. Precipitation ranges from 5 to 15 inches per year, with an annual average of 9 inches. There is no water basin above the site. It has never been cultivated and is too rough for circle irrigation. Present use is cattle grazing at a ratio of one cow per 35 acres. Foliage is grasses and scattered rabbit brush.

Geology and groundwater hydrology information submitted is very general. Based on known regional geology, it is expected that soils at Finley Buttes range from 90' to 300' thick over Columbia River basalt flows. Overlying soils are sedimentary deposits. They are assumed to be slowly permeable and not contain any significant groundwater. The basalts contain excellent aquifers, which are the subject of considerable attention by the Water

### Landfill Site (Continued)

Resources Department (WRD), due to overpumping and water rights litigation.

A copy of the landfill proposal was forwarded to Mike Zwart at (WRD) for comment. He reports that this location is on a divide between a designated critical groundwater withdrawal area and a proposed critical area. There are relatively more sediments overlying the basalt bedrock here than in the region generally. The potentiometric surface of the groundwater used for irrigation is at approximately 575' MSL, (not 675' MSL indicated in report) which is 75 feet below the estimated bedrock surface. Wells in the region may extend 1,000 feet deep to get large volumes of water.

### Preliminary Site Evaluation

Based only on surface observations and from an engineering design standpoint, the proposed site looks workable. Only 230 acres are involved in this conceptual proposal, but it appears that considerably more land and capacity could be available. The 230 acres are estimated to last 25 years at a fill rate of 180,000 tons/year. Although a very favorable water balance can be displayed, any design would have to include lining and leachate collection, treatment and disposal - probably by sprinkle irrigation. Suitable land for irrigation is limitless. There is no indication of recent erosion in the draws. The site should be easily protected from surface water, since it is located at the highest local elevation.

The area is subject to high winds and dust storms. The surface soils are light and will blow when disturbed, therefore, special care would have to be taken to control dust and stabilize disturbed soils. Provision of adequate water to the site to control dust, provide fire protection, etc. could be a problem. The design would have to include handling cloudburst type storm events.

Considerable on-site and vicinity investigation into geology and groundwater hydrology characteristics will be necessary before it is possible to go beyond this cursory view that the site is suitable for landfill.

### Issues

#### **Local Acceptance**

The Port of Morrow is actively seeking business and openly supports the project. Louis Carlson, the new County Judge, (from Heppner and was on the Port Commission) expressed cautious interest. The county has wanted to site a landfill in the north end for many years. No residences would be directly impacted by the transportation or landfill. The attitudes of the large commercial farming interests is unknown. One would expect opposition from some source.



**Need for Site (340-61-026(5))**

There is some need for better disposal within Morrow County. The Turner landfill, serving the Heppner area (south county) is operating on year-to-year lease from a private landowner who has threatened closure. The operation has been only marginally acceptable. North county solid waste goes to the Hermiston site (22 miles) and is adequately disposed. Primarily, the need for the site would have to be established by the area whose waste enters the site and could be partially based on any unique siting characteristics of the Morrow County location. An evaluation of alternatives would be necessary to justify/support the Morrow County choice.

**Land Use and Recycling (ORS 459.055 and the Opportunity to Recycle Act)**

The site is zoned Exclusive Farm Use (EFU). As such, a Waste Reduction Program must be developed by "the local government unit responsible for solid waste disposal pursuant to statute or agreement between governmental units" (ORS 459.055(2)). In addition, ORS 459.250 requires that the Department shall require as a condition to issuing a permit that a place for collecting source separated recyclable material, located either at the disposal site or at another location more convenient to the population served by the disposal site is provided for every person whose solid waste enters the disposal site. Between these two statutes, it seems we should expect out-of-state generators of solid waste entering a disposal site in Oregon to meet conditions at least equal to conditions placed on in-state generators. Clark County should be expected to implement the opportunity to recycle at least equivalent to what would be acceptable in the metropolitan Portland area in Oregon.

ES:m  
SF1714

cc: Steve Gardels  
Janet Gillaspie  
Steve Greenwood  
Lorie Parker

# Two Portland companies propose to barge garbage to Morrow landfill

By **HOLLY DANKS**  
and **HARRY BODINE**  
of The Oregonian staff

Two Portland companies announced Tuesday that they want to ship metropolitan-area garbage to Eastern Oregon by barge and dump it in a 600-acre landfill they propose to build 16 miles south of Boardman.

Spokesmen for Tidewater Barge Lines, the largest barge line on the Columbia/Snake River system, and Wastech, which operates the Oregon Processing and Recovery Center in Portland and the Clackamas Transfer and Recycling Center in Oregon City, presented their program at a Portland news conference. They later spelled out details to the Metropolitan Service District's solid waste committee.

Called the Finley Buttes Landfill project, named for the remote area of Morrow County proposed as the dump site, the plan offers "a cost-effective and environmentally sound alternative to the Bacona Road and Ramsey Lake metropolitan landfill sites," Jacob Tanzer, a Portland attorney representing the two companies, said.

The shipping and dumping operation could be under way by the end of 1988 or early 1989 and could serve the Portland-Clark County, Wash., area for more than 20 years, Tanzer said.

The project, though similar to one proposed by Waste Management, Inc., is better, Tanzer said, because it would use existing recycling facilities in Portland and Oregon City, ship the garbage in sealed containers as part of existing barge traffic and dump the waste in an area already zoned and environmentally suited for a landfill.

Waste Management Inc., the largest trash handler in the United States, unveiled similar plans in March to ship Portland-area waste to a site southeast of Arlington in Gilliam County by either barge or train. Chem-Security Systems Inc., a subsidiary, already runs a toxic waste dump near Arlington.

The Portland area generates almost 1 million tons of garbage per year, most of which is buried in the St. Johns landfill. But the landfill is scheduled to close in 1989.

To replace St. Johns, the Oregon Department of Environmental Quality is scheduled to select by June 30 a new landfill site that Metro in turn would acquire and operate to serve Multnomah, Washington and Clackamas counties. Metro simultaneously is considering five private

## St. Johns tired of garbage

By **HARRY BODINE**  
of The Oregonian staff

Lents and St. Johns-area residents testified Tuesday night that a solid-waste recovery plant — preferably a composting operation — may be a good idea, but it should not be built in their neighborhoods.

"St. Johns has done enough," resident Daniel L. Wear told the Metropolitan Service District's Resource Recovery Citizens Review Committee in a hearing at Westminster Presbyterian Church in Northeast Portland.

His views were echoed by more than a dozen persons who expressed their views on five proposals Metro is considering to burn garbage, convert it into compost or manufacture resource-derived fuel pellets as alternatives to burying waste in landfills.

William Huston, who lives in Mount Scott near the former Dwyer Lumber Co. property south of Southeast Foster Road, suggested that Metro should find a less-populated area for one of the proposals it is considering, a composting plant.

"Two miles east there is nothing," Huston said.

Reversing the trend of comments, Columbia County Commissioner Michael J. Sykes

endorsed a mass garbage burning plant Fluor/Southern Electric International proposes to build in St. Helens.

In addition to solving Columbia County's solid-waste disposal problem, a "waste to energy" plant would provide electricity that would ensure that Boise Cascade Corp. would continue to operate its St. Helens plant for 20 years, Sykes said.

Answering questions from the audience after testimony, Metro officials assured those present that the regional agency would consider seriously two recent proposals to transport Portland-area garbage up the Columbia River to new long-term landfill sites in Gilliam and Morrow counties.

Dave Phillips, citizens resource recovery committee chairman, reminded the audience that his panel's charge was to recommend a course of action for Metro on alternative technologies, not landfills.

The committee is scheduled to make its recommendation May 21 to Rena Cusma, Metro's executive officer. One additional public hearing, called by the Columbia County Board of Commissioners, is scheduled for 7:30 p.m. May 20 at the courthouse in St. Helens.

post garbage or convert it into resource derived fuel in an effort to reduce the amount of waste being buried in landfills.

Wayne Trehwitt, Wastech president, said there was less chance of ground water contamination at Finley Buttes than at Portland-area sites being considered.

Because of Morrow County's semiarid climate, there aren't any potential problems with wastes leaching into the water table, he said.

Trehwitt said the Boardman shipping plan would cost waste-company customers less than if garbage is dumped at Ramsey Lake, Bacona Road or Arlington landfills. It also would give business to the severely underused Port of Morrow and would boost that area's economy, he added.

Although there is some opposi-

County, the project had been received favorably during informal talks with local officials and community leaders, Trehwitt said.

Although truck traffic south of Boardman will increase 20 percent if the project is approved, no houses are along the route, Trehwitt noted.

The land proposed for the dump site now is privately owned, but Tanzer said that Tidewater and Wastech held an option to buy it.

The Tidewater-Wastech proposal "could not come at a more opportune time," Tor Lyshaug, Metro's acting director of solid waste, said.

"The picture has changed substantially in the last two months," he said. Metro has new alternatives for dealing with solid waste "at relatively reasonable prices. The new regime (Cusma's administration) can take part of the credit for that."

STATE OF OREGONDEPARTMENT OF ENVIRONMENTAL QUALITYRECEIVED  
INTEROFFICE MEMO MAR 26 1987

TO: File

DATE: March 12, 1987

FROM: Ernie Schmidt *ES*

SUBJECT: Proposed Waste Management Landfill Near Arlington, Oregon

Friday, March 6, 1987, representatives of Waste Management of North America met with DEQ staff to begin technical discussion of W-M's proposed municipal landfill in Gilliam County. Present were:

Douglas Strauch P.E.  
District Engr. - No. Calif. Dist.  
W-M of California, Inc.  
2055 Gateway Place, Suite 240  
San Jose, CA 95110  
(408) 295-8544

Travis Hughes, Ph.D.  
Vice Pres. Technical Programs  
P.E. LaMoreaux & Assoc's (PELA)  
P.O. Box 2310  
Tuscaloosa, AL 35403  
(205) 752-5543

For DEQ:

Bob Danko  
Ernie Schmidt

Fred Bromfeld  
Neil Mullane

Mr. Strauch is responsible for the technical aspects of the proposed project. The overall project will be managed by Rick Daniels at the W-M of Oregon office in Portland (249-8078). The manager of the Portland office is Doug Ogden.

PELA is W-M's geotechnical consultant and has also been the primary consultant for Chem-Waste Management on the nearby hazardous waste disposal site. The results of a preliminary on-site investigation by PELA were reviewed.

Conceptually, the landfill would ultimately cover 688 acres within two sections of land which are included in a total 2,000 acre area under option from Stone Ranches, Inc. (See attached figure). The centroid of the landfill would be about 6 miles south of Arlington and the Columbia River. Maximum depth of fill would be 165 feet including a 25 foot excavation. Total capacity is estimated at  $90 \times 10^6$  yards. At an average fill rate of 2,000 tons/day, the site would last 102 years.

Transportation could be by rail or barge. Rail is being looked at carefully, because rail access already exists close to the site and this would avoid offloading containers of solid waste through the City of Arlington. They would also have to contend with an annual two week period,

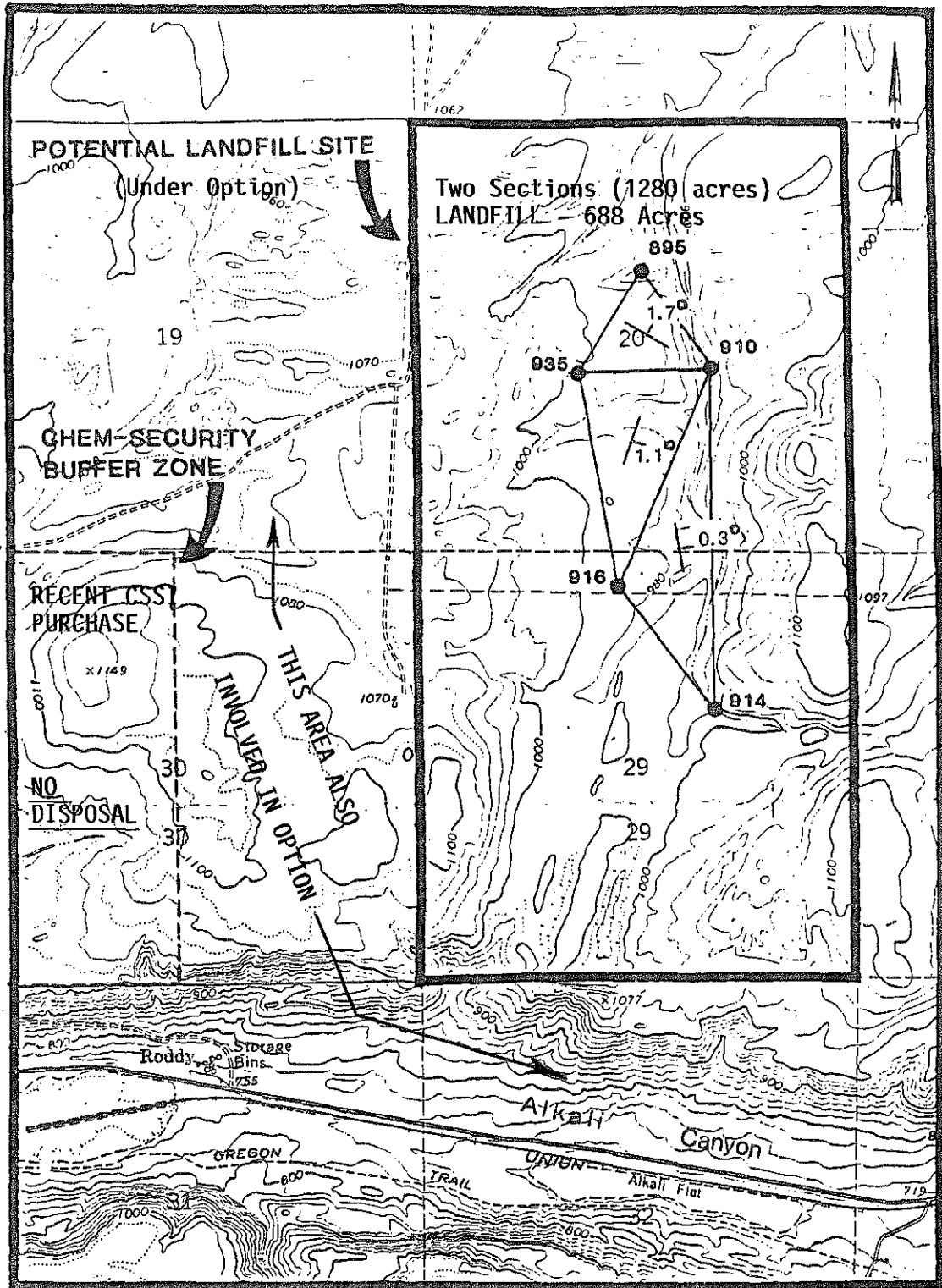
during which river traffic is stopped to accomodate<sup>M</sup> locks maintenance. Barge haul would, however, tend to be cheaper and perhaps less subject to accident. We were not able to pin down an overall disposal cost figure at this early date.

Most of the discussion centered on the physical nature of the proposed site. It is a gentle draw extending north and south with intermittent drainage to the north and east, eventually to China Creek which passes through Arlington and also carries water only intermittently. Five exploratory borings have been completed to depths ranging from 55 feet to 125 feet. These revealed 7 - 10 feet of loess on top of 10 - 75 feet of permeable sands and gravels, which overly the Selah clay strata. The borings stopped within the Selah. Regional geology suggests the Selah is 75 - 125 feet deep overlying deep Priest Rapids Basalt. The lower portion of the Selah is saturated and although it is a poor aquifer, it is the water that the design of the nearby CSSI site is intended to protect. The permeability of this clay may run from  $10^{-5}$  to  $10^{-7}$  CM/SEC. W-M hopes to use it in any liner construction.

The Selah clay appears to be very slowly recharged by incident precipitation. Infrequent moisture fronts apparently move downward from the ground surface. Although average precipitation is only about 9 inches annually, the landfill design would have to include a liner system with leachate collection and treatment. The climate will tend to minimize the generation of leachate, but in the long-run will not prevent it.

The Department's feasibility study requirements were reviewed. A geotechnical investigation equivalent to that performed under the Department's SB662 siting process was indicated as appropriate for this proposal.

cc: Fred Hansen  
Mike Downs  
Steve Greenwood  
Bob Danko  
Steve Gardels



CSSI  
 HW DISPOSAL  
 SITE



TOTAL AREA UNDER OPTION FOR SOLID WASTE LANDFILL PURPOSES APPROXIMATELY 2,000 ACRES

Base map from USGS 7 1/2 minute topographic maps.

- 910 EXPLORATORY BOREHOLE, ELEVATION OF TOP OF SELAH SHOWN. EAS 3/11/87
- ↘ 1.1° AVERAGE STRIKE AND DIP, TOP OF SELAH MEMBER.

**FIGURE 2. AVERAGE STRIKE AND DIP OF THE TOP OF THE SELAH MEMBER FROM TRIANGULATION BETWEEN BOREHOLES.**

Prepared by:  
**P.E. LAMOREAUX & ASSOCIATES, INC.**

BEFORE THE ENVIRONMENTAL QUALITY COMMISSION  
OF THE STATE OF OREGON

In the Matter of Amending                    )  
OAR 340-61-120                                )  
                                                  )  
                                                  )  
                                                  )

Statement of Need for Temporary  
Rule Amendment and Fiscal and  
Economic Impact and Land Use  
Consistency

STATEMENT OF NEED FOR RULEMAKING:

Pursuant to ORS 183.335(7), this statement provides information on the Environmental Quality Commission's intended action to adopt a temporary rule.

1. Legal Authority

ORS 459.235 and ORS 468.065 allow the Environmental Quality Commission to establish fees for permits issued for solid waste disposal sites.

2. Need for the Rule

The Department expects to soon receive at least two solid waste facility permit applications for major landfills proposed to serve the Portland area. Additional Department staffing is needed to investigate the applications, determine whether the sites are approvable and issue or deny the permits in a timely manner. A temporary rule is needed to increase the permit processing fee paid by each applicant sufficient to cover the Department's costs of evaluating each site and processing the permit application. The normal rulemaking process could not be completed in time to establish the new fees before receipt of the permit applications.

3. Principal Documents Relied Upon in This Rulemaking

- a. ORS Chapter 459
- b. ORS Chapter 468
- c. OAR 340, Division 61, Solid Waste Management.
- d. "Preliminary Feasibility Study Report for Morrow County Solid Waste Disposal Project" dated December 19, 1986 by Seton, Johnson and Odell, Inc.
- e. "Preliminary On-Site Investigation of a Potential WMNA Solid Waste Landfill Site, Gilliam County, Oregon" dated March 5, 1987 by P.E. LaMoreaux and Associates.

The above documents are available for public inspection at the office of the Department of Environmental Quality, 811 S.W. 6th Avenue, Portland, Oregon, during regular business hours, 8 a.m. to 5 p.m.

Attachment 3  
Agenda Item E  
May 29, 1987 EQC Meeting

FISCAL AND ECONOMIC IMPACT:

This temporary rule is expected to have very little small business impact. The proposed application fee is small compared to the total cost of establishing a major solid waste landfill site and will have negligible effect on the ultimate cost to the public for solid waste disposal.

LAND USE CONSISTENCY STATEMENT:

The proposed rule does not affect land use as defined in the Department's coordination program approved by the Land Conservation and Development Commission.

SF2000.3

Rule 340-61-120 is proposed to be amended as follows:

(Note: Underlined language is new)

Permit Fee Schedule

340-61-120(1) Filing Fee. A filing fee of \$50 shall accompany each application for issuance, renewal, modification, or transfer of a Solid Waste Disposal Permit. This fee is non-refundable 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 \$1,000, except as provided in subsection (2)(h) of this section, 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) Major facility<sup>1</sup>.....\$1,000
- (B) Intermediate facility<sup>2</sup>.....\$ 500
- (C) Minor facility<sup>3</sup>.....\$ 175

<sup>1</sup>Major Facility Qualifying Factors:

- a- Received more than 25,000 tons of solid waste per year; or
- b- Has a collection/treatment system which, if not properly constructed, operated and maintained, could have a significant adverse impact on the environment as determined by the Department.

<sup>2</sup>Intermediate Facility Qualifying Factors:

- a- Received at least 5,000 but not more than 25,000 tons of solid waste per year; or
- b- Received less than 5,000 tons of solid waste and more than 25,000 gallons of sludge per month.

<sup>3</sup>Minor Facility Qualifying Factors:

- a- Received less than 5,000 tons of solid waste per year; and
- b- Received less than 25,000 gallons of sludge per month.

All tonnages based on amount received in the immediately preceding fiscal year, or in a new facility the amount to be received the first fiscal year of operation.



- (b) Preliminary feasibility only (Note: the amount of this fee may be deducted from the complete application fee listed above):
- (A) Major facility .....\$ 600
  - (B) Intermediate facility .....\$ 300
  - (C) Minor facility .....\$ 100

(c) Permit renewal (including new operational plan, closure plan or improvements):

- (A) Major facility .....\$ 500
- (B) Intermediate facility .....\$ 250
- (C) Minor facility .....\$ 75

(d) Permit renewal (without significant change):

- (A) Major facility .....\$ 200
- (B) Intermediate facility .....\$ 100
- (C) Minor facility .....\$ 50

(e) Permit modification (including new operational plan, closure plan or improvements):

- (A) Major facility .....\$ 500
- (B) Intermediate facility .....\$ 250
- (C) Minor facility .....\$ 75

(f) Permit modification (without significant change in facility design or operation): All categories.....\$ 25

(g) Permit modification (Department initiated): All categories...no fee

(h)(A) An application processing fee of \$85,000 shall be submitted with each application for a major new general purpose domestic waste landfill received by the Department after May 29, 1987. For purposes of this subsection, a major new general purpose domestic waste landfill shall be defined as one designed to receive 100,000 or more tons per year of domestic solid waste and designed for a landfill area of 100 or more acres.

(B) The application processing fee may be used by the Department for costs it incurs in investigating the permit application and reaching a determination of whether to issue or deny the requested permit.

(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) Domestic Waste Facility:

- (A) A landfill which received 500,000 tons or more of solid waste per year:.....\$60,000
- (B) A landfill which received at least 400,000 but less than 500,000 tons of solid waste per year:.....\$48,000.
- (C) A landfill which received at least 300,000 but less than 400,000 tons of solid waste per year:.....\$36,000
- (D) A landfill which received at least 200,000 but less than 300,000 tons of solid waste per year:.....\$24,000
- (E) A landfill which received at least 100,000 but less than 200,000 tons of solid waste per year:.....\$12,000
- (F) A landfill which received at least 50,000 but less than 100,000 tons of solid waste per year:.....\$ 6,000

- (G) A landfill which received at least 25,000 but less than 50,000 tons of solid waste per year:.....\$ 3,000
- (H) A landfill which received at least 10,000 but less than 25,000 tons of solid waste per year:.....\$ 1,200
- (I) A landfill which received at least 5,000 but not more than 10,000 tons of solid waste per year:.....\$ 500
- (J) A landfill which received at least 1,000 but not more than 5,000 tons of solid waste per year:.....\$ 100
- (K) A landfill which received less than 1,000 tons of solid waste per year:.....\$ 50
- (L) A transfer station, incinerator, resource recovery facility and each other facility not specifically classified above which received more than 10,000 tons of solid waste per year: .....\$ 500
- (M) A transfer station, incinerator, resource recovery facility and each other facility not specifically classified above which received less than 10,000 tons of solid waste per year:.....\$ 50
- (b) Industrial Waste Facility:
  - (A) A facility which received 10,000 tons or more of solid waste per year:.....\$1,000
  - (B) A facility which received at least 5,000 tons but less than 10,000 tons of solid waste per year:.....\$ 500
  - (C) A facility which received less than 5,000 tons of solid waste per year:.....\$ 100
- (c) Sludge Disposal Facility:
  - (A) A facility which received 25,000 gallons or more of sludge per month:.....\$ 100
  - (B) A facility which received less than 25,000 gallons of sludge per month:.....\$ 50
  - (C) Closed Disposal Site: Each landfill which closes after July 1, 1984:.....10% of the fee which would be required, in accordance with subsections (3)(a), (3)(b), and (3)(c) above, if the facility was still in operation or \$50 whichever is greater.
- (e) Facility With Monitoring Well: In addition to the fees described above, each facility with one or more wells for monitoring groundwater or methane, surface water sampling points, or any other structures or locations requiring the collection and analysis of samples by the Department, shall be assessed a fee. The amount of the fee shall depend on the number of wells (each well in a multiple completion well is considered to be a separate well) or sampling points as follows:
  - (A) A facility with six or less monitoring wells or sampling points:.....\$1,100
  - (B) A facility with more than six monitoring wells or sampling points:.....\$2,000
- (4) Annual Recycling Program Implementation Fee. An annual recycling program implementation fee shall be submitted by each domestic waste disposal site, except transfer stations and closed landfills. This fee is in addition to any other permit fee which may be assessed by the Department. The amount of the fee shall depend on the amount of solid waste received as follows:

(a) A disposal site which received 500,000 tons or more of solid waste per year:.....	\$19,000
(b) A disposal site which received at least 400,000 but less than 500,000 tons of solid waste per year:.....	\$15,200
(c) A disposal site which received at least 300,000 but less than 400,000 tons of solid waste per year:.....	\$11,400
(d) A disposal site which received at least 200,000 but less than 300,000 tons of solid waste per year:.....	\$ 7,600
(e) A disposal site which received at least 100,000 but less than 200,000 tons of solid waste per year:.....	\$ 3,800
(f) A disposal site which received at least 50,000 but less than 100,000 tons of solid waste per year:.....	\$ 1,900
(g) A disposal site which received at least 25,000 but less than 50,000 tons of solid waste per year:.....	\$ 950
(h) A disposal site which received at least 10,000 but less than 25,000 tons of solid waste per year:.....	\$ 375
(i) A disposal site which received at least 5,000 but less than 10,000 tons of solid waste per year:.....	\$ 175
(j) A disposal site which received at least 1,000 but less than 5,000 tons of solid waste per year:.....	\$ 30
(k) A disposal site which received less than 1,000 tons of solid waste per year:.....	\$ 15

Stat. Auth.: ORS Ch. 459 & 468

Hist.: DEQ 3-1984, F. & ef. 3-7-84

# A CHANCE TO COMMENT ON . . .

## PROPOSED RULE AMENDING PERMIT APPLICATION FEES FOR NEW DOMESTIC SOLID WASTE LANDFILLS

Date Prepared: 5/15/87  
Hearing Date: 5/29/87  
Comments Due: 5/29/87

**WHO IS AFFECTED:** Persons proposing development of new general purpose, domestic solid waste landfills designed to receive more than 100,000 tons per year of solid waste and occupying more than 100 acres of landfill area.

**BACKGROUND:** The Department has recently been approached by two companies proposing to build major landfills in north central Oregon to dispose of solid waste from the Portland metropolitan area. The Department is not staffed to handle two such large and complex landfill permit applications in the timeframe the companies are proposing.

**WHAT IS PROPOSED:** The Department is proposing that the Environmental Quality Commission adopt a temporary rule to revise the solid waste permit fee schedule, OAR 340-61-120, to require a \$85,000 permit application processing fee for major new general purpose domestic waste landfills.

**WHAT ARE THE HIGHLIGHTS:** Persons submitting permit applications for major new general purpose domestic waste landfills would be required to submit a \$75,000 fee to cover the Department's costs of investigating, processing, and issuing or denying the requested solid waste permit.

**HOW TO COMMENT:** A public hearing to receive oral and written testimony is scheduled for:

Friday, May 29, 1987  
10:00 a.m.  
DEQ Portland Headquarters, Room 4  
811 S.W. Sixth Avenue

Comments may be presented at the public hearing or submitted in writing to DEQ, Hazardous and Solid Waste Division, Attention: Michael Downs, 811 S.W. Sixth Avenue, Portland, OR 97204. Written comments must be received by close of business (5:00 p.m.) on May 28, 1987.

**WHAT IS THE NEXT STEP:** After the public hearing, the Environmental Quality Commission may adopt as recommended, amend and adopt, or take no action. Within 180 days, the Department will hold additional public hearings on making this proposed temporary rule permanent.



ZB6695

811 S.W. 6th Avenue  
Portland, OR 97204

### 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 1-800-452-4011.



## Environmental Quality Commission

811 SW SIXTH AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

### MEMORANDUM

To: Environmental Quality Commission  
From: Director  
Subject: Agenda Item F, May 29, 1987, EQC Meeting

Proposed Adoption of Changes in Air Contaminant Discharge Permit Fees and Other Requirements as Amendments to the State Implementation Plan (OAR 340-20-155 and 340-20-165).

### Background

On March 13, 1987, the Commission authorized a public hearing to receive testimony on proposed changes in the fees for Air Contaminant Discharge Permits (see Attachments 1 and 2). Increases in the fee structure were proposed to partially offset inflationary costs. Other changes were proposed to ensure that the fee structure more closely reflects the time expended by the Department on different classes of sources.

The Commission is authorized by ORS 468.045(2) to establish a fee schedule for Air Contaminant Discharge Permits. These fees are intended to fund a portion of the compliance program for stationary sources of air pollution.

A public hearing was held on May 1, 1987 to consider the proposed changes (Attachment 3). No oral or written testimony was presented at the hearing. One letter was received during the public comment period.

### Discussion

The changes to the fee table involve the following:

- 1) Assessing the application processing fee upon renewal of a permit as well as upon initial application or modification.
- 2) Increasing application processing fees and compliance fees for boilers.
- 3) Exempting small sources in eleven source categories.
- 4) Adding two source categories to the permit program to include toxic pollutant sources.

The proposed changes represent an estimated 13.8% increase in fees. The last fee increase was effective July 1, 1983, at which time the Annual Compliance Determination Fees were increased an average of 7.8%, and the Filing Fee was increased by \$25.00. The Department feels that dropping some source categories, adding others, and collecting an application processing fee upon permit renewal will make the fee schedule more equitable.

No testimony was received during the public hearing, but one letter was received during the public notice period. In the letter, Boise Cascade Corporation expressed concern about excluding small sources from the permit process, and opposed paying the application processing fee as frequently as every five years. The Department's response to these concerns is contained in the Hearing Officer's Report (Attachment 3).

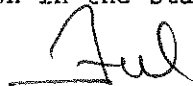
Tom Donaca of the Associated Oregon Industries was contacted about the proposed changes to the fee schedule. He replied by phone that the changes were acceptable to him.

#### Summary

- 1) On March 13, 1987, the EQC authorized a public hearing to consider changes in the fee schedule for Air Contaminant Discharge Permits.
- 2) A public hearing was held on May 1, 1987. No oral or written testimony was presented at the hearing. Written testimony submitted during the public notice period consisted of one letter which opposed excluding some of the small sources from the permit process, and suggested that the duration of regular permits should be extended from five to ten years. The Department does not recommend these changes, as discussed in the hearings officer's report.
- 3) The Department recommends the adoption of the fee schedule as proposed, to cover inflationary increases and to make the fee schedule more equitable. The fee schedule would be in effect for the fees due beginning July 1, 1987.
- 4) The EQC is authorized by ORS 468.045(2) to establish a schedule of fees for permits and to modify the State Implementation Plan.

#### Director's Recommendations

Based upon the Summation, it is recommended that the Commission adopt the proposed modifications to OAR 340-20-155, Table 1, Air Contaminant Sources and Associated Fee Schedule (Attachment 1), and OAR 340-20-165, Fees. It is also recommended that the Commission direct the Department to submit the rule revision to the EPA for inclusion in the State Implementation Plan.



Fred Hansen

- Attachments
- 1) Proposed Fee Schedule
  - 2) Staff Report for Hearing Authorization
  - 3) Hearing Officer's Report
  - 4) Statement of Need for Rulemaking

M. HEATH:a  
AA6272  
229-5509  
May 6, 1987

OREGON ADMINISTRATIVE RULES  
CHAPTER 340, DIVISION 20 — DEPARTMENT OF ENVIRONMENTAL QUALITY

Air Contaminant Discharge Permits

Purpose

340-20-140 The purpose of these rules is to prescribe the requirements and procedures for obtaining Air Contaminant Discharge Permits pursuant to ORS 468.310 to 468.330 and related statutes for stationary sources.

Stat. Auth.: ORS Ch.

Hist: DEQ 47, f. 8-31-72, ef. 9-15-72; DEQ 63, f. 12-20-73, ef. 1-11-74; DEQ 107, f. & ef. 1-6-86; Renumbered from 340-20-033.02

Definitions

340-20-145 As used in these rules, unless otherwise required by context:

(1) "Department" means Department of Environmental Quality.

(2) "Commission" means Environmental Quality Commission.

(3) "Person" means the United States Government and agencies thereof, any state, individual, public or private corporation, political subdivision, governmental agency, municipality, industry, co-partnership, association, firm, trust, estate, or any other legal entity whatever.

(4) "Permit" or "Air Contaminant Discharge Permit" means a written permit issued by the Department or Regional Authority in accordance with duly adopted procedures, which by its conditions authorizes the permittee to construct, install, modify, or operate specified facilities, conduct specified activities, or emit, discharge, or dispose of air contaminants in accordance with specified practices, limitations, or prohibitions.

(5) "Regional Authority" means Lane Regional Air Pollution Authority.

Stat. Auth.: ORS Ch.

Hist: DEQ 47, f. 8-31-72, ef. 9-15-72; DEQ 63, f. 12-20-73, ef. 1-11-74; DEQ 107, f. & ef. 1-6-76; Renumbered from 340-20-033.04

Notice Policy

340-20-150 It shall be the policy of the Department and the Regional Authority to issue public notice as to the intent to issue an Air Contaminant Discharge Permit allowing at least thirty (30) days for written comment from the public, and from interested State and Federal agencies, prior to issuance of the permit.

Stat. Auth.: ORS Ch.

Hist: DEQ 47, f. 8-31-72, ef. 9-15-72; DEQ 63, f. 12-20-73, ef. 1-11-74; DEQ 107, f. & ef. 1-6-76; Renumbered from 340-20-033.06

Permit Required

340-20-155 (1) No person shall construct, install, establish, develop or operate any air contaminant source which is referred to in Table 1, appended hereto and incorporated herein by reference, without first obtaining a permit from the Department or Regional Authority.

(2) No person shall modify any source covered by a permit under these rules such that the emissions are significantly increased without first applying for and obtaining a modified permit.

(3) No person shall modify any source covered by a permit under these rules such that:

(a) The process equipment is substantially changed or added to; or

(b) The emissions are significantly changed without first notifying the Department.

(4) Any source may apply to the Department or Regional Authority for a special letter permit if operating a facility with no, or insignificant, air contaminant discharges. The determination of applicability of this special permit shall be made solely by the Department or Regional Authority having jurisdiction. If issued a special permit, the application processing fee and/or annual compliance determination fee, provided by OAR 340-20-165, may be waived by the Department or Regional Authority.

(5) The Department may designate any source as a "Minimal Source" based upon the following criteria:

(a) Quantity and quality of emissions;

(b) Type of operation;

(c) Compliance with Department regulations; and

(d) Minimal impact on the air quality of the surrounding region. If a source is designated as a minimal source, the annual compliance determination fee, provided by rule 340-20-165, will be collected in conjunction with plant site compliance inspections which will occur no less frequently than every five (5) years.

Stat. Auth.: ORS Ch.

Hist: DEQ 47, f. 8-31-72, ef. 9-15-72; DEQ 63, f. 12-20-73, ef. 1-11-74; DEQ 107, f. & ef. 1-6-76; Renumbered from 340-20-033.08; DEQ 125, f. & ef. 12-16-76; DEQ 20-1979, f. & ef. 6-29-79; DEQ 23-1980, f. & ef. 9-25-80; DEQ 13-1981, f. 5-6-81, ef. 7-1-81; DEQ 11-1983, f. & ef. 5-31-83

Multiple-Source Permit

340-20-160 When a single site includes more than one air contaminant source, a single permit may be issued including all sources located at the site. For uniformity such applications shall separately identify by subsection each air contaminant source included from Table 1.

(1) When a single air contaminant source which is included in a multiple-source permit, is subject to permit modification, revocation, suspension, or denial, such action by the Department or Regional Authority shall only affect that individual source without thereby affecting any other source subject to the permit.

(2) When a multiple-source permit includes air contaminant sources subject to the jurisdiction of the Department and the Regional Authority, the Department may require that it shall be the permit issuing agency. In such cases, the Department and the Regional Authority shall otherwise maintain and exercise all other aspects of their respective jurisdictions over the permittee.

Stat. Auth.: ORS Ch.

Hist: DEQ 47, f. 8-31-72, ef. 9-15-72; DEQ 63, f. 12-20-73, ef. 1-11-74; DEQ 107, f. & ef. 1-6-76; Renumbered from 340-20-003.10

Fees

340-20-165 (1) All persons required to obtain a permit shall be subject to a three part fee consisting of a uniform non-refundable filing fee of \$75, an application processing fee, and an annual compliance determination fee which are determined by applying Table 1. The amount equal to the filing fee, application processing fee, and the 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 the application processing fee shall be submitted with any application for modification of a permit. The amount equal to the filing fee and the annual compliance determination fee shall be submitted with any application for a renewed permit.

(2) The fee schedule contained in the listing of air contaminant sources in Table 1 shall be applied to determine the permit fees, on a Standard Industrial Classification (SIC) plant site basis.

application processing fee,

TABLE 1  
AIR CONTAMINANT SOURCES AND  
ASSOCIATED FEE SCHEDULE

(340-20-155)

NOTE: Persons who operate boilers shall include fees as indicated in Items 58, 59, or 60 in addition to fee for other applicable category.

Air Contaminant Source	Standard Industrial Classifica- tion Number	Filing Fee	Application Processing Fee	Annual Compliance Determina- tion Fee	Fees to be Submitted with New Application	Fees to be Submitted with Renewal Application	Fees to be Submitted with Applica- tion to Modify Permit	
1. Seed cleaning located in special control areas, commercial operations only (not elsewhere included)	0723	75	100	190	365	[265]	<u>365</u>	175
2. [Smoke houses with 5 or more employees] <u>Reserved</u>	[2013]	[75]	[100]	[135]	[310]	[210]	[175]	
3. Flour and other grain mill products in special control areas	2041							
a) 10,000 or more t/y		75	325	375	775	[450]	<u>775</u>	400
b) Less than 10,000 t/y		75	250	160	485	[235]	<u>485</u>	325
4. Cereal preparations in special control areas	2043	75	325	270	670	[345]	<u>670</u>	400
5. Blended and prepared flour in special control areas	2045							
a) 10,000 or more t/y		75	325	270	670	[345]	<u>670</u>	400
b) Less than 10,000 t/y		75	250	135	460	[210]	<u>460</u>	325
6. Prepared feeds for animals and fowl in special control areas	2048							
a) 10,000 or more t/y		75	325	375	775	[450]	<u>775</u>	400
b) Less than 10,000 t/y		75	200	295	570	[370]	<u>570</u>	275



TABLE 1 Continued (340-20-155)

NOTE: Persons who operate boilers shall include fees as indicated in Items 58, 59, or 60 in addition to fees for other applicable category.

Air Contaminant Source	Standard Industrial Classification Number	Filing Fee	Application Processing Fee	Annual Compliance Determination Fee	Fees to be Submitted with New Application	Fees to be Submitted with Renewal Application	Fees to be Submitted with Application to Modify Permit
7. Beet sugar manufacturing	2063	75	425	1860	2360	[1935] <u>2360</u>	500
8. Rendering plants	2077						
a) 10,000 or more t/y <u>input</u>		75	250	460	785	[535] <u>785</u>	325
b) Less than 10,000 t/y <u>input</u>		75	250	270	595	[345] <u>595</u>	325
9. Coffee roasting- <u>30 T/y or more roasted product</u>	2095	75	200	245	520	[320] <u>520</u>	275
10. Sawmillsand/or planing mills	2421						
[ a)] <u>25,000 or more bd.ft./ shift finished product</u>	<u>2426</u>	75	200	375	650	[450] <u>650</u>	275
[ b) <u>Less than 25,000 bd.ft./ shift</u> ]		[75]	[75]	[270]	[420]	[345]	[150]
11. [Hardwood mills] <u>Reserved</u>	[2426]	[75]	[75]	[245]	[395]	[320]	[150]
12. [Shake and shingle mills] <u>Reserved</u>	[2429]	[75]	[75]	[295]	[445]	[370]	[150]
13. Mill work [with 10 employees or more] ( <u>Including structural wood members</u> ), <u>25,000 or more bd.ft./ shift input</u>	2431	75	150	295	520	[370] <u>520</u>	225

TABLE 1 Continued (340-20-155)

NOTE: Persons who operate boilers shall include fees as indicated in Items 58, 59, or 60 in addition to fees for other applicable category.

Air Contaminant Source	Standard Industrial Classification Number	Filing Fee	Application Processing Fee	Annual Compliance Determination Fee	Fees to be Submitted with New Application	Fees to be Submitted with Renewal Application	Fees to be Submitted with Application to Modify Permit
14. Plywood manufacturing <u>and/or veneer drying</u>	2435 & 2436						
a) [Greater than] 25,000 <u>or more sq.ft./hr, 3/8" basis finished product</u>		75	625	755	1455	[830] 1455	700
b) [Less than] <u>10,000 or more but less than 25,000 sq.ft./hr, 3/8" basis finished product</u>		75	450	510	1035	[585] 1035	525
c) <u>Less than 10,000 sq.ft./hr, 3/8" basis finished product</u>		<u>75</u>	<u>150</u>	<u>270</u>	<u>495</u>	<u>495</u>	<u>225</u>
15. [Veneer manufacturing only (not elsewhere included)] <u>Reserved</u>	[2435 & 2436]	[75]	[100]	[270]	[445]	[345]	[175]
16. Wood preserving ( <u>Excluding waterborne</u> )	2491	75	150	270	495	[345] <u>495</u>	225
17. Particleboard manufacturing ( <u>Including strandboard and waferboard</u> )	2492						
a) <u>10,000 or more sq.ft./hr., 3/4" basis finished product</u>		75	625	890	1590	[965] <u>1590</u>	700
b) <u>Less than 10,000 sq.ft./hr., 3/4" basis finished product</u>		<u>75</u>	<u>300</u>	<u>425</u>	<u>800</u>	<u>800</u>	<u>375</u>

TABLE 1 Continued (340-20-155)

NOTE: Persons who operate boilers shall include fees as indicated in Items 58, 59, or 60 in addition to fees for other applicable category.

Air Contaminant Source	Standard Industrial Classification Number	Filing Fee	Application Processing Fee	Annual Compliance Determination Fee	Fees to be Submitted with New Application	Fees to be Submitted with Renewal Application	Fees to be Submitted with Application to Modify Permit
18. Hardboard manufacturing (Including fiberboard)	2499						
a) <u>10,000 or more sq.ft./hr.</u> <u>1/8" basis finished product</u>		75	625	730	1430	[805] 1430	700
b) <u>Less than 10,000 sq.ft./hr.</u> <u>1/8" basis finished product</u>		<u>75</u>	<u>300</u>	<u>375</u>	<u>750</u>	<u>750</u>	<u>375</u>
19. Battery separator mfg.	2499	75	100	540	715	[615] 715	175
20. Furniture and fixtures <u>25,000 or more bd.ft./</u> <u>shift input</u>	2511	<u>75</u>	<u>150</u>	<u>295</u>	<u>520</u>	<u>520</u>	<u>225</u>
[a) 100 or more employees]		[75]	[200]	[375]	[650]	[450]	[275]
[b) 10 employees or more but less than 100 employees]		[75]	[125]	[245]	[445]	[320]	[200]
21. Pulp mills, paper mills, and paperboard mills <u>(Kraft, sulfite, &amp; neutral</u> <u>sulfite only)</u>	2611 2621 2631	75	1250	3235	4560	[3310] 4560	1325
22. Building paper and building- board mills	2661	75	200	245	520	[320] 520	275
23. Alkalies and chlorine mfg.	2812	75	350	645	1070	[720] 1070	425
24. Calcium carbide manufacturing	2819	75	375	645	1095	[720] 1095	450

TABLE 1 Continued (340-20-155)

NOTE: Persons who operate boilers shall include fees as indicated in Items 58, 59, or 60 in addition to fees for other applicable category.

Air Contaminant Source	Standard Industrial Classification Number	Filing Fee	Application Processing Fee	Annual Compliance Determination Fee	Fees to be Submitted with New Application	Fees to be Submitted with Renewal Application	Fees to be Submitted with Application to Modify Permit
25. Nitric acid manufacturing	2819	75	250	325	650	[400] <u>650</u>	325
26. Ammonia manufacturing	2819	75	250	375	700	[450] <u>700</u>	325
27. Industrial inorganic and organic chemicals manufacturing (not elsewhere included)	2819	75	325	460	860	[535] <u>860</u>	400
28. Synthetic resin manufacturing	[2819] <u>2821</u>	75	250	375	700	[450] <u>700</u>	325
29. Charcoal manufacturing	2861	75	350	780	1205	[855] <u>1205</u>	425
30. [Herbicide] <u>Pesticide</u> manufacturing	2879	75	625	3235	3935	[3310] <u>3935</u>	700
31. Petroleum refining	2911	75	1250	3235	4560	[3310] <u>4560</u>	1325
32. Asphalt production by distillation	2951	75	250	375	700	[450] <u>700</u>	325
33. Asphalt blowing plants	2951	75	250	485	810	[560] <u>810</u>	325
34. Asphaltic concrete paving plants	2951						
a) Stationary		75	250	295	620	[370] <u>620</u>	325
b) Portable		75	250	375	700	[450] <u>700</u>	325

TABLE 1 Continued (340-20-155)

NOTE: Persons who operate boilers shall include fees as indicated in Items 58, 59, or 60 in addition to fees for other applicable category.

Air Contaminant Source	Standard Industrial Classification Number	Filing Fee	Application Processing Fee	Annual Compliance Determination Fee	Fees to be Submitted with New Application	Fees to be Submitted with Renewal Application	Fees to be Submitted with Application to Modify Permit
35. Asphalt felts and coating	2952	75	250	565	890	[640] <u>890</u>	325
36. [Blending, compounding, or] <u>Re refining of lubricating oils and greases, and re-processing of oils and solvents for fuel</u>	2992	75	225	350	650	[425] <u>650</u>	300
37. Glass container manufacturing	3221	75	250	460	785	[535] <u>785</u>	325
38. Cement manufacturing	3241	75	800	2370	3245	[2445] <u>3245</u>	875
39. [Redimix] Concrete <u>manufacturing, including redimix and CTB</u>	3273 3271 3272	75	100	160	335	[235] <u>335</u>	175
40. Lime manufacturing	3274	75	375	245	695	[320] <u>695</u>	450
41. Gypsum products	3275	75	200	270	545	[345] <u>545</u>	275
42. Rock crusher	3295						
a) Stationary		75	225	295	595	[370] <u>595</u>	300
b) Portable		75	225	375	675	[450] <u>675</u>	300
43. Steel works, rolling and finishing mills, electro-metallurgical products	3312 3313	75	625	645	1345	[720] <u>1345</u>	700

TABLE 1 Continued (340-20-155)

NOTE: Persons who operate boilers shall include fees as indicated in Items 58, 59, or 60 in addition to fees for other applicable category.

Air Contaminant Source	Standard Industrial Classification Number	Filing Fee	Application Processing Fee	Annual Compliance Determination Fee	Fees to be Submitted with New Application	Fees to be Submitted with Renewal Application	Fees to be Submitted with Application to Modify Permit
44. Incinerators	<u>4953</u>						
a) [1000 lbs/hr and greater capacity] <u>250 or greater tons/day capacity</u>		<u>75</u>	<u>3000</u>	<u>1615</u>	<u>4690</u>	<u>4690</u>	<u>3075</u>
b) [500 lbs/hr to 1000 lbs/hr capacity] <u>50 to 250 tons/day capacity</u>		75	375	245	695	[320] <u>695</u>	450
c) [40 lbs/hr to 500 lbs/hr capacity pathological waste only] <u>2 to 50 tons/day capacity</u>		75	125	190	390	[265] <u>390</u>	200
d) <u>Crematoriums and pathological waste incinerators, not elsewhere classified</u>		75	125	190	390	[265] <u>390</u>	200
e) <u>PCB and/or off-site hazardous waste incinerator</u>		<u>75</u>	<u>3000</u>	<u>1615</u>	<u>4690</u>	<u>4690</u>	<u>3075</u>
45. Gray iron and steel foundries	3321						
Malleable iron foundries	3322						
Steel investment foundries	3324						
Steel foundries (not elsewhere classified)	3325						
a) 3,500 or more t/y production		75	625	565	1265	[640] <u>1265</u>	700
b) Less than 3,500 t/y production		75	150	295	520	[370] <u>520</u>	225
46. Primary aluminum production	3334	75	1250	3235	4560	[3310] <u>4560</u>	1325

TABLE 1 Continued (340-20-155)

NOTE: Persons who operate boilers shall include fees as indicated in Items 58, 59, or 60 in addition to fees for other applicable category.

Air Contaminant Source	Standard Industrial Classification Number	Filing Fee	Application Processing Fee	Annual Compliance Determination Fee	Fees to be Submitted with New Application	Fees to be Submitted with Renewal Application	Fees to be Submitted with Application to Modify Permit
47. Primary smelting of zirconium or hafnium	3339	75	[6250] <u>1250</u>	3235	9560 <u>4560</u>	[3310] <u>4560</u>	[6325] <u>1325</u>
48. Primary smelting and refining of ferrous and nonferrous metals (not elsewhere classified)	3339						
a) 2,000 or more t/y production		75	625	1400	2100	[1475] <u>2100</u>	700
b) Less than 2,000 t/y production		75	125	540	740	[615] <u>740</u>	200
49. Secondary smelting and refining of nonferrous metals, <u>100 or more t/yr metal charged</u>	3341	75	300	375	750	[450] <u>750</u>	375
50. Nonferrous metals foundries, <u>100 or more t/y metal charged</u>	[3361] [3362] <u>3360</u>	75	150	325	550	[400] <u>550</u>	225
51. [Electroplating, polishing, and anodizing with 5 or more employees] <u>Reserved</u>	[3471]	[75]	[125]	[245]	[445]	[320]	[200]
52. Galvanizing and pipe coating--excluding all other activities	3479	75	125	245	445	[320] <u>445</u>	200
53. Battery manufacturing	3691	75	150	325	550	[400] <u>550</u>	225

TABLE 1 Continued (340-20-155)

NOTE: Persons who operate boilers shall include fees as indicated in Items 58, 59, or 60 in addition to fees for other applicable category.

Air Contaminant Source	Standard Industrial Classification Number	Filing Fee	Application Processing Fee	Annual Compliance Determination Fee	Fees to be Submitted with New Application	Fees to be Submitted with Renewal Application	Fees to be Submitted with Application to Modify Permit
54. Grain elevators--intermediate storage only, located in special control areas	4221						
a) 20,000 or more t/y <u>grain processed</u>		75	225	510	810	[585]	<u>810</u> 300
b) Less than 20,000 t/y <u>grain processed</u>		75	125	245	445	[320]	<u>445</u> 200
55. Electric power generation	4911*						
a) Wood or Coal Fired - [Greater than] <u>25 or greater MW</u>		75	5000	3235	8310	[3310]	<u>8310</u> 5075
[b) Wood or Coal Fired - Less than 25 MW]		[75]	[3000]	[1615]	[4690]	[1690]	[3075]
c) Oil Fired - <u>25 or greater MW</u>		75	450	780	1305	[855]	<u>1305</u> 525
56. Gas production and/or mfg.	4925	75	475	375	925	[450]	<u>925</u> 550
57. Grain elevators--terminal elevators primarily engaged in buying and/or marketing grain--in special control areas	5153						
a) 20,000 or more t/y <u>grain processed</u>		75	625	645	1345	[720]	<u>1345</u> 700
b) Less than 20,000 t/y <u>grain processed</u>		75	175	245	495	[320]	<u>495</u> 250



TABLE 1 Continued (340-20-155)

NOTE: Persons who operate boilers shall include fees as indicated in Items 58, 59, or 60 in addition to fees for other applicable category.

Air Contaminant Source	Standard Industrial Classification Number	Filing Fee	Application Processing Fee	Annual Compliance Determination Fee	Fees to be Submitted with New Application	Fees to be Submitted with Renewal Application	Fees to be Submitted with Application to Modify Permit
58. Fuel Burning equipment within the boundaries of the Portland, Eugene-Springfield and Medford-Ashland Air Quality Maintenance Areas and the Salem Urban Growth Area***	4961**	(Fees will be based on the total aggregate heat input of all [boilers] <u>fuel burning equipment</u> at the site)					
a) Residual or distillate oil fired, 250 million or more btu/hr heat input		75	[200] 400	[245] 490	[520] 965	[320] 965	[275] 475
b) Residual or distillate oil fired, 10 or more but less than 250 million Btu/hr heat input		75	[125] 250	[135] 270	[335] 595	[210] 595	[200] 325
c) Reserved							
59. Fuel burning equipment within the boundaries of the Portland, Eugene-Eugene-Springfield and Medford-Ashland Air Quality Maintenance Areas and the Salem Urban Growth Area***	4961**	(Fees will be based on the total aggregate heat input of all fuel burning <u>equipment</u> at the site)					
a) Wood or coal fired, 35 million or more Btu/hr heat input		75	[200] 400	[245] 490	[520] 965	[320] 965	[275] 475
b) Wood or coal fired, less than 35 million Btu/hr heat input		75	[50] 100	[135] 270	[260] 445	[210] 445	[125] 175
60. Fuel burning equipment outside the boundaries of the Portland, Eugene-Springfield and Medford-Ashland Air Quality Maintenance Areas and the Salem Urban Growth Area.	4961**	(Fees will be based on the total aggregate heat input of all [boilers] <u>fuel burning equipment</u> at the site.)					

TABLE 1 Continued (340-20-155)

NOTE: Persons who operate boilers shall include fees as indicated in Items 58, 59, or 60 in addition to fees for other applicable category.

Air Contaminant Source	Standard Industrial Classification Number	Filing Fee	Application Processing Fee	Annual Compliance Determination Fee	Fees to be Submitted with New Application	Fees to be Submitted with Renewal Application	Fees to be Submitted with Application to Modify Permit
All [wood, coal and] oil fired [greater than 30 x 10 <sup>6</sup> ] <u>30 million or more Btu/hr (heat input), and all wood and coal fired 10 million or more Btu/hr (heat input)</u>		75	[125] 250	[135] 270	[335] 595	[210] 595	[200] 325
61. New sources not listed herein which would emit 10 or more tons per year of any air contaminants including but not limited to particulates, SO <sub>x</sub> , or [NO <sub>x</sub> or hydrocarbons] <u>Volatile Organic Compounds (VOC)</u> , if the source were to operate uncontrolled.							
a) Low cost		75	****	150	****	[225] ****	****
b) Medium cost		75	****	350	****	[425] ****	****
c) High cost		75	****	2000	****	[2075] ****	****
62. New sources not listed herein which would emit significant malodorous emissions, as determined by Departmental or Regional Authority review of sources which are known to have similar air contaminant emissions.							
a) Low cost		75	****	150	****	[225] ****	****
b) Medium cost		75	****	350	****	[425] ****	****
c) High cost		75	****	2000	****	[2075] ****	****

TABLE 1 Continued (340-20-155)

NOTE: Persons who operate boilers shall include fees as indicated in Items 58, 59, or 60 in addition to fees for other applicable category.

Air Contaminant Source	Standard Industrial Classification Number	Filing Fee	Application Processing Fee	Annual Compliance Determination Fee	Fees to be Submitted with New Application	Fees to be Submitted with Renewal Application	Fees to be Submitted with Application to Modify Permit
63. Existing sources not listed herein for which an air quality problem is identified by the Department or Regional Authority.							
a) Low cost		75	****	150	****	[225] ****	****
b) Medium cost		75	****	350	****	[425] ****	****
c) High cost		75	****	2000	****	[2075] ****	****
64. Bulk Gasoline Plants regulated by OAR 340-22-120	5100 *****	75	55	160	290	[235] <u>290</u>	130
65. Bulk Gasoline Terminals	5171 *****	75	1000	540	1615	[615] <u>1615</u>	1075
66. Liquid Storage Tanks, 39,000 gallons or more capacity, regulated by OAR 340-22-160 (Not elsewhere included)	4200 *****	75	50/tank	110/tank			
67. Can Coating	3411*****						
a) 50,000 or more units/mo.		75	1500	970	2545	[1045] <u>2545</u>	1575
b) Less than 50,000 units/mo.		75	100	215	390	[290] <u>390</u>	175
68. Paper Coating	2641 or 3861*****	75	1500	970	2545	[1045] <u>2545</u>	1575
69. Coating Flat Wood regulated by OAR 340-22-200	2400*****	75	500	325	900	[400] <u>900</u>	575

TABLE 1 Continued (340-20-155)

NOTE: Persons who operate boilers shall include fees as indicated in Items 58, 59, or 60 in addition to fees for other applicable category.

Air Contaminant Source	Standard Industrial Classification Number	Filing Fee	Application Processing Fee	Annual Compliance Determination Fee	Fees to be Submitted with New Application	Fees to be Submitted with Renewal Application	Fees to be Submitted with Application to Modify Permit
70. Surface Coating, Manufacturing	2500, 3300, 3400, 3500, 3600, 3700, 3800, 3900*****						
a) 10 or more but less than 40 tons VOC/yr		75	25	90	190	[165]	<u>190</u> 100
b) 40 or more but less than 100 tons VOC/yr		75	100	215	390	[290]	<u>390</u> 175
c) [over] 100 <u>or greater</u> tons VOC/yr		75	500	430	1005	[505]	<u>1005</u> 575
71. Flexographic or Roto-graveure Printing over 60 tons VOC/yr per plant	2751, 2754*****	75	50/press	160/press			
[72.] [New sources of VOC not listed herein which have the capacity or are allowed to emit 10 or more tons per year VOC]	[*****]						
<u>Reserved</u>							
[a] Low cost]		[75]	[*****]	[150]	[*****]	[225]	[*****]
[b] Medium cost]		[75]	[*****]	[350]	[*****]	[425]	[*****]
[c] High cost]		[75]	[*****]	[2000]	[*****]	[2075]	[*****]
73. <u>Sources subject to NESHAPS rules (except demoliton and renovation)</u>		<u>75</u>	<u>100</u>	<u>150</u>	<u>325</u>		<u>325</u> <u>175</u>

TABLE 1 Continued (340-20-155)

NOTE: Persons who operate boilers shall include fees as indicated in Items 58, 59, or 60 in addition to fees for other applicable category.

Air Contaminant Source	Standard Industrial Classification Number	Filing Fee	Application Processing Fee	Annual Compliance Determination Fee	Fees to be Submitted with New Application	Fees to be Submitted with Renewal Application	Fees to be Submitted with Application to Modify Permit
<u>74. Sources of toxic air pollutants (not elsewhere classified)</u>		<u>75</u>	<u>250</u>	<u>300</u>	<u>625</u>	<u>625</u>	<u>325</u>

\*Excluding hydro-electric and nuclear generating projects. [,and limited to utilities.]

\*\*Including [fuel burning equipment generating steam for process or for sale but excluding power generation (SIC 4911)] co-generation facilities of less than 25 megawatts.

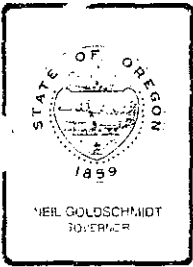
\*\*\*Maps of these areas are attached. Legal descriptions are on file in the Department.

\*\*\*\*Sources required to obtain a permit under items 61, 62, and 63 [72] will be subject to the following fee schedule to be applied by the Department based upon the anticipated cost of processing.

Estimated Permit Cost	Application Processing Fee
Low cost	\$100.00 - \$250.00
Medium cost	\$250.00 - \$1500.00
High cost	\$1500.00 - \$3000.00

As nearly as possible, applicable fees shall be consistent with sources of similar complexity as listed in Table 1.

\*\*\*\*\* Permit for sources in categories 64 through [72] 71 are required only if the source is located in the Portland AQMA, Medford-Ashland AQMA or Salem SATS.



Attachment 2  
Agenda Item No. F  
May 29, 1987  
EQC Meeting

## Environmental Quality Commission

811 SW SIXTH AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

### MEMORANDUM

To: Environmental Quality Commission  
From: Director  
Subject: Agenda Item G, March 13, 1987, EQC Meeting

Request for Authorization to Conduct a Public Hearing on  
Proposed Changes in Air Contaminant Discharge Permit Fees  
and Other Requirements and to Amend the State Implementation  
Plan

### Background

The Air Contaminant Discharge Permit fee revenues are used to support a portion of the permit program. As required by ORS 468.065(2), the fees are set in accordance with the cost to the Department of reviewing and investigating the application, issuing or denying the requested permit, and determining compliance or non-compliance with the permit. The Department is proposing to increase permit revenues to partially offset increasing costs occurring between 1983-1989. Fees would be increased an average of 13.8%. It is proposed to effect this increase by collecting the Application Processing Fee for all regular and minimal source permits upon permit renewal. Currently the Application Processing Fee is levied only at the initial application for a permit or upon major modification of the source. It is also proposed to increase the Application Processing Fees and the Compliance Determination Fees for the boiler classifications to reflect more closely time expended by the Department on this class of sources.

In addition, it is proposed to exempt the small sources in eleven source classes from the permit program and add two additional source classes to the permit program. The following is a list of source classes that are proposed for exemption or addition:

### Source Classes Proposed for Exemption

Smoke houses with 5 or more employees. - 4 sources affected.  
Coffee roasting less than 30 t/y roasted product. - no known source affected.  
Sawmills less than 25,000 bd ft/shift finished product. - 30 sources affected.  
Hardwood mills. - 8 sources affected.  
Shake and shingle mills. - 29 sources affected.  
Mill work less than 25,000 bd ft/shift input. - 32 sources affected.  
Veneer manufacturing only. - 21 sources affected.

Furniture and fixtures less than 25,000 bd ft/shift input. - 3 sources affected.  
Blending and compounding of lubricating oils and grease. - one source affected.  
Nonferrous metals less than 100 t/y metal charged. - 4 sources affected.  
Electroplating, polishing and anodizing with 5 or more employees. - 14 sources affected.

#### Source Classes Proposed for Addition

Sources subject to National Emission Standards for Hazardous Air Pollutants (NESHAPS) regulations excluding demolition and renovation. - 7 sources affected.

Sources of Toxic Air Pollutants. - sources emitting air contaminants that could have adverse health affects at relatively low levels as determined by the Department.

The Department considers those source classes proposed for exemption to have negligible air quality impact, and that permit activities for these sources are not cost effective. These are generally small, well-controlled sources which have maintained compliance and have not been the source of public complaint. Provisions are contained in the permit program to place any source on permit if an air quality problem is identified by the Department. The two source classes proposed for inclusion in the permit program are currently regulated, but are not included in the permit program. These sources would include operations which utilize asbestos material, machining of metals containing beryllium and sludge processing which emits mercury. The Department's intent in adding a category to include toxic air pollutants is to ensure that sources of potentially harmful compounds are properly regulated and apprised of our requirements. These sources because of their unique nature are handled on a case-by-case basis. Requiring permits for these classes of sources would allow for more effective regulation of toxic air pollutant sources.

A copy of the proposed fee schedule, Table 1, with proposed rule revisions consistent with the proposed budget is attached. The "Statement of Need for Rulemaking" is also attached.

#### Alternatives and Evaluation

The Air Contaminant Discharge Permit Fees are comprised of three parts: a non-refundable filing fee, presently \$75, submitted with all applications; an application processing fee previously submitted only with applications for new or modified sources; and a compliance determination fee submitted either annually by holders of regular permits or once every five years by holders of minimal source permits. The latter two types of fees differ between source categories depending upon the relative time expended by the Department to draft and issue permits and to determine compliance with the permit.

Furniture and fixtures less than 25,000 bd ft/shift input. - 3 sources affected.  
Blending and compounding of lubricating oils and grease. - one source affected.  
Nonferrous metals less than 100 t/y metal charged. - 4 sources affected.  
Electroplating, polishing and anodizing with 5 or more employees. - 14 sources affected.

Source Classes Proposed for Addition

Sources subject to National Emission Standards for Hazardous Air Pollutants (NESHAPS) regulations excluding demolition and renovation. - 7 sources affected.

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The impact of the Department's proposed fee package is summarized as follows:

Proposed Exemption of Small Sources	< \$42,485 >
Addition of Two New Source Classes	2,275
Projected Fee Increase (Boilers)	32,670
Levy of Application Processing Fee at Permit Renewal	60,425
Projected Fees from New Permits	10,635
Total increase	\$ 63,520

The fee schedule has not been revised since July 1, 1983 at which time the Compliance Determination Fees were increased an average 7.8% and the Filing Fee was increased \$25.

#### Summation

1. Air Quality permit program costs have risen over the past four year period as a result of inflation and increased compliance assurance activity. Increased activity in this program includes determination of emissions, compliance evaluation, and determination of source impact on air quality.
2. The increased revenue proposed from fee increases represents a 13.8% increase.
3. The Department is proposing exemption of eleven source categories from the permit requirement that have negligible air quality impact and adding two other classes which require regulation.
4. The Department has proposed a fee schedule (Table 1) with associated rule revisions which would assess the Application Processing Fees at permit renewal, and increase fees for boilers.
5. In order to consider modification of OAR 340-20-155, Table 1, OAR 340-20-165 as proposed with amendments to the State Implementation Plan, EQC authorization for a public hearing is required.

#### Directors Recommendation

Based upon the summation, it is recommended that the Commission authorize a public hearing to obtain testimony on proposed changes to Air Contaminant Discharge Fees, OAR 340-20-155, Table 1, OAR 340-20-165, and the State Implementation Plan.

  
Fred Hansen

- Attachments 1. Proposed Amendments to OAR 340-20-155, Table 1, and OAR 340-20-165(1).
2. Statements of Need for Rulemaking and Public Hearing Notice.

William Fuller:d  
AD251  
229-5749  
February 18, 1987

*Oregon Department of Environmental Quality*

## **A CHANCE TO COMMENT ON...**

**Proposed Increases in Air Contaminant Discharge Permit Fees**

**NOTICE OF PUBLIC HEARING**

Date Prepared: February 27, 1987

Hearing Date: May 1, 1987

Comments Due: May 4, 1987

**WHO IS  
AFFECTED:**

Industrial and Commercial facilities in Oregon who are required to obtain Air Contaminant Discharge Permits or emit Hazardous or Toxic Air Pollutants.

**WHAT IS  
PROPOSED:**

The Department of Environmental Quality is proposing to amend OAR 340-20-155, Table 1 and 340-20-165 to increase permit fees for boilers, collect Application Processing Fees for all permits at permit renewal and to delete small sources in eleven categories that have negligible air quality impact and add two additional categories to the permit program. A hearing will be held in the 4th floor conference room at 811 S.W. Sixth Avenue, Portland, Oregon on May 1, 1987 at 1:00 p.m.

**WHAT ARE THE  
HIGHLIGHTS:**

Fees will be increased an average of 13.8%. This increase would be effected by levying Application Processing Fees at permit renewal and increasing both Application Processing Fees and Compliance Determination Fees for boilers. Small source in eleven categories that have maintained compliance and that have little effect on air quality would become exempt from the permit requirements. Two additional categories would be added to the permit program. The first would include operations which utilize asbestos material, machining of metals containing beryllium and sludge processing which emits mercury. The other category would include toxic air pollutants which are potentially harmful to health.

**SPECIAL  
CONDITIONS:**

**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 Mary W. Heath at 229-5509.

A public hearing will be held before a hearings officer at:



P.O. Box 1760  
Portland, OR 97207

8/16/84

**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 1-800-452-4011.

1:00 p.m.  
Friday, May 1, 1987  
Executive Building, 4th Floor Conference Room  
811 S.W. Sixth Avenue, 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, 811 S.W. Sixth Avenue, Portland, OR 97204, but must be received by no later than 5:00 p.m. May 4, 1987.

**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 as part of the State Clean Air Act Implementation Plan. The Commission's deliberation should come May 29, 1987 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.

AD251.A

1:00 p.m.  
Friday, May 1, 1987  
Executive Building, 4th Floor Conference Room  
811 S.W. Sixth Avenue, Portland, OR 97204

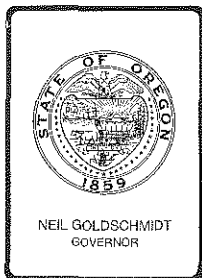
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A Statement of Need, Fiscal and Economic Impact Statement, and Land Use Consistency Statement are attached to this notice.

AD251.A



## *Environmental Quality Commission*

811 SW SIXTH AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

### MEMORANDUM

To: Environmental Quality Commission

From: Hearing Officer

Subject: Report on May 1, 1987 Public Hearing on Proposed Changes in Air Contaminant Discharge Permit Fees and Other Requirements as Amendments to the State Implementation Plan (OAR 340-20-155 and 340-20-165)

### Summary of Procedure

Pursuant to Public Notice, a public hearing was convened in Room 417, 811 S.W. Sixth Avenue, Portland, at 1:00 p.m. on May 1, 1987. The purpose was to receive testimony on proposed changes to Table 1, OAR 340-20-155, Air Contaminant Sources and Associated Fee Schedule, and OAR 340-20-165, Fees.

### Summary of Testimony

No oral or written testimony was presented at the public hearing.

One letter was received during the public notice period. In the letter, Boise Cascade Corporation suggested that smaller sources should be put on permits with lower fees and longer renewal periods, instead of being excluded from the permit process completely. However, most of the sources which will be exempted are now already on Minimal Source and Special Letter Permits with reduced fees. These sources have emissions of less than one ton per year of particulate and have negligible air quality impact. The Department still retains discretionary authority to require permits for any of these sources if they are causing an air pollution problem. They would be subject to fees under the category "Existing sources not listed herein for which an air quality problem has been identified by the Department."

Boise Cascade also asked for information about expenses pertaining to the annual compliance determination fee. These fees fund a portion of the Department's air compliance program, historically about 50 percent of the total, with the remaining 50 percent funded by State general funds and EPA grant funds. Sources on regular permits are inspected annually to determine whether they are operating in compliance with State and Federal air quality regulations. The compliance program also includes follow-up work to inspections, monitoring and review of source tests and procedures,

Report on Public Hearing/ACDP Fees  
May 13, 1987  
Page 2

enforcement work, plume evaluation certification for field inspectors, source construction activities and plan reviews, and computer and clerical staff work supporting these activities.

Boise Cascade also suggested that the Department extend the duration of permits from five to ten years to help reduce the Department's paperwork load, and allow industry to pay the application processing fee once every ten years instead of every five years. However, since many changes in processes and emissions can take place in a source during a ten year period, the Department wishes to review the major source permits on a five year frequency. Minimal Source Permits are presently issued for ten years.

Tom Donaca of the Associated Oregon Industries was contacted about the proposed changes to the fee schedule. He replied by phone that the changes were acceptable to him.

Mary Heath

Attachment: 1 letter  
AA6297  
May 13, 1987



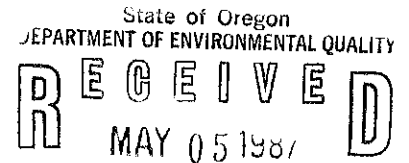
Boise Cascade

**Timber and Wood Products Group**

Environmental and Energy Services  
P.O. Box 8328  
Boise, Idaho 83707

May 4, 1987

State of Oregon  
Department of Environmental Quality  
Air Quality Division  
811 SW 6th Avenue  
Portland, OR 97204



**AIR QUALITY CONTROL**

RE: Air Permit Fee Increases

Dear Mary W. Heath:

Boise Cascade has reviewed the proposed amendments to the Air Quality Program Fee Schedule (OAR 340-20-155) and has the following comments:

1. We are not opposed to an equitable user based fee schedule.
2. We are not opposed to the State's method of categorizing user facilities to determine fee schedules.
3. We suggest an effort be made to extend the life of permits from the present five years to ten years. The modification would benefit both the State and Industry, but would not affect the State's environmental enforcement control.

The State would benefit by reducing renewal application paperwork in half which would eventually allow the State to catch up on its permit paperwork backlog. Industry would benefit because it would have to pay the increased renewal application fee once every ten years instead of five. Environmental enforcement would remain unchanged because regulatory and fee instruments already exist for permit modifications.

4. We request copies of State's expenses that pertain to the "annual compliance fee" such as purpose of visit, man-hours, and expense reports be published so that industry can see where its dollars are being spent.
5. We are concerned about the proposed exemption of smaller sources. Rather than exclude these facilities completely, they could be covered with general or blanket permits with less frequent inspections and/or longer renewal periods. We understand the small sources are paying for more DEQ time than is actually necessary. However, we suggest lowering their fees accordingly, rather than exempting the facilities from the permit process.

State of Oregon  
May 4, 1987

-2-

Please call me at 208-384-6458 if any clarification is required.

*Gretchen E. Hoy*

Gretchen E. Hoy  
Environmental Engineer

/j

cc: Garrett Andrew (T&WPG - Boise)  
Chuck Eudy (Paper - Communications)  
Bob Hays (Corp. Communications - Boise)  
Milt Heighes (T&WPG - LaGrande)  
Al Mick (Paper - Portland)  
Bob Morris (T&WPG - Medford)  
Mike Roberts (Paper - Env. Affairs - Boise)  
Dick Rudisile (TYWPG - Medford)  
Burt Vaughn (T&WPG - Monmouth)  
Alan Willis (Govt'l Affairs)



RULEMAKING STATEMENTS

for  
Proposed Changes in  
Air Contaminant Discharge Permit Fees  
and Other Requirements

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 OAR 340-20-155, Table 1, and OAR 340-20-165. It is proposed under authority of ORS Chapter 468, including Sections 065, 310.

Need for the Rule

Additional funds are needed to cover costs of administering the Air Contaminant Discharge Permit Program included in the Department's 1987-89 budget and to revise the source classes requiring permits.

Principal Documents Relied Upon

1. OAR 340-20-155, Table 1, and 340-20-165
2. Proposed DEQ budget for the 1987-89 biennium.

FISCAL AND ECONOMIC IMPACT STATEMENT:

The proposal would be very beneficial to small businesses and industries in those categories that would become exempt from Air Contaminant Discharge Permits. The effect on all other source classes would be an increase in permit fees.

LAND USE CONSISTENCY STATEMENT:

The proposed rule does not affect land use as defined in the Department's coordination program approved by the Land Conservation and Development Commission.

Request for Authorization to Conduct a Public Hearing on Proposed  
Changes in Air Contaminant Discharge Permit Fees and Other  
Requirements and to Amend the State Implementation Plan

Director's Statement

The Department is proposing an increase in Air Contaminant Discharge Permit Fees to meet the statutory requirement that permit fees cover a substantial part of the cost of reviewing and issuing permits and assuring compliance with permit conditions. The proposed increases are consistent with the Governor's proposed budget for the 1987-89 biennium.

The Department is proposing to apply the application processing Fee to permit renewals and to increase the fees for the boiler classifications. These fee increases would bring the fees for permit renewals and for boilers more in line with Department costs.

The Department is also proposing changes to the Air Quality permit program by exempting, from the Air Quality Permit Program, some industrial sources that have little impact on Air Quality and adding two other source classes to the permit program.

Significant Issues

Air Contaminant Discharge Permit Fees would be increased

AD253

Request for Authorization to Conduct a Public Hearing on Proposed  
Changes in Air Contaminant Discharge Permit Fees and Other  
Requirements and to Amend the State Implementation Plan

Director's Statement

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The Department is also proposing changes to the Air Quality permit program by exempting, from the Air Quality Permit Program, some industrial sources that have little impact on Air Quality and adding two other source classes to the permit program.

Significant Issues

Air Contaminant Discharge Permit Fees would be increased

AD253



## Department of Environmental Quality

811 S.W. SIXTH AVENUE, PORTLAND, OREGON 97204 PHONE (503) 229-5696

### MEMORANDUM

To: Environmental Quality Commission  
From: Director  
Subject: Agenda Item G, May 29, 1987, EQC Meeting

Proposed Adoption of Open Field Burning Rules, OAR 340-26-001 Through 340-26-055, as a Revision to the Oregon State Implementation Plan

### Background

The field burning program is annually reviewed in an effort to both identify emerging problems and to develop and utilize any new techniques or improvements which can effectively maximize the acres burned each year and minimize smoke intrusions affecting the public. While many improvements are successfully put into practice at an operational level, or through the voluntary efforts of the growers, some occasionally require that new regulations be considered.

The open field burning rules were last revised in early 1984 in a major effort to modernize, simplify, and add needed flexibility to the daily decision-making process. In the Department's opinion, the program has been fairly successful in recent years, thus only minor refinements directly relating to controls on field burning, per se, are proposed. However, alternate burning practices such as propane flaming and stack burning have increased markedly the past two years, offsetting field burning to some extent but also resulting in some new air quality problems and regulatory concerns.

### Problem Statement

The use of propane flaming as an alternative method of sanitizing grass seed field is increasing rapidly in the Willamette Valley, resulting in increased summertime air quality impacts and public complaints. The Department estimates that between 30,000 and 60,000 acres were treated by propane flaming in 1986, with continued increases expected in 1987 and the years ahead. Last year a total of six "light" smoke intrusions were recorded in population areas, including two in the Eugene-Springfield area, as a direct result of individual propane operations, with some 70 complaints reported to the Department. General propaning activity also contributed to elevated particulate loadings and hazy conditions throughout the Valley on a number of other days.

The increase in straw removal and propane flaming has also been accompanied by an increase in the burning of straw piles or stacks. It is estimated that up to 7,000 acres of straw which could not be sold or given away were disposed of by stack burning in 1986. Since removal of straw from a field ensures that an alternative sanitation method will be used, stack burning can help to reduce

field burning. Straw stacks appear to burn very cleanly. No significant smoke impacts have been recorded from stack burning and few complaints have been received.

1986 witnessed an increase in the use of preparatory burning as a beneficial technique for improved smoke management. Preparatory burning is the controlled burning of small areas of selected "problem" fields in order to reduce the fire hazard potential and allow rapid-ignition burning techniques to be used when it is open burned at a later time. A total of about 100 preparatory burns were allowed last summer, ranging from one to three acres per field and up to 50 acres per day. These amounts of burning showed no adverse air quality impacts and benefited smoke management by permitting "faster and cleaner" burning. However, strict applications of the field burning rules related specifically to humidity and ventilation would prevent preparatory burning during the times it is normally conducted (morning hours). Staff believe that special and limited exemptions from these restrictions are needed.

### Alternatives and Evaluation

Before new rules were considered, a cooperative voluntary effort to reduce problems from propaning was tried. Prior to the 1986 burn season, the Department and Oregon Seed Council jointly developed a set of operational guidelines for propaning which growers were encouraged to follow. These guidelines included many of the same provisions now proposed as rules. While many growers complied with the effort, others did not and its effectiveness overall was limited, resulting in increased smoke impacts and public complaints.

The Department has developed proposed rule changes intended to manage or resolve many of the problems noted above. The process has included surveys and support of basic research to fill information gaps, experimentation, and meetings with growers to discuss key issues.

Briefly, the proposed rules regarding propane flaming authorize the Department to prohibit propaning under adverse meteorological or air quality conditions, and more clearly defines acceptable limits in the way propaning is actually conducted. Minimum design specifications related to nozzle density and hood size are proposed. The hours would be restricted to 9 a.m. to sunset during July and August (9 a.m. to one-half hour before sunset after that) to prevent propaning in the very early morning and evening when humidity is extremely high. A requirement that propaning be conducted in overlapping strips beginning along the downwind side of the fields would be specified to deter operating in a way that promotes open flames.

With regard to stack burning, the proposed rules would continue the current approach of allowing it under the same daily authorizations and conditions that govern fourth priority agricultural burning (orchard prunings, etc.). Such burning is rarely permitted during the summer when field burning occurs, except under stormy conditions or after a hard rain when field burning is precluded. Moderate amounts of moisture do not adversely affect emissions from stack burning. The rules would exempt stack burning from the registration, permits, fees, and other limitations applicable to field burning.

New rules are proposed which would exempt preparatory burning from minimum humidity and ventilation restrictions applicable to open field burning. A limit of five acres per burn and 50 acres per day would be established in order to prevent any unnecessary burning and unwanted smoke buildups.

Other proposed rule changes would 1) clarify the definition of "fluffing," 2) clarify the requirement that growers directly monitor the field burning radio whenever burning, and 3) update the definition of "grower allocation" to reflect current procedures for assigning allocations. Another change would require growers to ensure that their fields are in good burnable condition and to use approved lighting equipment. Regulations adopted recently for the protection of visibility in Class 1 areas would also be referenced.

The EQC authorized a public hearing on the proposed Open Field Burning Rules (Agenda Item D, March 13, 1987 EQC Meeting).

#### Summary of April 22, 1987 Public Hearing

Bill Johnson, representing ENUF (End Noxious and Unhealthful Fumes) from Foster, Oregon, spoke in favor of the proposed rules. Mr. Johnson described his opposition to open field burning and suggested that research into alternatives to field burning, such as straw utilization, be more vigorously pursued by the Department.

Ralph Johnston, representing the Lane Regional Air Pollution Authority (LRAPA), stated his agency's support of the proposed Open Field Burning Rules. Of particular concern to LRAPA are the changes in the rules allowing DEQ to prohibit propane flaming during poor air quality conditions. He cited two light smoke intrusions from propane flaming which occurred in the Eugene-Springfield area during 1986. He stated that, given the increasing potential for air quality problems from this source, LRAPA recommends these rules be adopted.

Dave Nelson of the Oregon Seed Council stated his support for the proposed Open Field Burning Rules, but voiced objections to three specific requirements identified in the rules. First, he stated that the proposed 50-acre limit on preparatory burning was inappropriate and needed to be either raised considerably or left unspecified. Second, he objected to the wording of the proposed requirements for field preparation prior to propane flaming, stating that the language strongly suggests that growers must prepare their fields twice rather than once, and that this would be burdensome for growers. Third, he pointed out that the wording of the proposed requirement to conduct propane flaming crosswise to the wind is too strict, and should reflect the fact that, due to wind change and field configuration, crosswise propaning is not always possible.

Chuck Craig from the Oregon Seed Council stated his support for the rules, but expressed disagreement with the 50-acre daily limit for preparatory burning. He stated that he did not believe there is enough evidence to support the concept that 50 acres represents an appropriate limit. He indicated that with the benefits preparatory burning provides, and the anticipation that its use could be increased considerably in the future with no adverse air quality impact, a 50-acre limit is simply not realistic.

Liz Van Leeuwen, State Representative of District 37, submitted in writing her concerns about the proposed rules. She indicated that with the current restrictions on open field burning, additional restrictions on propane flaming and preparatory burning

make it even more difficult for growers to burn their fields. She expressed disfavor at the portion of the stack burning rules which requires unauthorized burning of stacks to be extinguished, and objected to the suggestion that straw stacks be covered. She stated that a limit on preparatory burning of 50 acres a day was too low and that propaning crosswise to the wind is not always possible. She also stated reservations on the limitation of propaning to daylight hours (9 a.m. to sunset).

Elizabeth Lippert, a resident of Foster, briefly described her objections to the practice of field burning and expressed concern about the related health effects.

Other comments made at the hearing were directed at regulation of propane flaming. Several grass seed farmers expressed their concern that the proposed propane flaming regulations represented tighter control of this activity, which they feared would make it more difficult for them to burn their fields during the summer. One farmer claimed that the proposed propane flaming regulations would create more smoke problems because it would limit propaning activity to daylight hours and thereby concentrate the smoke during this time. He also claimed the propane regulations discourage farmers from propaning by making it more time-consuming to prepare their fields and more costly to dispose of the straw. Another farmer stated that it is important that he propane his fields a second time within three or four days of the first propane, and he was concerned that the proposed regulations which allow the Department to prohibit propaning might interfere with this critical second propaning.

#### Response to Public Comment

Based on the increasing use of propane flaming as an alternate burning practice and the associated smoke impacts resulting from the practice, the Department believes that tighter controls are currently needed. The increased straw removal associated with propane flaming has led to more burning of straw piles or stacks, and a need to regulate this practice as well.

The Department believes the controls proposed for these two practices represent the minimum regulation necessary to control potential smoke impacts from these practices, and should not represent any additional hardship to grass seed farmers in accomplishing the burning of their fields.

The removal of loose straw from the field has been a requirement since 1984, and is the basis for reducing smoke emissions from propaning. The Department believes that the proposed regulations should not unduly restrict or curtail propane flaming from occurring. For example, the vast majority of propane flaming in previous years has been conducted during the 9 a.m.-to-sunset hours specified in the proposed regulations. Propaning during these hours when humidities are low minimizes smoke emissions considerably. The proposed requirement to conduct propaning crosswise to the prevailing winds has, for some time, been an accepted and frequently used method of propaning which minimizes smoke emissions and avoids generating an open fire in the field. For these reasons, every effort must be made to propane in this manner. The Department anticipates that the need to prohibit propane flaming due to adverse meteorological or air quality conditions would occur on only a very few days during the summer.

With regard to stack burning, the Department believes it is justified in requiring that "every reasonable effort" be made to extinguish unpermitted stack burning which is in violation of the rules, and in "advising" farmers to cover their straw stacks to protect from moisture until an authorized burn day is announced.

As a result of comments made at the April 22 Public Hearing and the written testimony received prior to the Hearing, the Department recognizes the need to make minor revisions to specific sections concerning propane flaming and preparatory burning. The changes are as follows:

1. Preparatory burning (Page 17)

340-26-033(2). "Such burning shall be limited to the minimum numbers of acres necessary, in no case exceeding 5 acres for each burn or a maximum of [50] 100 acres each day.

The 50-acre daily limit has been replaced by a 100-acre limit. During the 1986 burning season, the Department allowed up to 50 acres a day of preparatory burning under optimum atmospheric conditions. Not only did this 50 acres appear to be a reasonable number from an air quality standpoint, but it also represented the maximum number of acres available to be burned on a given day. Given the possibility that more than 50 acres could be burned on a given day without adverse air quality impacts, the Department believes the change from 50 to 100 acres for preparatory burning would be appropriate. However, the Department feels strongly that any additional preparatory burning over 100 acres a day would represent excessive burning, and perhaps jeopardize the continued use of preparatory burning as an effective smoke management tool.

2. Propane flaming (Page 18)

340-26-045(1)(a)(B). "The [remaining] field stubble must be flail chopped, mowed, or otherwise cut close to the ground and the loose straw removed to the extent possible.

The language has been revised so that the word "remaining" has been deleted, and the words "loose straw" have been returned to their original location in the existing rules. The Department believes this change in the language will eliminate the confusion over whether the Department is requiring growers to prepare their fields twice in order to conduct propane flaming. This language states more directly that prior to propaning, it is the grower's responsibility to ensure that the field has been cut close to the ground and the loose straw removed to the extent possible. This leaves it up to the grower the number of times the field must be prepared to comply with this requirement.

3. Propane flaming (Page 19)

340-26-045(1)(b)(B). "Every effort must be made to operate propane flammers [must be operated] in overlapping strips, crosswise to the prevailing wind, beginning along the downwind edge of the field."

Changes "must be operated" to "every effort must be made" to operate propane flammers. This language takes into account that propaning crosswise might not always be possible due to wind shifts or irregular field shape, yet still requires that the grower must make every effort to do so.

Summation

1. The use of propane flaming has increased sharply in recent years, resulting in significant summertime air quality impacts. A voluntary compliance program to reduce propane-related smoke problems was attempted last year, but met with only



limited success. New proposed rules were prepared which would allow the Department to prohibit propaning and more clearly define operational parameters in propaning practice. Rules were also prepared to allow stack burning under "fourth priority agricultural burning", exempting it from field burning regulations, and impose new limits on the use of preparatory burning as a smoke management tool, exempting it from humidity and ventilation requirements. Other minor and clarifying changes to the field burning rules were also proposed.

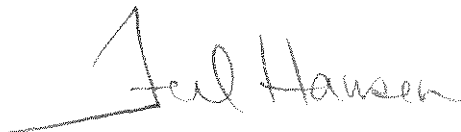
2. The proposed Open Field Burning Rules were presented to the Commission and authorized for public hearing on March 13, 1987. A hearing was held on April 22, 1987 in Springfield, Oregon, resulting in testimony from eight persons and written comments from two others.

3. The majority of the testimony was in general agreement with the proposed rules. There were a few specific objections to parts of sections addressing propane flaming and preparatory burning, but these represented minor changes which the Department feels could be accommodated.

4. Based on the testimony received by the Department, minor changes have been incorporated into the proposed rules (1) increasing the daily acreage limit for preparatory burning from 50 to 100 acres, (2) simplifying the language for propane flaming field preparation, and (3) slightly changing the language for propane flaming so that growers "must make every effort" to propane crosswise to the wind.

#### Director's Recommendations

Based on the above summation, it is recommended that the Commission adopt the proposed field burning rule changes (OAR 340-26-001 through 340-26-055) as a revision to the State Implementation Plan (SIP).



Fred Hansen

#### Attachments:

1. Statement of Need for Rulemaking
2. Hearing Officer's Report
3. Proposed Revisions to the Open Field Burning Rules  
(OAR 340-26-001 through 340-26-055)
4. Written Testimony

Brian Finneran:ka  
686-7837  
May 6, 1987

Attachment 1  
Agenda Item No. G  
May 29, 1987  
EQC Meeting

**RULEMAKING STATEMENTS**  
for  
**ADOPTION OF OPEN FIELD BURNING RULE REVISIONS**  
as a  
**REVISION TO THE OREGON STATE IMPLEMENTATION PLAN**

Pursuant to ORS 183.335(2), this statement provides information on the intended action to amend rules.

STATEMENT OF NEED

Legal Authority

This Rule amends OAR 340-26-001 through 340-26-055 of the State Implementation Plan. It is proposed under the authority of ORS Chapter 468.460(1).

Need for the Rule

The proposed amendments and additions are needed to address air pollution problems generated by the increased use of propane flaming as an alternative to open field burning in the Willamette Valley. Rules would also address burning of straw stacks and preparatory burning. Other minor or clarifying changes are proposed. Rule revisions will be submitted to the U. S. Environmental Protection Agency as an Amendment to the State Implementation Plan.

Principal Documents Relied Upon

ORS 468.450 through 468.495 and OAR Chapter 340, Division 23, Rules for Open Field Burning.

FISCAL AND ECONOMIC IMPACT STATEMENT

There should be no significant adverse economic impact on small businesses. Proposed restrictions could prohibit propane flaming on some days, however, the extent of curtailment is likely to be negligible.

LAND USE CONSISTENCY STATEMENT

Portions of the proposed rules appear to affect land use and will be consistent with Statewide Planning Goals and Guidelines.

Goal 6 (Air, Water and Land Resources Quality): The proposal is designed to improve and maintain air quality in the affected area and is therefore consistent with the Goal.

Goal 11 (Public Facilities and Services) is deemed unaffected by the rules.

The proposal 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 manner as 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 appropriate conflicts brought to our attention by local, state or federal authorities.

Attachment 2  
Agenda Item No. G  
May 29, 1987  
EQC Meeting

STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMO

TO: Environmental Quality Commission Date: May 6, 1987  
FROM: Brian Finneran, DEQ Hearings Officer  
SUBJECT: Report for Hearing Held April 22, 1987  
Proposed Adoption of Open Field Burning Rules, OAR  
340-26-001 Through 340-26-055, as a Revision to the  
Oregon State Implementation Plan.

Summary of Procedure

A public hearing was held April 22 in Springfield to receive public comment on the proposed Open Field Burning Rules. Written and oral testimony was received from ten persons. Brian Finneran, Acting Manager of the Field Burning Program, Department of Environmental Quality, presided at the hearing. Approximately 20 people attended the hearing.

Summary of Testimony

Comment on the proposed rules can best be organized by summarizing the four positions expressed in the testimony; 1) those in support of the rules, 2) those in support but with a few specific objections to parts of the propane flaming and preparatory burning rules, 3) those not stating opposition, but with a few objections to the rules, or 4) other.

Summary of Testimony in Support of the Proposed Rules

Bill Johnson, representing ENUF (End Noxious and Unhealthful Fumes) from Foster, OR, spoke in favor of the proposed rules. He stated that restrictions on propane flaming and stack burning are only partial solutions to air pollution; that more restrictions on open field burning are needed. Mr. Johnson described his opposition to open field burning and suggested that research into alternatives to field burning, such as straw utilization, be more vigorously pursued by the Department.

Ralph Johnston, representing the Lane Regional Air Pollution Control Authority, stated his agency's general support of the proposed Open Field Burning Rules. He commented that the Field Burning Program has made significant strides to reduce smoke impacts in the Eugene-Springfield metropolitan area. Of particu-

lar concern to LRAPA are the changes in the rules allowing DEQ to prohibit propane flaming during poor air quality conditions. He cited two light smoke intrusions from propane flaming which occurred in the Eugene-Springfield area during 1986. He stated that, given the increasing potential for air quality problems from this source, LRAPA recommends these rules be adopted.

#### Summary of Testimony in Support But With a Few Objections

Dave Nelson of the Oregon Seed Council expressed his support for the proposed Open Field Burning Rules, but voiced objections to three specific requirements identified in the rules. First, he stated that the proposed 50-acre limit on preparatory burning was inappropriate and needed to be either raised considerably or left unspecified. Second, he objected to the wording of the proposed requirements for field preparation prior to propane flaming, stating that the language strongly suggests that growers must prepare their fields twice rather than once, and that this would be burdensome for growers. Third, he pointed out that the wording of the proposed requirement to conduct propane flaming crosswise to the wind is too strict and should reflect the fact that, due to wind changes and field configuration, crosswise propaning is not always possible.

Chuck Craig from the Oregon Seed Council also stated his support for the rules, but expressed disagreement with the 50-acre daily limit for preparatory burning. He stated that he did not believe there is enough evidence to support the concept that 50 acres represents an appropriate limit. He indicated that with the benefits preparatory burning provides, and the anticipation that its use could be increased considerably in the future with no adverse air quality impact, a 50-acre limit is simply not realistic.

#### Summary of Testimony Not Stating Opposition But With Objections

Liz Van Leeuwen, State Representative of District 37, submitted in writing her concerns about the proposed rules. She indicated that with the current restrictions on open field burning, additional restrictions on propane flaming and preparatory burning make it even more difficult for growers to burn their fields. She stated that, while limiting preparatory burning to a maximum of five acres was acceptable, a daily acreage limit of 50 acres was too low. She expressed her concern that propaning crosswise to the wind is not always possible and that propaning should be allowed to continue beyond sunset. (Written testimony available.)

George Van Leeuwen, a grass seed farmer, commented on the requirement that propane flaming be conducted crosswise to the wind. He stated that he had extensive experience in propaning, and while propaning crosswise is the ideal

method for conducting propaning, wind shifts often occur in the field, making it difficult to operate in this manner. He also pointed out that some fields need to be propaned twice, and that the second propaning often needs to follow within a few days. He requested that special consideration be given to exempting these fields if propaning is prohibited during this critical time period. (Written testimony available.)

Summary of Other Testimony

Bill Looney, a grass seed farmer, commented that additional regulations on propane flaming represented a hardship to grass seed farmers, who already have to deal with the restrictions on open field burning. He indicated that developing alternatives to field burning may take a long time, and that improvements could be made in allowing farmers more burning opportunities.

Paul Rigor, a grass seed farmer, stated his concern that additional field burning regulations will make it more difficult for grass seed farmers to get their fields burned. He stressed the importance of controlling blind seed disease in grass seed production through use of field burning.

Paul Kirsch, a grass seed farmer, submitted written testimony stating his objection to any further restrictions to propane flaming. He believes that non-regulation makes it easier for farmers to propane, while the proposed regulations will discourage farmers and cause delays in propaning, resulting in more smoke from propaning. He also stressed the extra effort and costs that are associated with propane flaming as compared to open field burning. (Written testimony available.)

Elizabeth Lippert, resident of Foster, directed her comments to smoke from field burning. She briefly described her objection to the practice of field burning and expressed concern about the related health effects.

OPEN FIELD BURNING RULES HEARING SUMMARY

Springfield City Council Chambers, 10 a.m., April 22, 1987

Key: Rule Position: S=Support, O=Opposed, N=No Position,

<u>No.</u>	<u>Name</u>	<u>Affiliation</u>	<u>City</u>	<u>Position</u>
1	Bill Johnson	ENUF	Foster	S
2	Ralph Johnston	LRAPA	Springfield	S
3	Dave Nelson	Seed Council	Salem	S
4	Chuck Craig	Seed Council	Salem	S
5	Paul Rigor	Farmer	Corvallis	N
6	Bill Looney	Farmer	Shedd	N
7	George VanLeeuwen	Farmer	Halsey	N
8	Elizabeth Lippert	Public	Foster	N

SUBMITTED WRITTEN TESTIMONY

1	Liz VanLeeuwen	State Representative	Halsey	N
2	Paul Kirsch	Farmer	St. Paul	O

DIVISION 26

**RULES FOR OPEN FIELD BURNING  
(Willamette Valley)**

**Introduction**

340-26-001 (1) These rules apply to the open burning of all perennial and annual grass seed and cereal grain crops or associated residue within the Willamette Valley, hereinafter referred to as "open field burning". The open burning of all other agricultural waste material (referred to as "fourth priority agricultural burning") is governed by OAR Chapter 340, Division 23, Rules for Open Burning.

(2) Organization of rules:

(a) OAR 340-26-003 is the policy statement of the Environmental Quality Commission setting forth the goals of these rules:

(b) OAR 340-26-005 contains definitions of terms which have specialized meanings within the context of these rules.

(c) OAR 340-26-010 lists general provisions and requirements pertaining to all open field burning with particular emphasis on the duties and responsibilities of the grower registrant.

(d) OAR 340-26-012 lists procedures and requirements for registration of acreage, issuance of permits, collection of fees, and keeping of records, with particular emphasis on the duties and responsibilities of the local permit issuing agencies.

(e) OAR 340-26-013 establishes acreage limits and methods of determining acreage allocations.

(f) OAR 340-26-015 establishes criteria for authorization of open field burning pursuant to the administration of a daily smoke management control program.

(g) OAR 340-26-025 establishes civil penalties for violations of these field burning rules.

(h) OAR 340-26-031 establishes special provisions pertaining to field burning by public agencies for official purposes, such as "training fires".

(i) OAR 340-26-033 establishes special provisions pertaining to "preparatory burning".

[(i)] (j) OAR 340-26-035 establishes special provisions pertaining to open field burning for experimental purposes.

[(j)] (k) OAR 340-26-040 establishes special provisions and procedures pertaining to emergency open field burning and emergency cessation of burning.



[(k)] (l) OAR 340-26-045 establishes provisions pertaining to approved alternative methods of burning, such as "propane flaming".

(m) OAR 340-26-055 establishes provisions pertaining to "stack burning."

### Policy

**340-26-003** In the interest of public health and welfare pursuant to ORS 468.455, it is the declared public policy of the State of Oregon to control, reduce, and prevent air pollution from open field burning by smoke management. In developing and carrying out a smoke management control program it is the policy of the Environmental Quality Commission:

- (1) To provide for a maximum level of burning with a minimum level of smoke impact on the public, recognizing:
  - (a) The importance of flexibility and judgement in the daily decision-making process, within established and necessary limits;
  - (b) The need for operational efficiency within and between each organizational level;
  - (c) The need for effective compliance with all regulations and restrictions.
- (2) To study, develop and encourage the use of reasonable and economically feasible alternatives to the practice of open field burning.

### Definitions

**340-26-005** As used in these rules, unless otherwise required by context:

- (1) "Actively extinguish" means the direct application of water or other fire retardant to an open field fire.
- (2) "Approved alternative method(s)" means any method approved by the Department to be a satisfactory alternative field sanitation method to open field burning.
- (3) "Approved alternative facilities" means any land, structure, building, installation, excavation, machinery, equipment, or device approved by the Department for use in conjunction with an approved alternative method.
- (4) "Commission" means the Environmental Quality Commission.
- (5) "Cumulative hours of smoke intrusion in the Eugene-Springfield area" means the average of the totals of cumulative hours of smoke intrusion recorded for the Eugene site and the Springfield site. Provided the Department determines a smoke intrusion to have been significantly contributed to by field burning, it shall record for each hour of the intrusion which causes the nephelometer hourly

reading to exceed background levels (the average of the three hourly readings immediately prior to the intrusion) by:

(a)  $5.0 \times 10^{-4}$  b-scat units or more, two hours of smoke intrusion;

(b)  $4.0 \times 10^{-4}$  b-scat units or more, for intrusions after September 15 of each year, two hours of smoke intrusion;

(c)  $1.8 \times 10^{-4}$  b-scat units or more but less than the applicable value in subsection (a) or (b), one hour of smoke intrusion.

(6) "Department" means the Department of Environmental Quality.

(7) "Director" means the Director of the Department or delegated employee representative pursuant to ORS 468.045(3).

(8) "District allocation" means the total amount of acreage sub-allocated annually to the fire district, based on the district's pro rata share of the maximum annual acreage limitation, representing the maximum amount for which burning permits may be issued within the district, subject to daily authorization. District allocation is defined by the following identity:

$$\text{District Allocation} = \frac{\text{Maximum annual acreage limit}}{\text{Total acreage registered in the Valley}} \times \frac{\text{Total acreage registered in the District}}{\text{District}}$$

(9) "Drying day" means a 24-hour period during which the relative humidity reached a minimum less than 50% and no rainfall was recorded at the nearest reliable measuring site.

(10) "Effective mixing height" means either the actual height of plume rise as determined by aircraft measurement or the calculated or estimated mixing height as determined by the Department, whichever is greater.

(11) "Field-by-field burning" means burning on a limited restricted basis in which the amount, rate, and area authorized for burning is closely controlled and monitored. Included under this definition are "training fires" and experimental open field burning.

(12) "Field reference code" means a unique four-part code which identifies a particular registered field for mapping purposes. The first part of the code shall indicate the grower registration (form) number, the second part the line number of the field as listed on the registration form, the third part the crop type, and the fourth part the size (acreage) of the field (e.g., a 35 acre perennial (bluegrass) field registered on line 2 of registration form number 1953 would be 1953-2-P-BL-35).

(13) "Fire district" or "district" means a fire permit issuing agency.

(14) "Fire permit" means a permit issued by a local fire permit issuing agency pursuant to ORS 477.515, 477.530, 476.380, or 478.960.

(15) "Fires-out time" means the time announced by the Department at which all flames and major smoke sources associated with open field burning should be out, and prohibition conditions are scheduled to be imposed.

(16) "Fluffing" means [a] an approved mechanical method of stirring or tending crop residues for enhanced [fuel bed] aeration and drying[, ] of the full fuel load, thereby improving the field's combustion characteristics.

(17) "Grower allocation" means the amount of acreage sub-allocated annually to the grower registrant, based on the grower registrant's pro rata share of the maximum annual acreage limitation, representing the maximum amount for which burning permits may be issued, subject to daily authorization. Grower allocation is defined by the following identity:

$$\text{Grower Allocation} = [1.10 \times] \frac{\text{Maximum annual acreage limit}}{\text{Total acreage registered in the Valley}} \times \frac{\text{Total acreage registered by grower registrant}}{\text{Total acreage registered in the Valley}}$$

(18) "Grower registrant" means any person who registers acreage with the Department for purposes of open field burning.

(19) "Marginal conditions" means conditions defined in ORS 468.450(1) under which permits for open field burning may be issued in accordance with these rules and other restrictions set forth by the Department.

(20) "Nephelometer" means an instrument for measuring ambient smoke concentrations.

(21) "Northerly winds" means winds coming from directions from 290 to 90 in the north part of the compass, averaged through the effective mixing height.

(22) "Open field burning" means burning of any perennial or annual grass seed or cereal grain crop, or associated residue, in such manner that combustion air and combustion products are not effectively controlled.

(23) "Open field burning permit" means a permit issued by the Department pursuant to ORS 468.458.

(24) "Permit issuing agency" or "Permit agent" means the county court or board of county commissioners, or fire chief or a rural fire protection district or other person authorized to issue fire permits pursuant to ORS 477.515, 477.530, 476.380, or 478.960.

(25) "Preparatory burning" means controlled burning of portions of selected problem fields for the specific purpose of reducing the fire hazard potential or other conditions which would otherwise inhibit rapid ignition burning when the field is subsequently open burned.

(26) "Priority acreage" means acreage located within a priority area.

(27) "Priority areas" means the following areas of the Willamette Valley:

(a) Areas in or within three miles of the city limits of incorporated cities having populations of 10,000 or greater.

(b) Areas within one mile of airports servicing regularly scheduled airline flights.

(c) Areas in Lane County south of the line formed by U.S. Highway 126 and Oregon Highway 126.

(d) Areas in or within three miles of the city limits of the City of Lebanon.

(e) Areas on the west and east side of and within 1/4 mile of these highways: U.S. Interstate 5, 99, 99E, and 99W. Areas on the south and north side of and within 1/4 mile of U.S. Highway 20 between Albany and Lebanon, Oregon Highway 34 between Lebanon and Corvallis, Oregon Highway 228 from its junction south of Brownsville to its rail crossing at the community of Tulsa.

(28) "Prohibition conditions" means conditions under which open field burning is not allowed except for individual burns specifically authorized by the Department pursuant to rule 340-26-015(2).

(29) "Propane flaming" means an approved alternative method of burning which employs a mobile flamer device [utilizing] which meets the following design specifications and utilizes an auxiliary fuel such that combustion is nearly complete and emissions significantly reduced[.]:

(a) Flamer nozzles must be not more than 15 inches apart.

(b) A heat deflecting hood is required and must extend a minimum of 3 feet beyond the last row of nozzles.

(30) "Quota" means an amount of acreage established by the Department for each fire district for use in authorizing daily burning limits in a manner to provide, as reasonably as practicable, an equitable opportunity for burning in each area.

(31) "Rapid ignition techniques" means a method of burning in which all sides of the field are ignited as rapidly as practical in order to maximize plume rise. Little or no preparatory backfire burning shall be done.

(32) "Residue" means straw, stubble and associated crop material generated in the production of grass seed and cereal grain crops.

(33) "Responsible person" means each person who is in ownership, control, or custody of the real property on which open burning occurs, including any tenant thereof, or who is in ownership, control or custody of the material which is burned, or the grower registrant. Each person who causes or allows open field burning to be maintained shall also be considered a responsible person.

(34) "Small-seeded seed crops requiring flame sanitation" means small-seeded grass, legume, and vegetable crops, or other types approved by the Department, which are planted in early autumn, are grown specifically for seed production, and which require flame sanitation for proper cultivation. For purposes of these rules, clover and sugar beets are specifically included. Cereal grains, hairy vetch, or field peas are specifically not included.

(35) "Smoke management" means a system for the daily (or hourly) control of open field burning through authorization of the times, locations, amounts and other restrictions on burning, so as to provide for suitable atmospheric dispersion of smoke particulate and to minimize impact on the public.

(36) "Southerly winds" means winds coming from directions from 90 to 290 in the south part of the compass, averaged through the effective mixing height.

(37) "Stack burning" means the open burning of piled or stacked residue from perennial or annual grass seed or cereal grain crops used for seed production.

[(37)] (38) "Test fires" means individual field burns specifically authorized by the Department for the purpose of determining or monitoring atmospheric dispersion conditions.

[(38)] (39) "Training fires" means individual field burns set by or for a public agency for the official purpose of training personnel in fire-fighting techniques.

[(39)] (40) "Unusually high evaporative weather conditions" means a combination of meteorological conditions following periods of rain which result in sufficiently high rates of evaporation, as determined by the Department, where fuel (residue) moisture content would be expected to approach about 12 percent or less.

[(40)] (41) "Validation number" means a unique five-part number issued by a permit issuing agency which validates a specific open field burning permit for a specific acreage in a specific location on a specific day. The first part of the validation number shall indicate the grower registration (form) number,

the second part the line number of the field as listed on the registration form, the third part the number of the month and the day of issuance, the fourth part the hour burning authorization was given based on a 24-hour clock, and the fifth part shall indicate the size of acreage to be burned (e.g., a validation number issued August 26 at 2:30 p.m. for a 70-acre burn for a field registered on line 2 of registration form number 1953 would be 1953-2-0826-1430-070).

[(41)] (42) "Ventilation Index (VI)" means a calculated value used as a criterion of atmospheric ventilation capabilities. The Ventilation Index as used in these rules is defined by the following identity:

$$VI = \frac{\text{(Effective mixing height (feet))}}{1000} \times \text{(Average wind speed through the effective mixing height (knots))}$$

[(42)] (43) "Willamette Valley" means the areas of Benton, Clackamas, Lane, Linn, Marion, Multnomah, Polk, Washington, and Yamhill Counties lying between the crest of the Coast Range and the crest of the Cascade Mountains, and includes the following:

(a) "South Valley", the areas of jurisdiction of all fire permit issuing agents or agencies in the Willamette Valley portions of the counties of Benton, Lane, or Linn.

(b) "North Valley", the areas of jurisdiction of all other fire permit issuing agents or agencies in the Willamette Valley.

### General Requirements

340-26-010 (1) No person shall cause or allow open field burning on any acreage unless said acreage has first been registered and mapped pursuant to rule 340-26-012(1), the registration fee has been paid, and the registration (permit application) has been approved by the Department.

(2) No person shall cause or allow open field burning without first obtaining (and being able to readily demonstrate) a valid open field burning permit and fire permit from the appropriate permit issuing agent pursuant to rule 340-26-012(2).

(3) No person shall open field burn cereal grain acreage unless that person first issues to the Department a signed statement, and then acts to insure, that said acreage will be planted in the following growing season to a small-seeded seed crop requiring flame sanitation for proper cultivation as defined in rule 340-26-005(34).

(4) No person shall cause or allow open field burning which is contrary to

the Department's announced burning schedule specifying the times, locations and amounts of burning permitted, or to any other provision announced or set forth by the Department or these rules.

(5) Each responsible person open field burning shall have an operating radio receiver and shall directly monitor the Department's burn schedule announcements at all times while open field burning.

(6) Each responsible person open field burning shall actively extinguish all flames and major smoke sources when prohibition conditions are imposed by the Department or when instructed to do so by an agent or employe of the Department.

(7) No person shall open field burn priority acreage on the west side of and abutting U.S. Interstate 5 without first providing a non-combustible strip at least 8 feet in width between the combustible materials of said field and the freeway right-of-way, to serve as fireguard for safety purposes.

(8) Each responsible person open field burning within a priority area around a designated city, airport or highway shall refrain from burning and promptly extinguish any burning if it is likely that the resulting smoke would noticeably affect the designated city, airport or highway.

(9) Each responsible person open field burning shall make every reasonable effort to expedite and promote efficient burning and prevent excessive emissions of smoke by:

(a) Ensuring that field residues are evenly distributed and in generally good burning condition;

(b) Utilizing approved lighting devices (drip torch, propane torch or other pressurized lighting device) and fire control (recommend minimum 500 gallons water) equipment;

(c) Employing [through employment of] rapid ignition techniques on all acreage where there are no imminent fire hazards or public safety concerns.

(10) Each responsible person open field burning shall attend the burn until effectively extinguished.

(11) Open field burning in compliance with the rules of this Division does not exempt any person from any civil or criminal liability for consequences or damages resulting from such burning, nor does it exempt any person from complying with any other applicable law, ordinance, regulation, rule, permit, order or decree of the Commission or any other government entity having jurisdiction.

(12) Any revisions to the maximum acreage to be burned, allocation or permit issuing procedures, or any other substantive changes to these rules affecting

open field burning for any year shall be made prior to June 1 of that year. In making rule changes, the Commission shall consult with Oregon State University.

(13) Open field burning shall be regulated in a manner consistent with the requirements of the Oregon Visibility Protection Plan for Class I areas (OAR 340-20-047, sec. 5.2).

#### **Certified Alternative to Open Field Burning**

340-26-011 [DEQ 105, f.& ef. 12-36-75;  
DEQ 114, f.6-4-76;  
DEQ 138, f.6-30-77;  
DEQ 140(Temp), f.& ef. 7-27-77 thru 11-23-77;  
DEQ 6-1978, f.& ef. 4-18-78 thru 10-5-78;  
DEQ 2-1980, f.& ef. 1-21-80;  
DEQ 12-1980, f.& ef. 4-21-80;  
DEQ 9-1981, f. & ef. 3-19-81;  
Repealed by DEQ 5-1984, f. & ef. 3-7-84]

#### **Registration, Permits, Fees, Records**

340-26-012 In administering a field burning smoke management program, the Department may contract with counties or fire districts to administer registration of acreage, issuance of permits, collection of fees and keeping of records for open field burning within their permit jurisdictions. The Department shall pay said authority for these services in accordance with the payment schedule provided for in ORS 468.480:

(1) Registration of acreage:

(a) On or before April 1 of each year, all acreage to be open burned under these rules shall be registered with the Department or its authorized permit agent on registration forms provided by the Department. Said acreage shall also be delineated on specially provided registration map materials and identified using a unique field reference code. Registration and mapping shall be completed according to the established procedures of the Department. A non-refundable registration fee of \$1 for each acre registered shall be paid at the time of registration. A complete registration (permit application) shall consist of a fully executed registration form, map and fee.

(b) Registration of acreage after April 1 of each year shall require the prior approval of the Department and an additional \$1 per acre late registration fee if the late registration is due to the fault of the late registrant or one under his control.

(c) Copies of all registration forms and fees shall be forwarded to the



Department promptly by the permit agent. Registration map materials shall be made available to the Department at all times for inspection and reproduction.

(d) The Department shall act on any registration application within 60 days of receipt of a completed application. The Department may deny or revoke any registration application which is incomplete, false or contrary to state law or these rules.

(e) It is the responsibility of the grower registrant to insure that the information presented on the registration form and map is complete and accurate.

(2) Permits:

(a) Permits for open field burning shall be issued by the Department, or its authorized permit agent, to the grower registrant in accordance with the established procedures of the Department, and the times, locations, amounts and other restrictions set forth by the Department or these rules.

(b) A fire permit from the local fire permit issuing agency is also required for all open burning pursuant to ORS 477.515, 477.530, 476.380, 478.960.

(c) A valid open field burning permit shall consist of:

(A) An open field burning permit issued by the Department which specifies the permit conditions in effect at all times while burning and which identifies the acreage specifically registered and annually allocated for burning;

(B) A validation number issued by the local permit agent on the day of the burn identifying the specific acreage allowed for burning and the date and time the permit was issued; and

(C) Payment of the required \$2.50 per acre burn fee.

(d) Open field burning permits shall at all times be limited by and subject to the burn schedule and other requirements or conditions announced or set forth by the Department.

(e) No person shall issue open field burning permits for open field burning of:

(A) More acreage than the amount sub-allocated annually to the District by the Department pursuant to rule 340-26-013(2);

(B) Priority acreage located on the upwind side of any city, airport or highway within the same priority area.

(f) It is the responsibility of each local permit issuing agency to establish and implement a system for distributing open field burning permits to individual grower registrants when burning is authorized, provided that such system is fair, orderly and consistent with state law, these rules and any other

provisions set forth by the Department.

(3) Fees: Permit agents shall collect, properly document and promptly forward all required registration and burn fees to the Department.

(4) Records:

(a) Permit agents shall at all times keep proper and accurate records of all transactions pertaining to registrations, permits, fees, allocations, and other matters specified by the Department. Such records shall be kept by the permit agent for a period of at least five years and made available for inspection by the appropriate authorities.

(b) Permit agents shall submit to the Department on specially provided forms weekly reports of all acreage burned in their jurisdictions. These reports shall cover the weekly period of Monday through Sunday, and shall be mailed and post-marked no later than the first working day of the following week.

#### **Acreage Limitations, Allocations**

**340-26-013** (1) Limitation of Acreage:

(a) Except for acreage and residue open burned pursuant to rules 340-26-035, 340-26-040 [and], 340-26-045, and 340-26-055 the maximum acreage to be open burned annually in the Willamette Valley under these rules shall not exceed 250,000 acres.

(b) The maximum acreage allowed to be open burned under these rules on a single day in the south Valley under southerly winds shall not exceed 46,934 acres.

(c) Other limitations on acreage allowed to be open burned are specified in rules 340-26-015(7), 340-26-033(2), and 340-26-035(1).

(2) Allocation of Acreage:

(a) In the event that total registration as of April 1 is less than or equal to the maximum acreage allowed to be open burned annually, pursuant to subsection (1)(a) of this rule, the Department may sub-allocate to growers on a pro rata share basis not more than [110] 100 percent of the maximum acreage limit, referred to as "grower allocation". In addition, the Department shall sub-allocate to each respective fire district, its pro rata share of the maximum acreage limit based on acreage registered within the district, referred to as "district allocation".

(c) In order to insure optimum permit utilization, the Department may adjust fire district allocations.

(d) Transfer of allocations for farm management purposes may be made within and between fire districts and between grower registrants on a one-in/one-out basis under the supervision of the Department.

**Daily Burning Authorization Criteria**

**340-26-015** As part of the smoke management program provided for in ORS 468.470 the Department shall set forth the types and extent of open field burning to be allowed each day according to the provisions established in this section and these rules:

(1) During the active field burning season and on an as needed basis, the Department shall announce the field burning schedule over the field burning radio network operated specifically for this purpose. The schedule shall specify the times, locations, amounts and other restrictions in effect for open field burning. The Department shall notify the State Fire Marshal of the burning schedule for dissemination to appropriate Willamette Valley agencies.

(2) Prohibition conditions:

(a) Prohibition conditions shall be in effect at all times unless specifically determined and announced otherwise by the Department.

(b) Under prohibition conditions, no permits shall be issued and no open field burning shall be conducted in any area except for individual burns specifically authorized by the Department on a limited extent basis. Such limited burning may include field-by-field burning[, preparatory burning,] or burning of test fires, except that:

(A) No open field burning shall be allowed:

(i) In any area subject to a ventilation index of less than 10.0[, except for experimental burning specifically authorized by the Department pursuant to rule 340-26-035];

(ii) In any area upwind, or in the immediate vicinity, of any area in which, based upon real-time monitoring, a violation of federal or state air quality standards is projected to occur.

(B) Only test-fire burning may be allowed:

(i) In any area subject to a ventilation index of between 10.0 and 15.0, inclusive[, except for experimental burning specifically authorized by the Department pursuant to rule 340-26-035];

(ii) When relative humidity at the nearest reliable measuring station exceeds 50 percent under forecast northerly winds or 65 percent under forecast

southerly winds.

(3) Marginal conditions:

(a) The Department shall announce that marginal conditions are in effect and open field burning is allowed when, in its best judgement and within the established limits of these rules, the prevailing atmospheric dispersion and burning conditions are suitable for satisfactory smoke dispersal with minimal impact on the public, provided that the minimum conditions set forth in paragraphs (2)(b) (A) and (B) of this rule are satisfied.

(b) Under marginal conditions, permits may be issued and open field burning may be conducted in accordance with the times, locations, amounts, and other restrictions set forth by the Department and these rules.

(4) Hours of burning:

(a) Burning hours shall be limited to those specifically authorized by the Department each day and may be changed at any time when necessary to attain and maintain air quality.

(b) Burning hours may be reduced by the fire chief or his deputy, and burning may be prohibited by the State Fire Marshal, when necessary to prevent danger to life or property from fire, pursuant to ORS 478.960.

(5) Locations of burning:

(a) Locations of burning shall at all times be limited to those areas specifically authorized by the Department, except that:

(A) No priority acreage shall be burned upwind of any city, airport, or highway within the same priority area;

(B) No south Valley priority acreage shall be burned upwind of the Eugene-Springfield non-attainment area.

(6) Amounts of burning:

(a) In order to provide for an efficient and equitable distribution of burning, daily authorizations of acreages shall be issued by the Department in terms of single or multiple fire district quotas. The Department shall establish quotas for each fire district and may adjust the quotas of any district when conditions in its judgement warrant such action.

(b) Unless otherwise specifically announced by the Department, a one quota limit shall be considered in effect for each district authorized for burning.

(c) The Department may issue more restrictive limitations on the amount, density or frequency of burning in any area or on the basis of crop type, when conditions in its judgement warrant such action.

(7) Limitations on burning based on air quality:

(a) The Department shall establish the minimum allowable effective mixing height required for burning based upon cumulative hours of smoke intrusion in the Eugene-Springfield area as follows:

(A) Except as provided in paragraph (B) of this subsection, burning shall not be permitted whenever the effective mixing height is less than the minimum allowable height specified in Table 1, and by reference made a part of these rules.

(B) Notwithstanding the effective mixing height restrictions of paragraph (A) of this subsection, the Department may authorize burning of up to 1000 acres total per day for the Willamette Valley, consistent with smoke management considerations and these rules.

(8) Limitations on burning based on rainfall:

(a) Burning shall not be permitted in an area for one drying day (up to a maximum of four consecutive drying days) for each 0.10 inch increment of rainfall received per day at the nearest reliable measuring station.

(b) The Department may waive the restrictions of subsection (a) of this section when dry fields are available as a result of special field preparation or condition, irregular rainfall patterns, or unusually high evaporative weather condition.

(9) Other discretionary provisions and restrictions:

(a) The Department may require special field preparations before burning, such as, but not limited to, mechanical fluffing of residues, when conditions in its judgement warrant such action.

(b) The Department may designate specified periods following permit issuance within which time active field ignition must be initiated and/or all flames must be actively extinguished before said permit is automatically rendered invalid.

(c) The Department may designate additional areas as priority areas when conditions in its judgement warrant such action.

#### **Winter Burning Season Regulations**

340-26-020 [DEQ 29, f.6-12-71, ef. 7-12-71;  
DEQ 93(Temp), f. & ef. 7-11-75 thru 11-28-75;  
DEQ 104, f. & ef. 12-26-75;  
DEQ 114, f. 6-4-76;  
DEQ 138, f. 6-30-77;  
DEQ 6-1978, f. 4-18-78;  
DEQ 8-1978(Temp), f. & ef. 6-8-78 thru 10-5-78;  
DEQ 2-1980, f. & ef. 1-21-80;

DEQ 12-1980, f. & ef. 4-21-80;  
DEQ 9-1981, f. & ef. 3-19-81;  
Repealed by DEQ 5-1984, f. & ef. 3-7-84]

### Civil Penalties

**340-26-025** In addition to any other penalty provided by law:

(1) Any person who intentionally or negligently causes or allows open field burning contrary to the provisions of ORS 468.450, 468.455 to 468.480, 476.380, and 478.960 or these rules shall be assessed by the Department a civil penalty of at least \$20, but not more than \$40 for each acre so burned.

(2) In lieu of any per-acre civil penalty assessed pursuant to section (1) of this rule, the Director may assess a specific civil penalty for any open field burning violation by service of a written notice of assessment of civil penalty upon the respondent. The amount of such civil penalty shall be established consistent with the following schedule:

(a) Not less than \$500 nor more than \$10,000 upon any person who:

(A) Causes or allows open field burning on any acreage which has not been registered with the Department for such purposes.

(B) Causes or allows open field burning on any acreage without first obtaining and readily demonstrating a valid open field burning permit for all acreage so burned.

(b) Not less than \$300 nor more than \$10,000 upon any person who fails to actively extinguish all flames and major smoke sources when prohibition conditions are imposed by the Department or when instructed to do so by any agent or employe of the Department.

(c) Not less than \$200 nor more than \$10,000 upon any person who:

(A) Conducts burning using an approved alternative method contrary to any specific conditions or provisions governing such method.

(B) Fails to readily demonstrate at the site of the burn operation the capability to monitor the Department's field burning schedule broadcasts.

(d) Not less than \$50 nor more than \$10,000 upon any person who commits any other violation pertaining to the rules of this Division.

(3) In establishing a civil penalty greater than the minimum amount specified in sections (1) and (2) of this rule, the Director may consider any mitigating and aggravating factors as provided for in OAR 340-12-045.

(4) Any person planting contrary to the restrictions of subsection (1) of

ORS 468.465 pertaining to the open burning of cereal grain acreage shall be assessed by the Department a civil penalty of \$25 for each acre planted contrary to the restrictions.

**Tax Credits for Approved Alternative Methods, and Approved Alternative Facilities**

- 340-26-030 [DEQ 114, f. & ef. 6-4-76;
- DEQ 138, f. 6-30-77;
- DEQ 6-1978, f. & ef. 4-18-78;
- DEQ 8-1978(Temp), f. & ef. 6-8-78 thru 10-5-78;
- DEQ 2-1980, f. & ef. 1-21-80;
- DEQ 12-1980, f. & ef. 4-21-80;
- DEQ 9-1981, f. & ef. 3-19-81;
- DEQ 5-1984, f. & ef. 3-7-84;
- Repealed by DEQ 12-1984, f. & ef. 7-13-84]

**Burning by Public Agencies (Training Fires)**

340-26-031 Open field burning on grass seed or cereal grain acreage by or for any public agency for official purposes, including the training of fire-fighting personnel, may be permitted by the Department on a prescheduled basis consistent with smoke management considerations and subject to the following conditions:

(1) Such burning must be deemed necessary by the official local authority having jurisdiction and must be conducted in a manner consistent with its purpose.

(2) Such burning must be limited to the minimum number of acres and occasions reasonably needed.

(3) Such burning must comply with the provisions of rules 340-26-010 through 340-26-013.

**Preparatory Burning**

340-26-033 The Department may allow preparatory burning of portions of selected problem fields, consistent with smoke management considerations and subject to the following conditions:

(1) Such burning must, in the opinion of the Department, be necessary to reduce or eliminate a potential fire hazard or safety problem in order to expedite the subsequent burning of the field.

(2) Such burning shall be limited to the minimum number of acres necessary, in no case exceeding 5 acres for each burn or a maximum of 100 acres each day.

(3) Such burning must employ backfiring burning techniques.

(4) Such burning is exempt from the provisions of rule 340-26-015 but must comply with the provisions of rules 340-26-010 through 340-26-013.

### **Experimental Burning**

**340-26-035** The Department may allow open field burning for demonstration or experimental purposes pursuant to the provisions of ORS 468.490, consistent with smoke management considerations and subject to the following conditions:

(1) Acreage experimentally open burned shall not exceed 5,000 acres annually.

(2) Acreage experimentally open burned shall not apply to the district allocation or to the maximum annual acreage limit specified in rule 340-26-013-(1)(a).

(3) Such burning is exempt from the provisions of rule 340-26-015 but must comply with the provisions of rules 340-26-010 and 340-26-012, except that the Department may elect to waive all or part of the \$2.50 per acre burn fee.

### **Emergency Burning, Cessation**

**340-26-040** (1) Pursuant to ORS 468.475 and upon a finding of extreme hardship, disease outbreak, insect infestation or irreparable damage to the land, the Commission may by order, and consistent with smoke management considerations and these field burning rules, permit the emergency open burning of more acreage than the maximum annual acreage limitation specified in rule 340-26-013(1)(a). The Commission shall act upon emergency burning requests within 10 days of receipt of a properly completed application form and supporting documentation:

(a) Emergency open burning on the basis of extreme financial hardship must be documented by an analysis and signed statement from a CPA, public accountant, or other recognized financial expert which established that failure to allow emergency open burning as requested will result in extreme financial hardship above and beyond mere loss of revenue that would ordinarily accrue due to inability to open burn the particular acreage for which emergency open burning is requested. The analysis shall include an itemized statement of the applicant's net worth and include a discussion potential alternatives and probable related consequences.



(b) Emergency open burning on the basis of disease outbreak or insect infestation must be documented by an affidavit or signed statement from the County Agent. State Department of Agriculture or other public agricultural expert authority that, based on his personal investigation, a true emergency exists that can only be dealt with effectively and practicably by open burning. The statement shall also specify: time of field investigation; location and description of field, crop and infestation; extent of infestation (compared to normal) and the necessity for urgent control; availability efficacy, and practicability of alternative control procedures, and; probable consequences of non-control.

(c) Emergency open burning on the basis of irreparable damage to the land must be documented by an affidavit or signed statement from the County Agent, State Department of Agriculture, or other public agricultural expert authority that, based on his personal investigation, a true emergency exists which threatens irreparable damage to the land and which can only be dealt with effectively and practicably by open burning. The statement shall also specify: time of field investigation; location and description of field, crop, and soil slope characteristics; necessity for urgent control: availability, efficacy, and practicability of alternative control procedures, and; probable consequences of non-control.

(2) Pursuant to ORS 468.475 and upon finding of extreme danger to public health or safety, the Commission may order temporary emergency cessation of all open field burning in any area of the Willamette Valley.

#### **Approved Alternative Methods of Burning (Propane Flaming)**

340-26-045 (1) The use of propane flammers, mobile field sanitizing devices, and other field sanitation methods specifically approved by the Department are considered alternatives to open field burning pursuant to the provisions of ORS 468.472 and 468.480, [provided that] subject to the following conditions:

(a) The field [has] must first be prepared as follows [been]:

(A) Either the field must have [P]previously been open burned and the appropriate fees paid; or

(B) The field stubble must be [F]flail-chopped, mowed, or otherwise cut close to the ground and the loose straw removed to [reduce the straw fuel load as much as] the extent practicable[;].

(b) Propane flaming operations must comply with the following criteria:

(A) Unless otherwise specifically restricted by the Department, and except for the use of propane flammers in preparing fire breaks, propane flaming may be conducted only between the hours of 9 a.m. and sunset (9 a.m. to one-half hour before sunset on or after September 1).

(B) Every effort must be made to operate propane flammers in overlapping strips, crosswise to the prevailing wind, beginning along the downwind edge of the field.

[(b)] (C) The remaining field [stubble will] residue must not sustain an open fire[; and].

(c) A fire permit [has been] must first be obtained from the local fire permit issuing agency.

(2) [Propane flaming and other approved alternative burning methods may be conducted on any day during daylight hours and are exempt from rules 340-26-010 through 340-26-015 and are therefore not subject to open field burning requirements related to registration, permits, fees, limitations, allocations and daily burning authorization criteria.] No person shall cause or allow to be initiated or maintained any propane flaming on any day or at any time if the Department has determined and notified the State Fire Marshal that propane flaming is prohibited because of adverse meteorological or air quality conditions.

### Stack Burning

340-26-055 (1) The open burning of piled or stacked residue from perennial or annual grass seed or cereal grain crops used for seed production is allowed, subject to the following conditions:

(a) No person shall cause or allow to be initiated or maintained any stack burning on any day or at any time if the Department has notified the State Fire Marshal that such burning is prohibited because of meteorological or air quality conditions. Unless otherwise specified by the Department, stack burning shall be subject to the same daily open burning schedule set forth and announced by the Department for "fourth priority agricultural burning" (which is separately governed under OAR Chapter 340, Division 23, Rules for Open Burning).

(b) A fire permit must be obtained from the local permit issuing agency.

(c) All residue to be burned must be dry to the extent practicable and free of all other combustible and non-combustible material. Covering the stacks is advised when necessary and practicable to protect the material from moisture.

(d) It shall be the duty of each responsible person to make every reasonable

effort to extinguish any stack burning which is in violation of any rule of the Commission.

(2) Provided the conditions of this rule are met, stack burning is exempt from rules 340-26-010 through 340-26-015 and is therefore not subject to open field burning requirements related to registration, permits, fees, allocations, and acreage limitations.

TABLE 1  
(340-26-015)

MINIMUM ALLOWABLE EFFECTIVE MIXING HEIGHT  
REQUIRED FOR BURNING BASED UPON THE CUMULATIVE HOURS  
OF SMOKE INTRUSION IN THE EUGENE-SPRINGFIELD AREA

<u>Cumulative Hours of Smoke Intrusion</u> <u>In the Eugene-Springfield Area</u>	<u>Minimum Allowable Effective</u> <u>Mixing Height (feet)</u>
0 - 14	no minimum height
15 - 19	4,000
20 - 24	4,500
25 and greater	5,500

Attachment 4  
Agenda Item No.  
May 29, 1987  
EQC Meeting

WRITTEN TESTIMONY

T E S T I M O N Y

RECEIVED  
APR 22 1987

BEFORE THE OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY  
CONCERNING PROPOSED AMENDMENTS TO OPEN FIELD BURNING RULES

APRIL 22, 1987

My name is Ralph Johnston, and I represent the Lane Regional Air Pollution Authority. LRAPA appreciates the opportunity to comment on the proposed changes in the Field Burning Rules. As a whole these rules are of vital importance in Lane County, since communities can be severely impacted by the emissions from grass seed field burning activities. The field burning smoke management program in general has made significant strides in the past few years to reduce the impact of smoke in the Eugene-Springfield Metropolitan Area. It is the belief of LRAPA that these latest proposed rule changes will continue that trend.

Of particular concern to LRAPA are the proposed changes in the rules relating to "propane flaming." Although only 30,000 to 60,000 acres were treated with this method in the Willamette Valley in 1986, the DEQ estimates that its use is on the rise and that, over the next few years, up to one-third of the growers may be using or considering this option. Currently, the DEQ has very little control over propane operations. Propane flaming can literally occur on any day, during daylight hours, and in any location without any restrictions. During 1986, there were two smoke intrusions into the Eugene-Springfield Metropolitan Area from propaning, with about 20 complaints registered by LRAPA. With the projected increase in propaning, these numbers could increase dramatically in future years, not only creating nuisance problems but also impacting the ambient PM-10 levels.

The proposed rules would allow the DEQ to regulate propaning operations according to meteorological and/or ambient air quality conditions and set some restrictions on the way that propane flaming operations are conducted. Given the increasing potential for air quality problems from this source, LRAPA recommends that these rules be adopted.

REJ/mjd

EIZ VanLEEUWEN  
LINN COUNTY  
DISTRICT 37

REPLY TO ADDRESS INDICATED

- House of Representatives  
Salem, Oregon 97310-1347  
 27070 Irish Bend Loop  
Halsey, Oregon 97340-9734

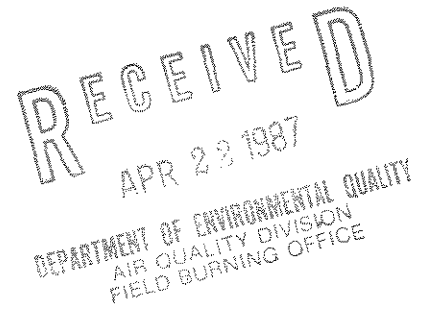


Home Phone 169-2544  
Capitol Message 178-8772

HOUSE OF REPRESENTATIVES  
SALEM, OREGON  
97310-1347

April 20, 1987

James Peterson, Chairperson  
835 NW Bond St.  
Bend, OR 97701



Re: Environmental Quality Commission public hearing on proposed open field burning rules

Dear Mr. Peterson:

Needless to say, I will not be able to be in Springfield Wednesday morning for the hearing on field burning and the press of legislative business may also prevent me from being at your May 29 meeting, at which rules will be adopted.

I speak both from personal experience and as a legislator who represents the largest area of grass seed grown in Oregon.

Grass seed growers are boxed in by the law which mandates that they can only open burn about two-thirds of their acreage, at the best. Your proposed additional rules on preparatory burning and propaning puts the grower into an even tighter box.

Probably limiting each preparatory to a maximum of five acres is agreeable; however, limiting the total preparatory acreage to an overall 50 acres a day is not acceptable.

The stack burning regulations have two proposals which are rather impractical and I trust you will remove that language:

1). Trying to cover stacks of straw to be burned is not practical in the first place and is prohibitively expensive. I have had personal experience in trying to cover stacks of straw we had hoped to sell.

2) It's also pretty fruitless to try and put out stack fires once they are going. Stacks usually burn quite hot and clean, but they certainly won't do that after they are partially burned and soaked down.

Due to the law and stringent rules, to say nothing of weather conditions, growers have been forced to remove straw. To properly treat many of the fields, the grower needs to propane. Please remember that removing straw is expensive, that propaning adds to that expense, but, more importantly, propaning takes a long period of time. I'm more than a little bit uneasy about your mandated hours. On certain days you could certainly go longer than sunset. (It only takes one half hour to open burn a field which may take a whole day to propane.)

Fields and crops are different and all cannot be burned exactly as laid out in p. 19-(B). Please eliminate that "must" and at least substitute a "should." Unexpected wind shifts do occur, especially in late summer, and you cannot always do precisely what is the most ideal.

There are so many variables out there in the field, created by

nature, that I plead with you to keep common sense and flexibility  
in the rules under which growers are forced to operate.

Respectfully,

*Liz Van Leeuwen*

Liz VanLeeuwen  
State Representative  
District 37

LVL/doc



4/13/87

DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION  
FIELD BURNING OFFICE  
APR 16 1987

Concerning restrictions on propane flaming

I, Paul Kirsch, farm 12021 acres of grass seed crops in the ST. Paul area. I have been successfully propane flaming my fields for the past 13 years. This has required much extra effort and cost to me but the compensation for the extra work is the timely removal of the straw and a more uniform burn.

I am opposed to any further restrictions of propane burning and I will explain why.

By non-regulation, as is currently practiced, propaning is done randomly up and down the valley which spreads out the risk of significant smoke impact to the lowest level. Through regulations you will compress the time frame for propaning, and given that the acres to be propaned will not disappear, you will be creating more of a smoke impact problem, which will surely lead to a request for even more restrictions.

I will assure you that more restrictions will not reduce smoke impact. Any set of restrictions that create more work for the farmer to prepare his fields for propaning will simply delay the job which means more regrowth or it may ruin on the fields. In most of my perennial fields I can get by with one propane

burn unless it rains. After a rain most fields require double propaning which will create more smoke.

My views probably seem self serving but I think that our efforts over the last 13 years to reduce the open burning problem through propane flaming should be recognized and encouraged, not discouraged.

Thank you  
Paul Kursch Pres.  
Kursch Family Farms, Inc.  
4350 Mahony Rd. N.E.  
ST. Paul, Or 97137  
phone 633-4771

RECEIVED

APR 22 1987

DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION  
FIELD BURNING OFFICE

April 22, 1987

To: Department Of Environmental Quality  
810 SW Sixth Avenue  
Portland, Ore 97204

From: Geo. VanLeeuwen  
27070 Irish Bend  
Halsey, Ore. 97348

r/e: Propaning rules

Ladies and Gentlemen:

I am a smaller scale grass seed grower, currently producing 690 acres of perennial ryegrass and orchardgrass seed, and work together with two sons, each of which farms about 500 acres of grass seed. We burn together with several neighbors who have similar sized operations.

After an incident in 1972, I became convinced that our area west of Halsey (zone 18) for a number of reasons would continue to be the last area to complete burning--James and I last year got to burn only 34% of our combined acreage before the September rains, which I'm sure is far below the Halsey-Shedd average. We therefore arranged to have our 1973 straw baled off and shipped to Japan thru Hastro-West, bought a commercial sized baler and related bale handling equipment at the end of 1973, and baled off much of our straw for the next six years, and worked extensively with the field burner program and propaning during those years in an intensive effort to find a viable solution to open field burning. We tried open burning again in about '79, '80, and '81, then in 1982 secured a 2,000 ton contract with Willamette Industries for use as fuel for their Foster Mill power plant. To handle that volume, we purchase a Hesston large square baler, bale processor, Freightliner truck and trailer, and field type forklift. Altogether, our smaller-sized operation has expended more than \$140,000 in capital items alone attempting to find suitable alternatives to open field burning. I relate these facts to demonstrate that my sons and I understand and appreciate the field smoke problem and have demonstrated that by the amount of money and work we've put into working on it. At the present time we are stuck with \$50,000 of straw being stored at a cost of \$8,000 a month because of the Mushroom King bankruptcy.

Out our fairly extensive propaning experience, I have two serious concerns regarding the proposed propaning rules:

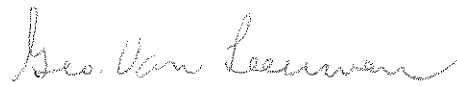
340-26-045 (1);(b) (8);---crosswise to the prevailing wind,---. This is the ideal situation that all of us hope to find each day we propane, but know from experience usually doesn't last long because at that time of year the wind may switch as much as 180 degrees several times in a half day and usually averages 45 degrees to the east and south sides of most fields. Also, because

of wind switches, each field needs to be circled at the beginning to provide a complete fire break, and buildings and other areas need to be circled. To make this section credably operable, the word should must replace must, and generally should be inserted before the word crosswise.

340-24-045 (2): I believe propaners in our area imposed stricter self restraint than the voluntary program requested by DEQ last year, but I learned recently that there were flagrant abuses in other areas, so I suppose mandatory time control is necessary. I wish some exceptions could be worked out so that fields that have been propaned the first time could be re-propaned the second time before more than 3 or 4 days from the first time elapse. If more than this time goes by, the plants begin to grow again and the second pass very seriously weakens or kills them. This is a critical operation for some crops and produces a relatively small amount of smoke. Please give this very serious consideration.

Finally, I would like to comment about enforcement---I fully realize that, like the income tax program, to make the program work at all there has to be strict enforcement, and the situation is further complicated by the wide variation in uncontrollable factors such as wind switches and judgement calls, making distinctions between purely accidental incidents and deliberate, intentional violation difficult to distinguish. I sincerely hope that the Department sincerely takes this into account and give the enforcement personnel the latitude and instruction in using good judgement and common sense in assessing the incidents the great majority of us do not desire. In other words, please give those of us who are doing our best to do a good job some consideration when we do get caught in a wind switch or un-anticipated humidity situation as we did last year.

Sincerely yours,

  
Geo. Van Leeuwen



**O**REGON  
**S**EED  
**C**OUNCIL

2140 TURNER RD., S.E.  
SALEM, OREGON 97302

April 23, 1987

Mr. Brian Finneran, Program Coordinator  
Field Burning Program  
Department of Environmental Quality  
1244 Walnut St.  
Eugene, Oregon 97403

Dear Brian,

Here is a summary of our comments as a follow-up to the hearing yesterday.

1. The 50 acre daily maximum limit on preparatory burning should be eliminated from the rules until we have time to properly analyze the need for a daily limit. In the event that the Department believes that a limit is mandatory, we would suggest that the limit be set at approximately 100 acres. A 100 acre limit would give the Department enough flexibility to accomplish needed preparatory burning while retaining the authority to allow the amount that matches existing atmospheric conditions.

2. Reword OAR 340-26-045 (1) (a) (B) so that it is as follows: The field must be closely mowed during the harvest process and the loose straw removed, or the stubble remaining following harvest be removed, or otherwise cut close to the ground and the secondary loose straw removed to the extent practicable.

3. George VanLeeuwen made a good point in that fields are susceptible to damage if the second propane pass is not made within a relatively short period of time. Consideration should be given to exempting fields in this critical time period under "propane prohibition" conditions.

It is clear that growers and operating personnel are still learning about the agronomic and atmospheric effects of propane flaming. We should maintain as much flexibility as possible to be able to appropriately respond to both needs.

Thank your for your consideration of these points.

Sincerely,

David S. Nelson  
Executive Secretary

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APR 27 1987

DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION  
FIELD BURNING OFFICE

15



## Environmental Quality Commission

811 SW SIXTH AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

### MEMORANDUM

To: Environmental Quality Commission  
From: Director  
Subject: Agenda Item H, May 29, 1987, EQC Meeting

Proposed Adoption of Amendments to the Water Quality Program  
Permit Fee Schedule (OAR 340-45-070, Table 2).

### Background and Problem Statement

In 1975, the Oregon legislature authorized the Environmental Quality Commission to adopt a water quality program fee schedule in order to finance a portion of the water quality source control program. The water quality source control program regulates wastewater treatment and disposal systems by permit. The legislature directed that the fees be based upon anticipated costs of evaluating the permit application, issuing or denying the permit, and an inspection program to determine compliance or noncompliance with the permit (ORS 468.065).

In keeping with this directive, fee rules, and a three-part fee schedule were adopted by the Commission April 20, 1976. The schedule consisted of: (a) a fixed filing fee, (b) an application processing fee varying in amount with the size and complexity of the permitted facility, and (c) an annual compliance determination fee varying in amount with the size and complexity of the permitted facility.

In the 1975-77 biennium appropriation bill (Chapter 445, Oregon Laws 1975), the Department was to raise about \$125,000 in user fees as partial support of the water quality source control program. Subsequently, the Department has been directed to periodically review fee revenues and adjust the fee schedule in order to maintain approximately the same proportion of fee support relative to state general funds and federal funds to cover program costs.

In keeping with this approach, fees were increased in 1979. This was done by increasing the permit processing fees to more closely reflect the cost of processing applications.

The fee schedule was also adjusted in 1981. The primary purpose of this adjustment was to replace lost revenue due to the issuance of several general permits covering over 30 percent of the minor sources. The use of general permits allowed staff time to be diverted away from the paperwork



## Environmental Quality Commission

811 SW SIXTH AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

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In keeping with this approach, fees were increased in 1979. This was done by increasing the permit processing fees to more closely reflect the cost of processing applications.

The fee schedule was also adjusted in 1981. The primary purpose of this adjustment was to replace lost revenue due to the issuance of several general permits covering over 30 percent of the minor sources. The use of general permits allowed staff time to be diverted away from the paperwork

associated with issuing regular permits on many minor sources. This allows more staff resource to be applied to compliance assurance activities concerning those sources that have the potential to significantly affect water quality. The annual compliance determination fees were the only fees increased during this fee schedule adjustment.

The following biennium (1983-85), the fees were raised again in order to address inflation and maintain the portion of fee support at about the same level as the original schedule. Between 1979 and 1985, the average percentage of the source control budget covered by fee revenues was about 17.5 percent.

There have been no Water Quality permit fee increases since 1983. Consequently, the proportion of fee support has not kept pace with inflation or other increased costs associated with source control. These additional costs are primarily due to the following expanded activities:

1. Groundwater impact evaluations for proposed and existing sources. The activities are being conducted pursuant to OAR Chapter 340, Division 41, which details the adopted groundwater protection policy;
2. Evaluation of sludge management practices pursuant to OAR Chapter 340, Division 50;
3. Industrial waste pretreatment program evaluations audits, inspections, and technical assistance for municipalities which treat industrial waste;
4. Biomonitoring and toxics impact evaluations for new and existing sources.

An increase in permit fees is necessary to cover increased costs associated with the expanded activities. In order to cover the additional expenses, the Department is proposing to increase the permit processing fees and the annual compliance determination fees. During the 1985-87 biennium, the fee revenue has been only about 14 percent of the legislatively approved source control budget, as compared to an average of about 17 percent between 1979 and 1985. If the proportion of the source control budget covered by user fees is increased to 17 percent, in keeping with the historical average, an increase in user fees of about \$64,000 would be generated. The Department considers the proposed fee schedule to reflect the level of additional resources needed to undertake the expanded activities and it would retain the level of fee support as a percentage of the total source control budget below 17 percent.

It should be noted that the proposal does not increase fees uniformly across the board. Certain categories would receive a greater proportional



increase in order to address the extra staff time necessary for those particular types of sources.

On March 13, 1987, the Commission authorized the Department to hold a public hearing on the proposed fee increases. The hearing was held on April 22, 1987. The Hearing Officer report is attached as Attachment C. Only one person attended the hearing. They did not object to the fee schedule as proposed. The Department did receive two letters from permittees objecting to any fee increases. One respondent suggested that the Department should absorb its increased costs just as industry is forced to do. The Department understands these concerns and tries to do as much as possible within existing resources. However, the public has high expectations of the Department to properly address groundwater problems, sludge disposal, and toxicity issues. These expectations cannot be accommodated within the current fee structures without shifting the costs to the Department's general fund revenues. We do not believe such a shift is consistent with legislative intent.

#### Alternatives and Recommendation

The alternative of no increase in fees was rejected because it would require that all increased costs due to inflation and increased demands on staff time be accounted for in general fund revenues. The Department foresees no opportunity to reduce costs by cutting back on activities. The no-increase option would thus run counter to legislative intent.

The fee schedule as proposed should add revenues in those areas where additional source control effort is required and still maintain about the same proportion of fee support as originally envisioned by the legislature.

With one exception, the proposed fee schedule is unchanged from that presented to the Commission when a hearing authorization was requested. That exception is a change in the definition of small mining operation in (3)(b)(M) of Table 2. After further consideration, it has been determined that the 20 tons per day breakpoint originally proposed for a small mining operation is too small. It has been changed to 70,000 cubic yards per year, in keeping with a new definition of small mining operation used by EPA. This would be equivalent to a continuous operation of about 200 tons per day. Those mining operations which process more than 70,000 cubic yards per year will be classified as major mining operations and subject to a larger fee.

With the above exception, the fee schedule proposed for adoption is the same as that for which hearing authorization was requested. Since this change is less restrictive than previously proposed, it is not considered significant enough to require additional public participation. The final fee schedule is attached as Attachment A.

Summation

1. The 1975 Oregon legislature authorized collection of permit fees to partially support water quality source control activities. Through the FY75-77 budget appropriation bill, they required the Department to raise about \$125,000 per year in user fees to offset general fund appropriations.
2. The Department was subsequently directed to periodically adjust the fees in order to maintain about the same proportion of the source control budget covered by user fee revenues.
3. A three-part water permit fee schedule was first adopted April 30, 1976. It consists of a fixed filing fee, a permit processing fee which varies in amount with the application processed, and an annual compliance determination fee which varies in amount with the size and complexity of the permitted facility.
4. Permit fees were last increased in 1983. Between 1979 and 1985, the proportion of the water source control budget covered by user fees was about 17 percent.
5. An increase of fees is necessary so that fee revenues will continue to support approximately the same proportion of permit related costs.

These costs have increased because of inflation and additional source evaluation demands. Without an increase in fees the proportion of the source control budget covered by user fees will drop to about 14 percent.

6. An increase in permit processing fees and annual compliance determination fees is proposed. Some minor housekeeping changes in the fee schedule categories are also proposed. This will restore the user fee proportion to about what it was between 1979 and 1985.
7. A public hearing on the modified fee schedule was held April 22, 1987. Three persons offered testimony for the hearing record.
8. Accept for one change in the definition of a small mining operation, the fee schedule proposed for adoption is the same as proposed at the time of hearing authorization.

EQC Agenda Item H  
May 29, 1987  
Page 5

Director's Recommendation

Based upon the summation, the Director recommends that the Commission adopt the proposed amendment of the Water Quality Permit Fee Schedule.



Fred Hansen

Attachments: (3)

- A. Revised Fee Schedule
- B. Statement of Need and Fiscal Impact Statement
- C. Hearing Officer Report, Evaluation and Response to Testimony

C.K. Ashbaker:h  
WH1900  
229-5325  
April 29, 1987

Note: Bracketed lined through [---] material is deleted.  
Underlined \_\_\_\_\_ material is new.

## TABLE 2

(340-45-070)

(For multiple sources on one application select  
only the one with highest fee)

## PERMIT FEE SCHEDULE

- (1) Filing Fee. A filing fee of \$50 shall accompany any application for issuance, renewal, modification, or transfer of an NPDES Waste Discharge Permit or Water Pollution Control Facilities Permit. This fee is non-refundable 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 [~~\$50~~] \$75 and [~~\$1,000~~] \$2,000 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) New Applications
- (A) Major industries<sup>1</sup> -- [~~\$1000~~] \$2000
- (B) Minor industries -- [~~\$500~~] \$600
- (C) Major domestic<sup>2</sup> -- [~~\$500~~] \$1500
- (D) Minor domestic -- [~~\$250~~] \$600

- (E) Agricultural -- [~~\$250~~] \$300
- (b) Permit Renewals (including request for effluent limit modification):
- (A) Major industries<sup>1</sup> -- [~~\$500~~] \$1000
- (B) Minor industries -- [~~\$250~~] \$300
- (C) Major domestic<sup>2</sup> -- [~~\$250~~] \$750
- (D) Minor Domestic -- [~~\$125~~] \$300
- (E) Agricultural -- [~~\$125~~] \$150
- (c) Permit Renewals (without request for effluent limit modification):
- (A) Major industries<sup>1</sup> -- [~~\$250~~] \$500
- (B) Minor industries -- [~~\$150~~] \$200
- (C) Major domestic<sup>2</sup> -- [~~\$150~~] \$500
- (D) Minor domestic -- [~~\$100~~] \$200
- (E) Agricultural -- \$100
- (d) Permit Modifications (involving increase in effluent limitations):
- (A) Major industries<sup>1</sup> -- [~~\$500~~] \$1000
- (B) Minor industries -- [~~\$250~~] \$300

(C) Major domestic<sup>2</sup> -- [~~\$250~~] \$750

(D) Minor domestic -- [~~\$125~~] \$300

(E) Agricultural -- [~~\$125~~] \$150

(e) Permit Modifications (not involving an increase in effluent limits): All categories -- \$75

(3) Annual Compliance Determination Fee Schedule:

(a) Domestic Waste Sources (Select only one category per permit)

(Category, Dry Weather Design Flow, and Initial and Annual Fee):

(A) Sewage Disposal -- 10 MGD or more -- [~~\$1050~~] \$1150

(B) Sewage Disposal -- At least 5 but less than 10 MGD --  
[~~\$825~~] \$900

(C) Sewage Disposal -- At least 1 but less than 5 MGD --  
[~~\$425~~] \$500

(D) Sewage Disposal -- Less than 1 MGD -- [~~\$225~~] \$300

(E) Non-overflow sewage lagoons -- [~~\$100~~] \$150

(F) [~~On-Site~~] Subsurface Sewage disposal systems larger than  
[~~5000~~] 20,000 gallons per day -- [~~\$60~~] \$150

(G) Subsurface sewage disposal systems larger than 5000 gallons  
per day but not greater than 20,000 gallons per day -- \$100

(b) Industrial, Commercial and Agricultural Sources (Source and Initial and Annual Fee:

(A) Major pulp, paper, paperboard, hardboard, and other fiber pulping industry -- [~~\$1325~~] \$1400

(B) Major sugar beet processing, potato and other vegetable processing, and fruit processing industry -- [~~\$1325~~] \$1400

(C) Fish Processing Industry:

(i) Bottom fish, crab, and/or oyster processing -- [~~\$425~~] \$175

(ii) Shrimp processing -- [~~\$450~~] \$175

(iii) Salmon and/or tuna canning -- [~~\$225~~] \$300

(D) Electroplating industry (excludes facilities which do anodizing only):

(i) Rectifier output capacity of 15,000 Amps or more -- [~~\$1325~~] \$1400

(ii) Rectifier output capacity of less than 15,000 Amps, but more than 5000 Amps -- [~~\$650~~] \$700

(E) Primary Aluminum Smelting -- [~~\$1325~~] \$1400

- (F) Primary smelting and/or refining of non-ferrous metals utilizing sand chlorination separation facilities -- [~~\$4325~~] \$1400
- (G) Primary smelting and/or refining of ferrous and non-ferrous metals not elsewhere classified above -- [~~\$650~~] \$700
- (H) Alkalies, chlorine, pesticide, or fertilizer manufacturing with discharge of process waste waters -- [~~\$4325~~] \$1400
- (I) Petroleum refineries with a capacity in excess of 15,000 barrels per day discharging process waste water -- [~~\$4325~~] \$1400
- (J) Cooling water discharges in excess of 20,000 BTU/sec. -- [~~\$650~~] \$700
- (K) Milk products processing industry which processes in excess of 250,000 pounds of milk per day -- [~~\$4325~~] \$1400
- (L) Major mining operators -- [~~\$4325~~] \$1400
- (M) Small mining operations less than 70,000 cubic yards per year, which:
- (i) Discharge directly to public waters -- [~~\$450~~] \$175
  - (ii) Do not discharge to public waters -- [~~\$400~~] \$125
  - (iii) Use cyanide or other toxic chemicals for extracting precious metals -- \$700
- (N) All facilities not elsewhere classified with disposal of process waste water -- [~~\$225~~] \$300



- (O) All facilities not elsewhere classified which dispose of non-process waste waters (i.e. small cooling water discharges, boiler blowdown, filter backwash, log ponds, etc.) --

[\$425] \$200

- (P) Dairies and other confined feeding operations -- [\$400]

\$125

- (Q) All facilities which dispose of waste waters only by evaporation from watertight ponds or basins -- [\$400]

\$125

---

1 Major Industries Qualifying Factors:

- 1- Discharges large BOD loads; or
- 2- Is a large metals facility; or
- 3- Has significant toxic discharges; or
- 4- Has a treatment system which, if not operated properly, will have a significant adverse impact on the receiving stream; or
- 5- Any other industry which the Department determines needs special regulatory control.

2 Major Domestic Qualifying Factors:

- 1- Serving more than 10,000 people; or
- 2- Serving industries which can have a significant impact on the treatment system.

STATEMENT OF NEED FOR RULEMAKING

Pursuant to ORS 183.335(7), this statement provides information on the Environmental Quality Commission's intended action to adopt a rule change.

(1) Legal Authority

ORS 468.065(2) authorizes the Commission to establish a schedule of permit fees.

(2) Need For The Rule

The Water Quality Permit Fees were originally adopted by the Commission as an Administrative Rule on April 30, 1976. When the fees were established the Department was instructed to review the fee schedule and to increase the fees as necessary so that the fee revenues would continue to support approximately the same proportion of permit related costs. There have been no fee increases since 1983. An increase is necessary to account for inflation and other cost increases associated with permit issuance and compliance assurance.

(3) Principal Documents Relied Upon In This Rulemaking

- a. OAR 340-45-070, Table 2 - Permit Fee Schedule
- b. ORS 468.065(2)
- c. Current listing of water quality permittees

FISCAL AND ECONOMIC IMPACT

These fee increases will have an impact on most permittees, some of which are small businesses. The impact is not viewed as burdensome, however. The increase in annual compliance fees is \$100 or less. The increase in permit processing fees is largest for new, major sources and ranges from \$25 to \$1000. Some small businesses that apply for a WPCF permit to install sewage treatment systems with subsurface disposal of effluent will experience a decrease in total initial permit fees because a separate site evaluation fee will not be required. The Department has endeavored to minimize the cost for categories of small businesses by implementing the general permit which requires a \$50 permit application fee and no annual compliance determination fee. Consequently, the Department believes the economic impact on small businesses will be minimal.

LAND USE CONSISTENCY

This proposed fee schedule change has no impact on land use or the coordination agreement between the Department and Department of Land Conservation and Development.

MEMORANDUM

TO: Environmental Quality Commission

FROM: Charles K. Ashbaker, Hearing Officer

SUBJECT: Report of Testimony Received Regarding a Public Hearing on the Proposed Water Quality Permit Fee Increase.

Procedures Followed

A Public notice was mailed March 24, 1987, to the Department rulemaking mailing list. In addition, a copy of the public notice, staff report, and revised fee schedule were mailed to each affected permittee. The notice was also published in the Secretary of State Bulletin.

The week before the hearing, another news announcement of the public hearing was sent to the Department's media list.

A hearing was scheduled for 1:00 p.m. April 22, 1987, at the 4th floor conference room at the DEQ offices in the Executive Building. Mary Halliburton, Sewage Section Manager and I, Industrial Waste Section Manager were there to answer questions. Only one person attended the hearing, an environmental engineer from Boise Cascade. She asked some questions and submitted written testimony.

Summary of Testimony

In addition to the representative from Boise Cascade who attended the hearing and submitted written testimony, there were two other letters of testimony received. A summary of the testimony is as follows:

1. Gretchen Hoy of Boise Cascade stated that they were not opposed to the fee schedule. She suggested that permits be extended from the five year term to a ten year term. She also suggested that the Department's expenses associated with permit compliance be published so that industry can see where the fee dollars are being spent.
2. Quimby Trucking, Inc. objected to any fee increase.
3. Steinfeld's Products Company wanted to go on record as being opposed to any permit fee increases at this time because of the difficult economic times that the businesses are facing.

Staff Evaluation and Response to Testimony

1. One respondent suggested that the permit term be extended to 10 years in order to reduce permit processing costs.

Currently, the 5-year permit term is specified in Oregon Statute and the Commission does not have the flexibility to extend the permit term. Additionally, the 1987 Water Quality Act passed by Congress retains the 5-year NPDES permit period. As an agency delegated by the U.S. Environmental Protection Agency to administer the water quality permit program for Oregon, the Department is obliged to issue permits for a 5-year maximum term.

2. It was suggested that the Department make available to the public, records of actual costs of permit issuance and compliance assurance activities so that permittees would know how their user fees are applied to a specific source program implementation expenses and to justify fee increases.

The Department recognizes that it is a sound management practice to document resource expenditures on permit related functions. A computerized tracking system is being implemented which will enable the Department to routinely track activities conducted and staff time involved with individual sources. However, it must also be noted that fees are not intended to reflect actual time and expenses spent on a specific permitted source. Instead, the fee schedule reflects broad categories of sources which may share similar environmental control needs and level of staff involvement to ensure their compliance with permit conditions and water quality standards.

3. Two permittees submitted objections to any fee increase. One of these permittees suggested that DEQ should absorb added costs, as industry is required to do, in order to remain competitive.

The Department realizes that increased fees will add to the cost of doing business and that it is sometimes difficult for industries to pass it on to the consumer of their products. DEQ does try to absorb additional activities into its normal workload. However, we believe the public has expectations that groundwater problems, toxicity issues, and sludge disposal activities of permitted sources be properly addressed. Further inflation also increases the Department's costs. The additional workload and effects of inflation cannot be accommodated within the current budget without shifting some of these additional source control costs to general fund revenues. The Department does not believe a shift to the Department's general fund revenues is consistent with legislative intent.

This concludes the summary of testimony received and is respectfully submitted to the Environmental Quality Commission for their consideration. A copy of the testimony received is attached.

Charles K. Ashbaker, Hearing Officer  
April 27, 1987  
WC1990 (c,h)

# STEINFELD'S PRODUCTS COMPANY

10001 N. RIVERGATE BLVD.  
PORTLAND, OREGON 97203  
TELEPHONE (503) 288-8241 • TWX 910-464-4718



*Manufacturers of Finest Quality*  
pickles - relishes  
sauerkraut

April 1, 1987

RECEIVED  
APR 8 1987

Environmental Quality Commission  
Fourth Floor Conference Room  
811 S.W. Sixth Avenue  
Portland, Oregon 97204

Water Quality Division  
Dept. of Environmental Quality

Attn: Charles K. Ashbaker

Dear Sir:

I wish to go on record as being opposed to the permit increases being proposed at the present time. It is a most difficult time to be in business in the very competitive marketplace today, and any increases will only continue to erode the profitability of business. At this time, when it is almost impossible for most businesses to increase selling prices, it is most frustrating when government appears not to be holding the line. It is inconceivable to us that you should propose increases at this time thereby affecting the ability of businesses to make a profit. Your organization may have had increased costs, but most of us are in the same situation and we have had to absorb any and all increased costs.

Who knows which straw it will be that will break the camel's back and further hurt our economy. Please consider not putting through the increase at this time. If there are no businesses left to increase government fees to, there will be no tax base for government to exist.

Sincerely,

A handwritten signature in cursive script that reads "R. H. Steinfeld, Sr.".

R. H. Steinfeld, Sr.  
Chairman of the Board  
STEINFELD'S PRODUCTS COMPANY

RHS:r

State of Oregon  
April 21, 1987

-2-

Please call me at 208-384-6458 if any clarification is required.

*Gretchen E. Hoy*  
Gretchen E. Hoy  
Environmental Engineer

/jff

cc: Garrett Andrew (T&WPG - Boise)  
Chuck Eudy (Paper - Communications)  
Bob Hays (Corp. Communications - Boise)  
Milt Heighes (T&WPG - LaGrande)  
Al Mick (Paper - Portland)  
Bob Morris (T&WPG - Medford)  
Mike Roberts (Paper - Env. Affairs - Boise)  
Dick Rudisile (T&WPG - Medford)  
Burt Vaughn (T&WPG - Monmouth)  
Alan Willis (Govt'l Affairs)



## Environmental Quality Commission

811 SW SIXTH AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

### MEMORANDUM

To: Environmental Quality Commission  
From: Director  
Subject: Agenda Item I, May 29, 1987, EQC Meeting

Proposed Adoption of Amendments to the Hazardous Waste Management Rules, OAR Chapter 340, Divisions 100-102.

### Background

The U.S. Environmental Protection Agency (EPA), under authority of the Resource Conservation and Recovery Act of 1976 (RCRA), has developed a national program for the management of hazardous waste. RCRA places the program within the federal province, but also includes provisions for EPA to authorize a state program to operate in lieu of the federal program. On July 19, 1985, the Commission adopted rules substantially equivalent to the federal hazardous waste rules. On January 31, 1986, EPA granted the State of Oregon Final Authorization to manage the base RCRA program (i.e., that part of the program in existence prior to the Hazardous and Solid Waste Amendments of 1984).

On November 8, 1984, the President signed into law a set of comprehensive amendments to RCRA, entitled the Hazardous and Solid Waste Amendments of 1984 (HSWA). These amendments require EPA to make extensive changes to the federal hazardous waste management rules. States are required to make similar changes to their rules, within specified time frames, to maintain authorization for the base RCRA program and to be eligible to continue with authorization to implement HSWA-related regulations.

In accordance with these requirements, the Department is proposing the adoption, by reference, of several new federal hazardous waste management regulations recently promulgated by EPA, and the deletion of existing state rules which conflict with these rules. The Department is also proposing the adoption of new state rules pertaining to public availability of information, concerning hazardous waste handlers, which are also necessary for continued authorization.

This action is the first in a series of proposed rulemaking activities which the Department has scheduled over the next two years. Pursuant to HSWA, EPA has promulgated and is continuing to promulgate a large number of new regulations and amendments to existing regulations. The Department intends to propose the adoption of these new regulations and amendments in groups or "clusters", approximately once each six months. EPA is encouraging states to use this approach and has established regulatory deadlines by which states must adopt specific rule clusters.

On March 13, 1987, the Commission authorized the Department to conduct a hearing and solicit public comment concerning these proposed rule amendments. A hearing was held, in Portland, on April 16, 1987. Nine people attended, but no one testified. Two groups submitted written testimony. Both groups generally supported the proposed amendments, but concern was expressed regarding the proposed deletion of the state's existing small quantity generator rules. No other issues were raised.

The Department now requests adoption of these proposed amendments. A Statement of Need for Rulemaking is Attachment I. The Commission is authorized to adopt hazardous waste management rules by ORS 466.020 and is authorized to take any action necessary to obtain Final Authorization for the RCRA program by ORS 466.085.

### Discussion

The Department is proposing the deletion of existing state rules concerning small quantity generators of hazardous waste and the adoption, by reference, of new federal small quantity generator rules. In addition, the Department is proposing the adoption, by reference, of minor amendments to the federal rules regarding the definition of solid waste, the listing as hazardous waste of spent pickle liquor from steel finishing operations, and closure/post-closure and financial responsibility requirements for hazardous waste management facilities. The Department is also proposing the adoption of new state rules concerning public availability of information which parallel the federal Freedom of Information Act and EPA procedures on this subject.

In order to maintain authorization for the RCRA program, the state must adopt all of these proposed rules, except for the small quantity generator rules, by July 1, 1987. The small quantity generator rules do not have to be adopted until July 1, 1989. However, as explained below, these new federal rules are already in effect in Oregon, and subject to enforcement by EPA. The Department believes that this dual regulation is undesirable and that the public would be best served, if the state were to adopt the federal rules as soon as possible. Each of the proposed new rules is discussed separately below.

### Small Quantity Generators (Federal Register, March 24, 1986)

Prior to HSWA, a state with Final Authorization, such as Oregon, administered its hazardous waste program in lieu of the federal program. When new, more stringent federal requirements were promulgated, the state was obligated to enact equivalent requirements within specified time frames. However, the new federal requirements did not take effect in the authorized state until they were adopted by the state.

In contrast, new federal requirements and prohibitions, adopted pursuant to HSWA, take effect across the nation without regard to whether a state has an authorized RCRA program or not. States must still adopt HSWA provisions



to retain Final Authorization. However, EPA is directed to enforce these requirements until the state adopts them and EPA has granted authorization for the state to manage these new parts of the program.

One such set of HSWA-related regulations, recently promulgated by EPA, concerns small quantity generators of hazardous waste. These regulations impose new requirements on persons who generate between 100 kg (220 lbs) and 1,000 kg (2,200 lbs) of hazardous waste in a calendar month. Prior to EPA adopting these rules, the federal program placed only minimal requirements on persons who generated less than 1,000 kg of hazardous waste a month (40 CFR 261.5). The Department, however, believed that generators of waste below the 1,000 kg level still posed a potentially serious threat to the environment. Consequently, we proposed and the Commission adopted rules that were different and in some cases more stringent than the federal rules dealing with small quantity generators. Now we find that the new federal regulations affect the same handlers covered by the state's regulations, but the two sets of regulations are different. In some areas the federal regulations are more stringent and in some areas they are less stringent than the state's existing small quantity generator rules in OAR 340-101-005.

Currently, both sets of regulations are in effect in Oregon. The Department believes that this dual jurisdiction is causing confusion, within the regulated community. Accordingly, the Department is proposing the deletion of the state's existing rules and the adoption, by reference, of the new federal rules. A summary of the basic differences between the state and federal small quantity generator rules is as follows:

1. Generator Categories:

The federal rules recognize three categories of generators. First, fully regulated generators who generate more than 1,000 kg (2,200 lbs.) per month of hazardous waste. Second, small quantity generators who generate between 100 kg (220 lbs.) and 1,000 kg (2,200 lbs.). Third, a "conditionally exempt generator" who generates less than 100 kg (220 lbs.) of hazardous waste and less than 1 kg (2.2 lbs.) of acutely hazardous waste in a calendar month. Conditionally exempt generators are basically excluded from all federal hazardous waste regulations, as long as they never accumulate more than 1,000 kg (2,200 lbs.) of hazardous waste on their property.

The state rules are identical to the federal rules in terms of fully regulated generators, but a small quantity generator is defined as one who generates between 200 lbs. and 2,200 lbs. per month. The state does not use the term "conditionally exempt" generator, but the rules basically exempt generators of less than 200 lbs. of hazardous waste and less than 2.2 lbs. of acutely hazardous waste in a calendar month.

2. Disposal Requirements:

The federal rules provide that all of the waste produced by a "conditionally exempt generator" may be sent to a non-hazardous waste management facility (e.g., a domestic waste landfill).

The state rules require that, depending upon the specific type of waste generated, no more than 2, 10, 25, or 200 lbs. per month may be disposed of in a non-hazardous waste facility, and then only if the waste is "securely contained" and the approval of the refuse collector or disposal site operator is obtained. All wastes generated in excess of these limits or not meeting these requirements must be managed at an approved hazardous waste facility.

3. Manifest Requirements:

The federal rules require generators of between 100 and 1,000 kg of hazardous waste in a calendar month to use a "cradle to grave" manifest for shipments of hazardous waste off the premises, unless the waste is being sent to a recycler under a contractual agreement.

The state rules include no such requirement, for generators of less than 2,000 lbs. of hazardous waste per month.

4. Emergency Planning and Response:

The federal rules require that generators of between 100 and 1,000 kg per month must provide certain emergency response equipment, prepare an emergency response plan, designate an emergency response coordinator, provide employee training and comply with other, related requirements.

5. Storage Requirements:

The federal rules allow generators of between 100 and 1,000 kg per month to accumulate wastes, without a permit, for up to 180 days or 270 days if shipping more than 200 miles, as long as the accumulation never exceeds 6,000 kg (13,200 lbs.), the waste is properly contained and certain other requirements are met.

The state rules allow generators of between 200 and 2,000 lbs. per month to accumulate wastes indefinitely, without a permit, if the total does not exceed 1,000 kg. Once this limit is exceeded, the wastes may be stored for up to 90 days without a permit. Also, if more than 100 containers are accumulated, a leak/spill containment system must be provided. If storing in tanks installed after January 1, 1985, a secondary containment system must be provided.

6. Reporting Requirements:

The federal rules exempt generators of between 100 and 1,000 kg per month from reporting requirements.

The state rules require quarterly reporting by all registered generators.

Note: The Department proposes to retain this existing state requirement. This data provides a more accurate picture of the types and amounts of hazardous waste being generated, and helps fulfill the program goal of tracking wastes from cradle to grave. This information is also important for such things as planning waste minimization programs, determining the need for new or expanded waste management facilities, and assessing fees.

7. Facility Requirements:

The federal rules require that hazardous waste treatment, storage or disposal facilities have a RCRA permit or be in interim status (i.e., be an existing facility that has applied for a permit), even if the facility only receives wastes from generators of between 100 and 1,000 kg per month.

The state rules allow hazardous waste management facilities that receive wastes only from generators of between 200 and 2,000 lbs. per month to operate without a RCRA permit or interim status, if written authorization from the Department is received.

8. Fees:

The federal rules do not include any fees.

The state rules include fees for generators of hazardous waste, to help provide for maintenance of the state's program.

Note: The Department proposes to retain this fee requirement.

Public Availability of Information

Another important set of HSWA-related regulations concerns the availability to the public of information regarding hazardous waste facilities or sites. As amended by HSWA, section 3006(f) of RCRA now specifies that a state may not obtain or maintain final authorization, unless such information is available to the public in substantially the same manner and to the same degree as would be the case if EPA were administering the program. In effect, the state's public information laws and regulations must closely parallel the federal Freedom of Information Act, and EPA's policies and procedures.

EPA requires that states incorporate certain of these procedural matters into statutes or rules, to maintain RCRA authorization. The Department's legal counsel has reviewed the state's public records laws and the Department's policies and procedures. The Department currently has no rules on this subject. Counsel has recommended the adoption of several new rules on this subject, including those required by EPA. Briefly, the proposed new rules provide for the following:

1. The Department must respond to a request for information within 20 days. Failure to respond constitutes a denial of the request.
2. If a request is denied, the requester must be notified in writing of the basis for the denial and informed of the right to appeal.
3. If a claim of confidentiality has been made, and cannot be resolved within 20 days of receipt of a public records request, the Department shall notify the requester that the request is denied until the claim of confidentiality has been resolved.
4. The Department shall consider the reduction or waiver of any fees required to provide copies of information, to the news media, public interest groups or others, if such reduction or waiver serves the public interest.

Technical Corrections to the Definition of Solid Waste (Federal Register, August 20, 1985)

On January 4, 1985, EPA promulgated a final rule which dealt with the question of which materials being recycled (or held for recycling) are solid and hazardous wastes. This rule also provided general and specific standards for various types of hazardous waste recycling activities. EPA issued technical corrections to this rule on April 11, 1985. Since that time, EPA has identified several other provisions that require technical correction or clarification. These rules make those changes.

In summary, the rules specify the following:

1. Discarded hazardous materials used to produce fuel or products that are applied to or placed on the land or which are otherwise contained in fuel or products that are applied to or placed on the land are subject to regulation. Previously it was unclear whether there was any regulatory distinction between materials "produced from" hazardous waste and those "containing" hazardous waste.
2. Fuels produced from the refining of oil-bearing hazardous waste from normal petroleum refining, processing and transportation practices are recyclable materials (i.e., are exempt from most hazardous waste regulations). The rule previously implied that such fuels were exempt only if burned in boilers or industrial furnaces.

3. Oil reclaimed from hazardous waste resulting from normal petroleum refining, processing and transportation practices is recyclable material, and exempt from regulation, if it is refined along with normal process streams at a petroleum refining facility. Previously, the exact scope of this exemption was unclear.
4. Coke that contains hazardous waste from the iron and steel production process is recyclable material. The rule previously implied that this exemption was dependent upon the type of facility in which the coke is burned.
5. Facilities that store recyclable materials before they are recycled are subject to the hazardous waste permit requirements. Only the recycling process itself is exempt from regulation. Previously, the exact scope of this exemption was unclear.

Closure, Post-Closure and Financial Responsibility Requirements (Federal Register, May 2, 1986)

These regulations include a series of technical amendments to the existing standards for owners and operators of hazardous waste treatment, storage and disposal facilities. Many of the amendments conform to a settlement agreement signed by EPA and petitioners in "American Iron and Steel Institute v. U. S. Environmental Protection Agency", renamed "Atlantic Cement Company, Incorporated v. U. S. Environmental Protection Agency". The remainder of the amendments are designed to clarify the regulations and to address issues that have arisen as EPA has implemented the regulations.

The amendments are extensive and many are of a housekeeping nature. However, substantive provisions include the following:

1. Clarification of the contents required in facility closure and post-closure plans. Previously, these requirements were somewhat vague.
2. A new requirement that estimates for closure and post-closure costs must be based on third party costs. Such costs will be substantially higher than first party costs.
3. A new requirement that, in the event of a change in facility ownership or operational control, the new owner or operator must demonstrate financial assurance within six months. Also, the rule specifies that the former owner or operator remains responsible, if the new owner or operator fails to meet this deadline.
4. The terms "active life", "final closure", "partial closure" and "hazardous waste management unit" are defined, as they relate to hazardous waste management facilities.

Clarification of an Existing "K-listed" Waste  
(Federal Register, May 28, 1986 and September 22, 1986).

These regulations clarify the listing as hazardous waste of spent pickle liquor from steel finishing operations (EPA hazardous waste No. K062). The May 28, 1986 regulations specify that the listing applies only to wastes generated by the iron and steel industry and not to other steel finishing operations. The September 22, 1986 regulations specify that the listing applies to finishing operations of all facilities within the iron and steel industry and not just to the finishing operations of plants that produce iron and steel.

Use of Corporate Guarantee for Liability Coverage for Hazardous Waste  
Treatment, Storage and Disposal Facilities (Federal Register, July 11, 1986)

Owners and operators of hazardous waste treatment, storage, and disposal facilities are required to demonstrate, on a per firm basis, liability coverage for sudden accidental occurrences in the amount of \$1 million per occurrence and \$2 million annual aggregate, exclusive of legal defense costs. Owners and operators of surface impoundments, landfills and land treatment facilities are also required to demonstrate, on a per firm basis, liability coverage for nonsudden accidental occurrences in the amount of \$3 million per occurrence and \$6 million annual aggregate, exclusive of legal defense costs.

Financial responsibility can currently be demonstrated through a financial test, liability insurance or a combination of the two. These regulations provide another option - a corporate guarantee. The guarantee is a promise by one corporation to answer for the default of another. As provided in these rules, the guarantor must be the parent corporation of the owner or operator, directly owning at least 50 percent of the voting stock of the corporation that owns or operates the facility; the latter corporation is deemed a "subsidiary" of the parent corporation. Since these rules provide for another alternative, they are considered to be less stringent than the current rules.

In Oregon, however, this new option may not be practical. Oregon insurance laws are such that any corporation wanting to provide this type of guarantee would essentially have to meet all the requirements of being an insurance company. This will likely be a substantial deterrent.

Hearing Summary

Pursuant to public notice, a hearing on these proposed rule amendments was held in Portland, on April 16, 1987. Nine people attended, in addition to Department staff, but no one wished to testify. Accordingly, the staff answered questions and conducted an informal discussion. The Hearing Officer's Report, including a list of the hearing attendees is Attachment II.

The proposed amendments to the small quantity generator rules were discussed by the Department's Hazardous Waste Program Advisory Committee during two meetings on March 2, 1987 and April 6, 1987. The Committee is comprised of representatives from industry, environmental and public interest groups and the public. A Committee membership list is Attachment III. During the April meeting, the Committee as a whole agreed to support the proposed amendments, but some members expressed concern that deletion of the existing state rules could result in an increase in the amount of hazardous waste going to local solid waste disposal sites.

The Committee asked the staff to prepare a written statement, based on these discussions, and to enter the statement into the hearing record. A statement was drafted and mailed to the Committee for comment. Six Committee members called to say that the statement was acceptable as drafted. One Committee member, Sara Laumann of OSPIRG, called to say that she did not agree with the Committee's recommendation to support deletion of the existing state rules. She asked that her dissenting vote be noted in this report. The remaining six Committee members did not comment on the draft statement. Accordingly, the Committee's statement appears in the Hearing Officer's Report (Attachment II) as drafted.

The Department also received written comments from advisory committee member Jean Meddaugh, on behalf of the Oregon Environmental Council (OEC). Ms. Meddaugh stated that OEC supports the proposed rule package, except for deletion of the existing small quantity disposal requirements. OEC is concerned about the potential environmental impact of allowing exempt small quantity generators to use local domestic waste landfills. OEC suggests that the Department establish programs for dealing with small quantities of hazardous waste that include both education and collection elements.

### Analysis and Alternatives

The single issue that has arisen concerning these proposed rule amendments is the proposed deletion of the state's existing disposal restrictions on small quantities of hazardous waste. Specifically, the state's rules require that exempt small quantity generators (i.e., those who generate less than 220 lbs./month) must obtain the permission of the refuse collector or disposal site operator, prior to disposing of their wastes in a local solid waste disposal site. Also, such wastes must be securely contained, to protect refuse collection and disposal workers and others who could come into contact with the waste. In contrast, the new federal rules allow exempt small quantity generators to dispose of their hazardous wastes, in solid wastes disposal sites licensed or permitted by the state, without the additional requirements to contain the wastes or to obtain prior permission.

Both the Department's Hazardous Waste Program Advisory Committee and the Oregon Environmental Council expressed concern about the small quantity disposal issue. However, both groups also indicated acceptance of alternatives other than simply retaining the state's current more stringent

regulations. The OEC specifically recommended an education program and some sort of state-supported, small quantity collection program. The advisory committee's recommendations were more general, indicating only that the Department should look into the problem and develop appropriate alternatives.

The Department clearly understands and agrees with the concerns of its advisory committee, the OEC and others with respect to the disposal of small quantities of hazardous waste. Ideally, the Department would rather not see any hazardous waste going to solid waste disposal sites. To that end, we are committed to working with industry and local government to develop alternatives such as waste reduction programs, waste exchanges and small quantity collection programs. In the interim, until such options are available, there are basically two alternatives: adopt the new federal rules and repeal the existing state rules or adopt the new federal rules and retain those additional state standards which are more stringent.

It is currently the Department's intent to delete existing state rules and to adopt new federal rules when the two sets of rules are substantially equivalent. The Department does not wish to be more stringent than the federal program, unless there is a compelling reason to be more stringent. In this case, the existing state rules are more stringent than the new federal rules. By requiring the approval of the refuse collector or disposal site operator, the state rules in effect prohibit the disposal of any hazardous waste in non-hazardous waste disposal sites. Refuse collectors and facility operators have repeatedly indicated that they will not knowingly accept such wastes. In the Department's view, there is no clear evidence that such more stringent rules are necessary and we do not believe that the existing rules are enhancing control of the disposal of hazardous waste in solid waste disposal sites, for the following reasons:

1. The existing state rules are difficult for the Department to enforce. Exempt small quantity generators are considered a low priority, because of the small amounts of waste they generate. They are not inspected by the Department's staff, except in response to citizen's complaints. Therefore, whatever enforcement has occurred has primarily been by refuse collectors and disposal site operators. They have rejected people who have asked for permission and have rejected any suspicious looking wastes, including containerized wastes, they happened to see. These practices are expected to continue, regardless of whether or not the state repeals its rules; and
2. The existing state rules have tended to penalize conscientious, exempt small quantity generators who have containerized their wastes and sought permission to dispose of it. For the most part, these actions have resulted in the rejection of their wastes by refuse collectors or disposal site operators. Meanwhile, unscrupulous or uninformed exempt small quantity generators have illicitly disposed of their wastes in solid waste disposal sites, sewer systems or in illegal, non-permitted disposal sites.

The Department and EPA believe that small quantities of hazardous waste can be safely managed at certain, select solid waste disposal sites. Under the



authority of ORS 466.100(3), the Department may restrict the disposal of hazardous waste, from exempt small quantity generators, to only those permitted solid waste disposal sites which the Department finds can safely manage such wastes. Some sites, by virtue of their location, design and operation, are clearly more suitable for the disposal of small quantities of hazardous waste than are others. As a condition of issuing a permit to a solid waste disposal site, the Department can specify whether or not exempt small quantities of hazardous waste may be accepted for disposal. Repeal of the current rules, requiring disposal site operator's permission, would allow exempt small generators to legally send wastes to those selected sites. While admittedly not an ideal solution, for the interim, the Department believes this to be a better alternative than retaining the existing rules.

Federal regulations require that all of today's proposed rule amendments, except for the small quantity generator rules, be adopted by July 1, 1987, if the Department is to retain authorization to manage the hazardous waste program. The small quantity generator rules do not have to be adopted until July 1, 1989. Since the only comments the Department received concern the small quantity generator rules, the Department recommends that the Commission adopt the remainder of the proposed rule amendments today. With respect to the small quantity generator rules, the Commission has three alternative courses of action as follows:

1. Adopt the new federal rules and delete all of existing state rules, as the Department has proposed;
2. Adopt the new federal rules and delete all of the existing state rules, except for the requirements that the wastes be properly contained and that permission be obtained prior to disposal in a solid waste disposal site; or
3. Decline to adopt the new federal rules or to repeal any of the existing state rules at this time and direct the Department to return at a later date with more information.

The Department recommends alternative number one, in order to avoid duplication, inconsistency and confusion between the state and federal rules and because we believe there is currently no compelling need for more stringent state rules.

#### Summation

1. The State of Oregon currently has final authorization to operate a comprehensive hazardous waste management program, in lieu of a federally-operated program.
2. In order to maintain final authorization, federal law requires that the state adopt new federal requirements and prohibitions, within specified time frames.

3. The Department is now proposing the adoption of some new federal rules by reference, including rules pertaining to small quantity generators. Also, the adoption of new state rules concerning public availability of information. In addition, the Department proposes the repeal of existing state small quantity generator rules.
4. A public hearing was held on April 16, 1987. No one testified. Written comments were received from the Oregon Environmental Council and the Department's Hazardous Waste Program Advisory Committee. The commentators generally supported the proposed rule amendments, but expressed concern about the proposed relaxing of standards for exempt small quantity generators.
5. The Department recognizes the potential problems with disposal of wastes from exempt small quantity generators and is committed to working with industry and local government to address this issue. However, the Department believes it is important to have consistency between the state and federal rules and believes there is currently no compelling need to retain state small quantity generator rules that are more stringent than the new federal rules.
6. The Commission is authorized to adopt hazardous waste management rules by ORS 466.020 and 466.085.

Director's Recommendation

Based upon the Summation, it is recommended that the Commission adopt the proposed amendments to the hazardous waste management rules, OAR Chapter 340, Divisions 100-102.



Fred Hansen

- Attachments
- I. Statement of Need for Rulemaking
  - II. Hearing Officer's Report
  - III. Hazardous Waste Program Advisory Committee Membership List
  - IV. Proposed Rule Amendments, OAR 340, Divisions 100-102
  - V. Federal Registers (Chronological Order)

Bill Dana:m  
SM977  
229-6015  
May 12, 1987

BEFORE THE ENVIRONMENTAL QUALITY COMMISSION  
OF THE STATE OF OREGON

IN THE MATTER OF AMENDING )  
OAR CHAPTER 340, )  
DIVISIONS 100 TO 105 ) STATEMENT OF NEED FOR  
RULEMAKING

STATUTORY AUTHORITY:

ORS 466.020 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 466.085 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 (RCRA).

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 adoption of new federal rules is required, for the Department to maintain 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 to 105.

FISCAL AND ECONOMIC IMPACT:

The new, more stringent federal regulations will increase the costs of hazardous waste management in this state, including costs to small businesses. However, any increased costs associated with these new standards will occur irrespective of the Department's proposed rule amendments. The new standards for small quantity generators, and for owners and operators of hazardous waste management facilities, have already been promulgated by the U.S. Environmental Protection Agency (EPA). In the event that the state does not also adopt these new standards, EPA will enforce them.

ZF1939.1



## *Environmental Quality Commission*

811 SW SIXTH AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

Attachment II  
Agenda Item I  
May 29, 1987 EQC Meeting

TO: Environmental Quality Commission

FROM: William H. Dana, Hearing Officer

SUBJECT: Report on Public Hearing on April 16, 1987,  
Concerning Proposed Amendments to the Hazardous  
Waste Management Rules, OAR Chapter 340,  
Divisions 100-102.

### Summary of Procedure:

Pursuant to public notice, a public hearing was convened at 9:00 a.m., on April 16, 1987, in the Department's offices at 811 S.W. Sixth Avenue in Portland. The purpose of the hearing was to receive testimony concerning proposed amendments to the hazardous waste management rules. Nine people attended the hearing, in addition to Department staff. An attendance list is attached.

### Summary of Testimony:

No one wished to testify at the hearing. As a result, Department staff used the opportunity to answer questions and conduct an informal discussion about the proposed rule amendments.

Written testimony was received from the Department's Hazardous Waste Program Advisory Committee and from Ms. Jean Meddaugh, representing the Oregon Environmental Council (OEC). Copies of the written testimony are attached. A summary of the testimony is as follows:

Hazardous Waste Program Advisory Committee - The committee generally supports the proposed amendments, but expressed some concern that the proposed deletion of the existing state small quantity generator rules could result in an increase in the amount of hazardous waste going to local solid waste disposal sites. The committee urges the Department to investigate this issue and consider regulatory alternatives as necessary. One committee member, Sara Laumann of OSPIRG, called during the comment period to say that she did not agree with the Committee's recommendation to support deletion of the existing state rules. She asked that her dissenting vote be noted in the hearing record.

Attachment II  
Agenda Item I  
May 29, 1987 EQC Meeting

Jean Meddaugh - Ms. Meddaugh states that OEC supports the proposed amendments, except for the deletion of the existing state small quantity disposal restrictions. OEC is concerned about the potential environmental impact of allowing small quantities of hazardous waste into local solid waste disposal sites. Ms. Meddaugh suggests that the Department consider alternative ways of regulating these wastes. She also suggests that the Department establish a program for dealing with small quantity generators which includes both education and collection elements. OEC strongly supports adoption of the proposed rules on public availability of information.

Respectfully submitted by,

*William H. Dana*

William H. Dana  
Hearings Officer

Attachments:   1. Hearing Attendance List  
                  2. Statement from the Department's  
                  Hazardous Waste Program Advisory Committee  
                  3. Letter from Ms. Jean Meddaugh

ZF1939.2

ATTENDANCE LIST

Date: 4/16/87

Hearing: Proposed Amendments to Hazardous Waste Rules, OAR 340, Divisions 100-102

NAME & ADDRESS

REPRESENTING

Peter Ayala

Taylor Lbr Trct, Sheridan, OR

James Billings

Chem-Security Systems Inc.

Ronald Berg

Assoc Chemists Inc.

Vince N. Rosero

Southern Pacific Pipe Lines, Inc.

Coquaine P. Wellson

PGE

GARY HATTN

HATTN AND ASSOCIATES

JOSE PHILLIPS <sup>ROB 1055</sup> ROSEBURG, ORE 97470

ROSEBURG FOREST PRODUCTS CO.

Jim Brown

Boyer Center

Perry L. Stayton <sup>P.O. Box 1337</sup> Vancouver, WA 98666

Crowley Environmental Services

# OREGON ENVIRONMENTAL COUNCIL

2637 S.W. Water Avenue, Portland, Oregon 97201

Phone: 503/222-1963

Hazardous & Solid Waste Division  
Dept. of Environmental Quality

RECEIVED  
APR 20 1987

Department of Environmental Quality  
Hazardous and Solid Waste Division  
Attn: Bill Dana  
811 SW 6th Ave.  
Portland, OR 97204

April 17, 1987

Dear Mr. Dana,

With regard to the Department's proposed deletion of state small quantity generator rules and adoption of the new federal rules, OEC supports this change except for the rules regulating disposal requirements. We are concerned that exempt small quantity generators will now be allowed to use domestic waste landfills. While we recognize the value of consistency with federal regulations, we are concerned about the environmental impact of such a decision. It is imperative that the Department consider alternative methods of bringing these hazardous waste generators into the regulatory framework.

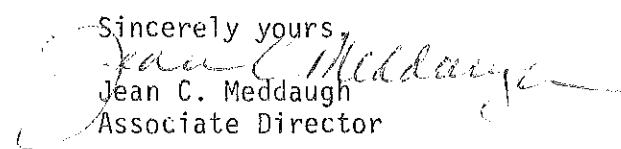
These hazardous waste generators will be caught in a dilemma because they will be told to dispose of their wastes in domestic landfills, yet the operators of these landfills will not knowingly accept such wastes. DEQ should establish a program which includes both education and collection elements. Such a program would benefit both the regulated community and the general health and welfare.

With regard to the proposed new rules on Public Availability of Information, OEC strongly supports their adoption.

OEC also supports the adoption of the Technical Corrections to the Definition of Solid Waste, Closure, Post-Closure and Financial Responsibility Requirements, Certification of Existing "K-Listed" Waste, and Use of Corporate Guarantee for Liability Coverage for Hazardous Waste TSD Facilities.

Thanking you for the opportunity to submit comments, I remain,

Sincerely yours,

  
Jean C. Meddaugh  
Associate Director





# Department of Environmental Quality

811 S.W. SIXTH AVENUE, PORTLAND, OREGON 97204 PHONE: (503) 229-5696

TO: Environmental Quality Commission      DATE: April 16, 1987

FROM: Hazardous Waste Program Advisory Committee

SUBJECT: Statement on Small Quantity Generator Rules

The Hazardous Waste Program Advisory Committee has reviewed and discussed the Department's proposed amendments to the hazardous waste rules in OAR Chapter 340, Divisions 100-102. The Committee recognizes the need for consistency between the federal and state rules and generally supports the adoption of these proposed amendments. However, the Committee notes that, by repealing the current state small quantity generator rules and adopting the new federal rules, there is at least a potential for an increase in the amount of hazardous waste going to local solid waste disposal sites. Accordingly, in supporting the adoption of the federal rules, the Committee urges the Department to look into the issue of how exempt small quantity generators are managing their wastes and to consider regulatory alternatives under either the hazardous waste program or the solid waste program. The Department should not let the wastes from these generators simply drop out of the system.

WHD:b  
ZB6612

Hazardous & Solid Waste Division  
Dept. of Environmental Quality

**R E C E I V E D**  
APR 16 1987

HAZARDOUS WASTE PROGRAM ADVISORY COMMITTEE  
MEMBERSHIP LIST

March 26, 1987

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ZB6370

Before the Environmental Quality Commission of the State of Oregon

In the Matter of Amending                    )     Proposed Amendments  
OAR 340, Divisions 100-105                )

Unless otherwise indicated, material enclosed in brackets [ ] is proposed to be deleted and material that is underlined is proposed to be added.

1. Rule 340-100-002 is proposed to be amended as follows:

340-100-002 (1) Except as otherwise modified or specified by OAR Chapter 340, Divisions 100 to 106, the rules and regulations governing the management of hazardous waste, including its generation, transportation by air or water, treatment, storage and disposal, prescribed by the United States Environmental Protection Agency in Title 40 Code of Federal Regulations, Part 260 to 266, 270 and Subpart A of 124, [and] amendments thereto promulgated prior to May 1, 1985, and amendments listed below in section (2) of this rule 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.] 466.005 to 466.080, and 466.090 to 466.215.

(2) In addition to the regulations and amendments promulgated prior to May 1, 1985, as described in section (1) of this rule, the following amendments to Title 40 Code of Federal Regulations, Part 260 to 266, 270 and Subpart A of 124, as published in volumes 50 and 51 of the Federal Register (FR), are adopted and prescribed by the Commission to be observed by all persons subject to ORS 466.005 to 466.080, and 466.090 to 466.215:

(a) Technical corrections to the definition of solid waste, in 50 FR 33542-43 (August 20, 1985).

(b) Amendments applicable to generators of between 100 kg (220 lbs) and 1,000 kg (2,200 lbs) of hazardous waste in a calendar month, in 51 FR 10174-76 (March 24, 1986).

(c) Amendments pertaining to closure and post-closure care and financial responsibility for hazardous waste management facilities, in 51 FR 16443-59 (May 2, 1986).

(d) Amendments clarifying the listing for spent pickle liquor from steel finishing operations, in 51 FR 19322 (May 28, 1986) and 51 FR 33612 (September 22, 1986).

(e) Amendments pertaining to liability coverage for hazardous waste management facilities, in 51 FR 25354-56 (July 11, 1986).

2. A New Rule, 340-100-005, is proposed to be Adopted as Follows:

340-100-005 (1) Upon request, the Department shall make available Department records regarding facilities and sites for the treatment, storage, and disposal of hazardous waste, in accordance with ORS 192.410 through 192.500.

(2) Within twenty (20) days of receipt of a request for records, under section (1) of this rule, the Department shall either grant or deny the request. If the Department fails to act within twenty (20) days, the request shall be deemed to be denied.

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(3) In the event that a request for records is denied, the Department shall notify the requestor, in writing, of the basis for the denial and of the requestor's right to appeal the denial to the Attorney General of the State of Oregon, as provided in ORS 192.450.

(4) In the event that a claim of confidentiality has been made, under OAR 340-100-003, and such claim cannot be resolved within twenty (20) days of receipt of a request for records, the Department shall notify the requestor within that 20-day period that the request is denied until the claim of confidentiality can be resolved.

(5) The Department shall consider the reduction or waiver of any fees required to provide copies of records, if the records are requested by the news media, a non-profit public interest group, or any other person or entity, and the requestor provides a written statement in support of reduction or waiver. The Department may reduce or waive fees, if the Department determines that reduction or waiver serves the public interest, taking into consideration the magnitude of the request, the Department's resources, whether the information would not be obtainable by the requestor without the reduction or waiver and any other factors relevant to the public interest.

3. Rule 340-101-005, special requirements for hazardous waste produced by small quantity generators, is proposed to be deleted as follows:

[Special requirements for hazardous waste produced by small quantity generators.]

[340-101-005 (1) The provisions of 40 CFR 261.5(b) and 261.5(g) are deleted and replaced with sections (2), (3), (4) and (5) of this rule.

(2) Except for those wastes identified in 40 CFR 261.5(e) and (f), a small quantity generator's hazardous wastes are subject to regulation under Divisions 100 to 108 only to the extent of generator compliance with the requirements of OAR 340-101-005(3) and the owner or operator of a treatment or storage facility's compliance with the requirements of OAR 340-101-005(4).

(3) 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 section (5) of this rule: 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 section (5) of this rule:

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(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.

(4) The owner or operator of an off-site facility that treats or stores hazardous waste obtained only from small quantity generators in amounts greater than 200 pounds but less than 2000 pounds of hazardous waste in a calendar month must obtain a letter of authorization from the Department as required by rule 340-105-100. Owners or operators of off-site facilities that treat or store more than 2000 pounds per calendar month are fully subject to regulation under Divisions 100 to 108.

(5) The following small quantity exemption levels shall be used for purposes of section (3) of this rule:

<u>Hazardous Waste No.</u>	<u>Small Quantity Disposal Exemption (lb. per month)</u>	<u>Hazardous Waste No.</u>	<u>Small Quantity Disposal Exemption (lb. per month)</u>
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
D004	10	F006	200
D005	200	F007	10
D006	10	F008	10
D007	200	F009	10
D008	200	F010	10
D009	10	F011	10
D010	200	F012	10
D011	200	F024	200
D012	10	F020	2
D013	10	F021	2
D014	10	F022	2
D015	10	F023	2
D016	10	F026	2
D017	10	F027	2
		F028	10

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

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U001 to U999 - Commercial chemical products or intermediates	10
U001 to U999 - Process waste as defined in 340-101-040(2)(b)	10
X001 - Pesticide waste as defined in 340-101-045	10
All F, K, U and X listed spill cleanup	2000]

4. Rule 340-102-041 is proposed to be amended as follows:

340-102-041 (1) The provisions of this rule replace the requirements of 40 CFR 262.41.

(2) A generator [who ships his] of hazardous waste [off-site must submit to the Department Quarterly Reports of the waste shipped] who is required by 40 CFR 262.20 to use a manifest when shipping wastes off-site, shall submit Quarterly Reports to the Department:

(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)]. shall contain at least the following information:

(i) A copy of the completed manifest for each shipment made during the calendar quarter; and

(ii) A listing of all additional waste generated during the quarter that was sent off-site without a manifest or was used, reused or reclaimed on-site. The listing shall include at least:

(I) The generator's name and address;

(II) The generator's U.S. EPA/DEQ Identification Number;

(III) Identification of the calendar quarter in which the waste was generated;

(IV) The type and quantity of each waste generated, by EPA code number; and

(V) The disposition of each waste, including the identity of the receiving party for wastes shipped off-site and handling method.

(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 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."

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- (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.

5. Rule 340-102-044 is proposed to be added as follows:

340-102-044 The provisions of 40 CFR 262.44 are deleted.

6. Rule 340-105-100, letter of authorization for small-quantity management facilities, is proposed to be deleted as follows:

[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.]



## 40 CFR Parts 261 and 263

[SWH-FRL-2033-0]

**Hazardous Waste Management System; Definition of Solid Waste; Technical Corrections****AGENCY:** Environmental Protection Agency.**ACTION:** Technical Corrections to the Definition of Solid Waste Final Rulemaking.

**SUMMARY:** On January 4, 1985, EPA promulgated a final rule which dealt with the question of which materials being recycled (or held for recycling) are solid and hazardous wastes. This rule also provided general and specific standards for various types of hazardous waste recycling activities. EPA issued technical corrections to this rule on April 11, 1985. Since that time, EPA has identified several other provisions that require technical correction or clarification. This notice makes these changes and modifies the previous publication accordingly.

**EFFECTIVE DATE:** These corrections become effective on August 20, 1985.

**FOR FURTHER INFORMATION CONTACT:** RCRA Hotline, toll free, at (800) 424-9346 or at (202) 382-3000. For technical information contact Matthew A. Straus, Office of Solid Waste [WH-562B], U.S. Environmental Protection Agency, 401 M St. SW., Washington, D.C. 20460, (202) 475-8551.

**SUPPLEMENTARY INFORMATION:****I. Technical Corrections to Rule****A. Interim Exemption for Hazardous Waste-Derived Fuels Produced From Wastes From Petroleum Refining, Production, or Transportation**

On January 4, 1985, EPA amended its existing definition of solid waste, 50 FR 614. This rulemaking defined which materials being recycled (or held for recycling) are solid wastes. EPA promulgated certain technical amendments to these rules on April 11, 1985, 50 FR 14216. One of these corrections concerned the regulatory status of hazardous waste-derived fuels produced from oil-bearing hazardous wastes from petroleum refining, production, and transportation. The technical amendment clarified that such fuels are presently exempt from regulation, pending a substantive decision as to whether regulation is necessary to protect human health and the environment. See 50 FR 14218; see also 50 FR 26309, June 26, 1985, likewise stating that such fuels are presently exempt from regulation.

There is a drafting error in the April 11 technical rule, however, in that the interim exemption was placed in § 266.30 of the regulations. This provision applies to hazardous waste fuels burned in boilers or industrial furnaces; thus, the interim exemption would appear to apply only when the hazardous waste-derived fuel from petroleum refining is to be burned in these types of devices. But fuels can be burned in other devices—in certain space heaters or engines not of integral design, for example—and the Agency intended that these hazardous waste-derived fuels be exempt without regard for the type of unit in which they are burned. We consequently are placing the interim exemption in § 261.6(a)(3), which provision exempts recyclable materials from regulation. These particular hazardous waste fuels thus are presently exempt from regulation without regard for the nature of the device in which they are burned.

This exemption is also applicable to oil reclaimed from petroleum refining hazardous wastes prior to insertion or reinsertion into the petroleum refining process (and, as already stated in the preceding paragraph, to fuels resulting from refining of the reclaimed oil). Such reclaimed oil, *i.e.*, oil reclaimed from petroleum refining hazardous waste, is not presently subject to regulation. This leaves in place the regulatory scheme of the May 19, 1980 rules, whereby such reclaimed oils are exempt from regulation. See 50 FR 647/3. The Agency is determining if and how to regulate such reclaimed oil as part of the rulemaking on hazardous waste fuels proposed on January 11, 1985. See 50 FR 1684.

There are two further points of clarification. As drafted in the April 11 notice, the interim exemption applied to all fuels exempt from the labeling requirements of RCRA section 3004(r). Section 3004(r) applies to hazardous waste-derived fuels produced from, or otherwise containing, oil-bearing hazardous wastes from petroleum refining, production, and transportation that are reintroduced into particular parts of the petroleum refining process. Questions have been raised about the precise scope of some of the terms in section 3004(r). On reflection, EPA does not believe it necessary to refer to section 3004(r) to express its intent to provide an interim exemption. Consequently, we are revising the interim exemption to refer to fuels from petroleum refining that include as ingredients (*i.e.*, that are produced from or otherwise contain) oil-bearing hazardous wastes from normal petroleum refining, production, or

transportation practices. We note that these hazardous wastes can be generated off-site, and the resulting fuels are covered by the interim exemption. (Cf. section 3004(r)(3) which also is not limited to wastes generated on-site.) We also note, as we did on April 11 (50 FR at 14218/2), that these wastes must be indigenous to the petroleum refining, production, or transportation process, and so would not include such wastes as spent pesticides.

Second, certain persons have raised the question of whether there is any regulatory distinction between fuels "produced from" hazardous waste and those "containing" hazardous waste, as these terms are used in amended 40 CFR 261.2(c)(2) (B) and (C). The Agency intends no such distinction. Nor did the Congress. See RCRA amended section 3004(q), noting that hazardous waste fuels are those produced from hazardous waste, or that "otherwise contain" hazardous waste (emphasis added). Fuels produced from hazardous waste thus are a subset of the class of fuels containing hazardous waste. EPA's amended definition of secondary materials that are wastes when burned for energy recovery is coextensive with this statutory provision. 50 FR 630 (January 4, 1985). The Agency also stated repeatedly in the preamble to the amended definition of solid waste that it claimed authority over all hazardous waste-derived fuels, without regard for how they are generated. Thus, EPA indicated that any fuels that "include hazardous wastes as ingredients" are themselves wastes; that any fuels "derived from these [hazardous] wastes [are] defined as solid wastes"; and that when hazardous wastes are "incorporated into fuels . . . fuels containing these wastes . . . remain solid wastes." 50 FR at 625 n.12, 629/2, and 636/1. Consequently, when a person uses a hazardous waste as a component in the fuel process, the output of the process is defined as a waste (assuming listed wastes are involved, or that the waste-derived fuel exhibits a hazardous waste characteristic). (The question of if and how to regulate such wastes remains for future rulemakings.)

The Agency also notes that these same principles apply with respect to waste-derived products that are used in a manner constituting disposal—they are wastes when a hazardous waste is used as a component of the process that produces them. See, e.g., 50 FR 627-628 (rejecting a standard based on simple mixing) and amended § 268.20(b) (EPA has jurisdiction over hazardous waste-derived products even where incorporated wastes have been

chemically reacted and are not separable by physical means).

In order to eliminate any possible uncertainty on this point, however, the Agency has decided to revise the language of § 261.2(c)(1) (use constituting disposal) and (c)(2) (burning for energy recovery) to recite the language from the Hazardous and Solid Waste Amendments of 1984 (HSWA). Thus, (a) hazardous secondary materials used to produce a fuel or used to produce a material that is applied to the land are defined as wastes; and (b) hazardous secondary materials otherwise contained in such waste-derived products are defined as wastes. In both cases, the waste-derived product is defined as a waste (assuming it too is hazardous as provided in § 261.3) and is potentially subject to regulation under Subtitle C of RCRA.

*B. Interim Exemption for Hazardous Waste-Derived Fuels From Iron and Steel Production*

On April 11, 1985, EPA also clarified that hazardous waste-derived coke from the iron and steel industry is not subject to regulation when the only hazardous wastes used in the coke-making process and from iron and steel production. This interim exemption was also placed in § 266.30(b) and so is limited by the type of unit in which the waste-derived coke is burned. To avoid any unintended limitation on the scope of this interim exemption, we are now placing it in § 261.6(a)(3).

*C. Regulation of the Process of Recycling*

EPA stated in the preamble to the final rule that EPA does not presently regulate the actual process of recycling (with the exception of certain uses constituting disposal), only the storage, transport, and generation that precedes it. 50 FR 642/1. The Agency included this thought in §§ 261.6(c)(2) and 266.35 of the regulations, but forgot to include it in § 261.6(c)(1). We consequently are amending § 261.6(c)(1) to state that the enumerated requirements only apply to recyclable materials stored before they are recycled.

*D. Correction to Subpart G of Part 266*

Subpart G of Part 266 contains rules for spent lead-acid batteries being reclaimed. Due to a typographical error, this provision was misnumbered as "§ 266.30". The correct numbering is § 266.80. Today's notice corrects this error.

*E. Clarification of Part A Permit Requirements*

In the April 11, 1985 notice, EPA indicated that facilities located in States which do not have finally authorized or interim authorized permit programs need to submit new or amended Part A permit applications to EPA by July 5, 1985. 50 FR 14217/3. Although accurate for States without any EPA authorization, this statement was not correct with respect to Phase I interim authorized States. If a State has any form of authorization, its universe of wastes (as approved by EPA) defines the universe of RCRA regulated entities within the State. Program Implementation Guidance 82-1, November 20, 1981. Thus, a person managing a waste that is not yet part of such an authorized State's universe of hazardous waste is not presently required to submit a Part A application. The new or amended application would have to be submitted when the State's universe of wastes has been amended to reflect changes to Part 261 and has been authorized by EPA.

**II. 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 in 40 CFR Parts 261 and 266**

Hazardous wastes, Recycling.

Dated: August 12, 1985.

Allyn M. Davis,

*Acting Assistant Administrator for Solid Waste and Emergency Response.*

For the reasons set out in the preamble, Title 40 of the Code of Federal Regulations is amended as follows:

**PART 261—IDENTIFICATION AND LISTING OF HAZARDOUS WASTE**

1. The authority section for Part 261 continues to read as follows:

**Authority:** Secs. 1008, 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. 6902, 6912(a), 6921, and 6922).

2. In § 261.2(c)(1)(i), paragraph (B) is revised to read as follows:

**§ 261.2 Definition of solid waste.**

\* \* \* \* \*  
(c) \* \* \*

(1) \* \* \*

(i) \* \* \*

(B) Used to produce products that are applied to or placed on the land or are otherwise contained in products that are applied to or placed on the land (in which cases the product itself remains a solid waste).

\* \* \* \* \*

3. In § 261.2(c)(2)(i), paragraph (C) is removed and paragraph (B) is revised to read as follows:

**§ 261.2 Definition of solid waste.**

\* \* \* \* \*

(c) \* \* \*

(2) \* \* \*

(i) \* \* \*

(B) Used to produce a fuel or are otherwise contained in fuels (in which cases the fuel itself remains a solid waste).

\* \* \* \* \*

4. In § 261.6(a)(3), paragraphs (v), (vi), and (vii) are added to read as follows:

**§ 261.6 Requirements for recyclable materials.**

\* \* \* \* \*

(a) \* \* \*

(3) \* \* \*

(v) Fuels produced from the refining of oil-bearing hazardous wastes along with normal process streams at a petroleum refining facility if such wastes result from normal petroleum refining, production, and transportation practices;

(vi) Oil reclaimed from hazardous waste resulting from normal petroleum refining, production, and transportation practices, which oil is to be refined along with normal process streams at a petroleum refining facility; or

(vii) Coke from the iron and steel industry that contains hazardous waste from the iron and steel production process.

\* \* \* \* \*

5. In § 261.6(c) paragraph (1) is amended to read as follows:

**§ 261.6 Requirements for recyclable materials.**

\* \* \* \* \*

(c)(1) Owners or operators of facilities that store recyclable materials before they are recycled 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. (The recycling process itself is exempt from regulation.)

\* \* \* \* \*

**PART 266—STANDARDS FOR THE MANAGEMENT OF SPECIFIC HAZARDOUS WASTES AND SPECIFIC TYPES OF HAZARDOUS WASTE MANAGEMENT FACILITIES**

6. The authority citation for Part 266 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).

7. Section 266.30(b) is amended by deleting paragraphs (b)(3) and (b)(4).

8. FR Doc. 85-3 published in the Federal Register of January 4, 1985 (50 FR 614), is corrected by changing the section number "266.30" under Subpart G to "266.80" on page 667.

[FR Doc. 85-19708 Filed 8-19-85; 8:45 am]

BILLING CODE 6560-50-M

**40 CFR Part 799**

[OPTS-42012B; TSH-FRL 2815-5b]

**Identification of Specific Chemical Substance and Mixture Testing Requirement; Diethylenetriamine**

**Correction**

In FR Doc. 85-12422, beginning on page 21398, as Part III, in the issue of Thursday, May 23, 1985, make the following correction:

On page 21412, second column, § 799.1575(c)(2)(i)(C), the fifth line should have read: "section or in the *in vivo* cytogenetics test conducted pursuant to paragraph (c)(2)(i)(B) of this section produces a positive result."

BILLING CODE 1505-01-M

**FEDERAL COMMUNICATIONS COMMISSION**

**47 CFR Parts 2 and 97**

**Modification of Footnote US275 to the Table of Frequency Allocations**

**AGENCY:** Federal Communications Commission.

**ACTION:** Order.

**SUMMARY:** The Federal Communications Commission amends Parts 2 and 97 of its Rules to prohibit secondary amateur operations in the 902-928 MHz band in the White Sands Missile Range. This action will provide protection to essential primary radiolocation and control operations at White Sands Missile Range.

**EFFECTIVE DATE:** September 29, 1985.

**ADDRESS:** Federal Communications Commission, 2035 M Street NW., Washington, D.C. 20554.

**FOR FURTHER INFORMATION CONTACT:** Mr. Fred Thomas, Office of Science and Technology, 1919 M Street NW., Washington, D.C. 20554, (202) 653-8162.

**SUPPLEMENTARY INFORMATION:**

**List of Subjects**

47 CFR Part 2

Frequency allocations.

47 CFR Part 97.

Amateur radio.

**Order**

In the matter of amendment of parts 2 and 97 of the Commission's rules to prohibit amateur use of the 902-928 MHz band at White Sands Missile Range in southern New Mexico.

Adopted: August 5, 1985.

Released: August 15, 1985.

By the Commission.

1. This action restricts amateur operations in the 902-928 MHz band in the vicinity of White Sands Missile Range. In the Second Report and Order of General Docket 80-739, Implementation of the Final Acts of the 1979 WARC, the Commission allocated the 902-928 MHz band to the amateur service on a secondary basis; it allocated the band on a primary basis for Government radiolocation and for industrial, scientific and medical applications.<sup>1</sup> This band has recently been added by the Report and Order in PR Docket 84-460 to the frequencies listed in Part 97 as being available for amateur use.<sup>2</sup> However, the Department of the Army has informed the Commission that several critical radiolocation operations, including tracking and control operations of unmanned aircraft, require the use of frequencies in the 902-928 MHz band at the White Sands Missile Range in New Mexico and that amateur operations in this area could impair or seriously disrupt these operations. Therefore, the Army has requested that the Commission place restrictions on amateur operations in the 902-928 MHz band around the White Sands area.

2. In order to protect these critical military operations we are modifying footnote US275 to the Table of Frequency Allocations, § 2.106 of the

<sup>1</sup> See Second Report and Order in General Docket No. 80-739 FCC 83-511, 49 FR 2357 (adopted November 8, 1983).

<sup>2</sup> See Report and Order in PR Docket No. 84-460 FCC 85-460 (adopted August 9, 1985).

Commission's Rules, and modifying § 97.7 of the Commission's Rules to restrict amateur operations in this band. The restrictions are as follows: In the band 902-928 MHz the amateur service is prohibited in the area of Texas and New Mexico bounded by latitude 31°41' N. on the south, longitude 104°11' W. on the east, latitude 34°30' N. on the north and longitude 107°30' W. on the west; in addition, outside this area but within 150 miles of these boundaries of White Sands Missile Range, New Mexico, the service is limited to a maximum peak envelope power output of 50 watts from the transmitter. The necessary amendments to Sections 2.106 and 97.7 of the Commission's Rules are contained in the Appendix.

3. In accordance with section 553 of the Administrative Procedures Act, which excludes matters involving military functions from the notice process (U.S.C. 553(a)(1)), no Notice of Proposed Rule Making will be issued in this matter.

4. Accordingly, it is ordered, that §§ 2.106 and 97.7 are amended as set forth in the Appendix. Authority for this action is contained in section 4(i) and 303(r) of the Communications Act of 1934, as amended. These amendments become effective September 29, 1985.

5. Point of contact on this matter is Fred Thomas, (202) 653-8162.

Federal Communications Commission,  
William J. Tricarico,  
Secretary.

**Appendix**

Parts 2 and 97 of Chapter I of Title 47 of the Code of Federal Regulations are amended as follows:

The authority citations in Parts 2 and 97 continue to read:

Authority: Secs. 4, 303, 48 Stat. 1066, 1082 as amended; 47 U.S.C. 154, 303.

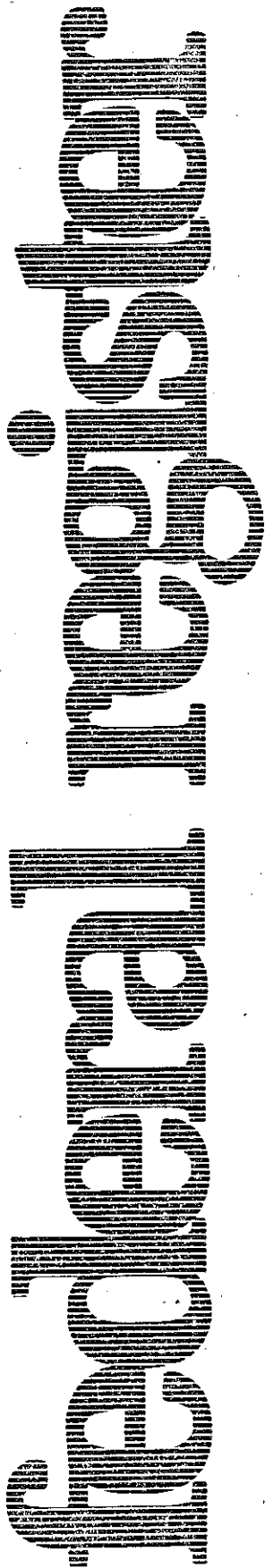
**PART 2—FREQUENCY ALLOCATIONS AND RADIO TREATY MATTERS; GENERAL RULES AND REGULATIONS**

Section 2.106 is amended by revising the text of footnote US275 as follows:

**§ 2.106 Table of frequency allocations.**

\* \* \* \* \*  
US275 The band 902-928 MHz is allocated on a secondary basis to the amateur service subject to not causing harmful interference to the operations of Government stations authorized in this band or to Automatic Vehicle Monitoring (AVM) systems. Stations in the amateur service must tolerate any interference from the operations of industrial, scientific and medical (ISM) devices, AVM systems and

Monday  
March 24, 1986



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**Part II**

**Environmental  
Protection Agency**

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**40 CFR Parts 260, 261, 262, 263, 270,  
and 271**

**Hazardous Waste: Generators of  
Hazardous Waste (100 to 1000 Kilograms  
Per Month), on Site Storage, etc.; Final  
Rule**

**40 CFR Part 262**

**Hazardous Waste: Generators of  
Hazardous Waste (100 to 1000 Kilograms  
Per Month), Waste Minimization;  
Proposed Rule**

**ENVIRONMENTAL PROTECTION  
AGENCY**

40 CFR Parts 260, 261, 262, 263, 270,  
and 271

[SWH-FRL-2969-2(b)]

**Hazardous Waste Management  
System: General; Identification and  
Listing of Hazardous Waste; Standards  
for Generators of Hazardous Waste;  
Standards for Transporters of  
Hazardous Waste; EPA Administered  
Permit Programs; Authorization of  
State Hazardous Waste Programs**

**AGENCY:** Environmental Protection  
Agency.

**ACTION:** Final rule.

**SUMMARY:** On August 1, 1985, the U.S. Environmental Protection Agency (EPA) proposed regulations under the Resource Conservation and Recovery Act (RCRA), as amended by the Hazardous and Solid Waste Amendments of 1984 (HSWA), that would be applicable to generators of between 100 kg and 1000 kg of hazardous waste in a calendar month ("100-1000 kg/mo generators"). Based in large measure on the existing hazardous waste regulatory program, the proposed rules represented the Agency's efforts to balance the statutory mandate to protect human health and the environment with the statutory directive to keep burdensome regulation of small businesses to a minimum.

EPA is today promulgating final regulations for these generators which modify certain aspects of the proposal. These modifications relate to the "small quantity generator" provisions of § 261.5 and the use of the multi-copy manifest in lieu of the proposed single copy system. Exemptions from exception and biennial reporting as well as from the manifest system for certain reclamation shipments and from certain of the requirements applicable to on-site accumulation have been retained in the final rules. The effect of this rule would be to subject generators of between 100 kg and 1000 kg of hazardous waste in a calendar month to the hazardous waste regulatory program.

**DATES: EFFECTIVE DATE:** September 22, 1986.

**Compliance Dates:** The Part 262 standards will become applicable to 100-1000 kg/mo generators on September 22, 1986.

The Part 264 and 265 standards will become applicable to 100-1000 kg/mo generators treating, storing, or disposing of hazardous waste on-site using non-

exempt management practices on March 24, 1987.

For off-site facilities managing wastes from 100-1000 kg/mo generators, the Part 264 or 265 standards will apply to the wastes from generators of 100-1000 kg/mo on September 22, 1986.

For off-site facilities managing wastes exclusively from generators of less than 1000 kg/mo, the requirement to obtain interim status as a hazardous waste facility for wastes from 100-1000 kg/mo generators will become applicable on September 22, 1986.

Off-site facilities managing waste from both large quantity generators and generators 100-1000 kg/mo will need to modify their Part A permit applications (as well as Part B if already submitted) by September 22, 1986 to reflect these newly regulated wastes from 100-1000 kg/mo generators.

**ADDRESSES:** The public docket for this rulemaking is located in Rm S-212-C, U.S. Environmental Protection Agency, 401 M Street, SW., Washington, DC. The RCRA Docket is available for viewing 8:00 a.m. to 4:00 p.m. Monday through Friday, excluding holidays. As provided in 40 CFR Part 2, a reasonable fee may be charged for copying services.

**FOR FURTHER INFORMATION CONTACT:** The RCRA/Superfund Hotline, (800) 424-9346, (in Washington, DC, call 382-3000), the Small Business Hotline, (800) 368-5888, or Robert Axelrad, (202) 382-5218, Office of Solid Waste (WH-562B), U.S. Environmental Protection Agency, 401 M Street, SW., Washington, DC 20460.

**SUPPLEMENTARY INFORMATION:**
**Preamble Outline**

- I. Authority
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  - a. Recordkeeping—section 262.40
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4. On-site Accumulation—section 262.34
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  - b. Standards Applicable to On-site Accumulation
    - i. Standards for Preparedness and Prevention—Part 265, Subpart C
    - ii. Standards for Contingency Plans, Emergency Procedures—Part 265, Subpart D, and Personnel Training Requirements
    - iii. Standards for Accumulation in Containers—Part 265, Subpart I
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5. International Shipments
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  - E. Part 264/265 Facility Standard Issues
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    2. Applicability of Permitting Requirements to Recycled Wastes
    3. Permit by Rule
    4. Modifications to Part A Permit Applications
- IV. Delayed Effective Dates
- V. Impact on Authorized States
  - A. Applicability in Authorized States
  - B. Effect on State Authorizations
- VI. CERCLA Impacts
- VII. Executive Order 12291—Regulatory Impact
  - A. Estimates of Per Firm Costs
    1. Part 262 Generator Standards
    2. Transportation Costs
    3. Treatment, Storage, and Disposal Costs
      - a. On-site Accumulation
      - b. Treatment and Disposal
  - B. Estimates of Nationwide Incremental Cost Burden on Generators of 100-1000 kg/mo
  - C. Estimates of the Economic Impacts of Today's Rule
- VIII. Regulatory Flexibility Act
- IX. Paperwork Reduction Act
- X. List of Subjects

**I. Authority**

These regulations are being promulgated under authority of section 2002(a), 3001, 3002, 3004, 3005, 3006, 3010, 3015, 3017, and 3019, of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act, as amended, 42 U.S.C. 6912(a), 6921, 6922, 6924, 6925, 6926, 6930, 6935, 6939, 6991, and 6993.

## II. Background and Summary of Final Rule

### A. The Hazardous and Solid Waste Amendments of 1984

On November 8, 1984, the President signed Pub. L. 98-616, titled The Hazardous and Solid Waste Amendments of 1984 (HSWA). These comprehensive amendments will have far-reaching ramifications for EPA's hazardous waste regulatory program and will impact a very large number of businesses in the United States. Further, Congress has established in these amendments ambitious schedules for the imposition of the requirements that EPA must promulgate.

With respect to regulation of small quantity generators (*i.e.*, generators of less than 1000 kg of hazardous waste in a calendar month) the HSWA added a new subsection (d) to Section 3001 of RCRA designed to modify EPA's current regulatory exemption of wastes generated by small quantity generators from full Subtitle C regulation (40 CFR 261.5). Section 3001(d) directs EPA to develop a comprehensive set of standards which will apply to hazardous wastes produced by small quantity generators of between 100 and 1000 kg of hazardous waste in a calendar month ("generators of 100-1000 kg/mo"). EPA is required to promulgate final standards no later than March 31, 1986. Today's final rule satisfied this requirement. In addition, section 3001(d) imposes certain minimum requirements on these generators prior to that date and requires EPA to complete a number of studies before April 1987.

#### 1. Codification Rule

On July 15, 1985, EPA published in the Federal Register a Final Rule which codified a number of legislatively mandated provisions contained in the HSWA (see 50 FR 28702-28755, July 15, 1985). Among those provisions is the requirement of section 3001(d)(3) that effective 270 days from the date of enactment, all off-site shipments of hazardous waste from generators of greater than 100 kg but less than 1000 kg of hazardous waste during a calendar month must be accompanied by a copy of the Uniform Hazardous Waste Manifest, signed by the generator, and containing the following information:

- The name and address of the generator of the waste;
- The U.S. Department of Transportation (DOT) description of the waste, including the proper shipping name, hazard class, and identification number (UN/NA);
- The number and type of containers;

- The quantity of waste being transported; and
- The name and address of the facility designated to receive the waste.

The information required by this provision (codified at 40 CFR 261.5(h)(3)) corresponds to Items 3, 9, 11, 12, 13, 14, and 16, of EPA form 8700-22 and accompanying instructions promulgated on March 20, 1984 (49 FR 10490). These information requirements conform to DOT shipping requirements designed to provide necessary information to handlers of hazardous materials (*e.g.*, transporters and emergency response personnel).<sup>1</sup> The interim manifest requirement applies only until the effective date of the regulations being promulgated today. These final rules will supersede the existing manifest requirements for these generators.

The HSWA provisions, together with existing regulations, distinguish three main classes of small quantity generators for regulatory purposes: (1) Those generating between 100 and 1000 kg of non-acutely hazardous waste per calendar month; (2) those generating up to 100 kg of non-acutely hazardous waste per calendar month; and (3) those generating acutely hazardous wastes in quantities currently set forth in § 261.5(e). These classes of small quantity generator are distinguished in the July 1985 "Codification Rule". Until the effective date of today's final rules, under the regulatory system imposed by 40 CFR 261.5 implementing section 3001(d) of the HSWA, a small quantity generator in the first group (*i.e.*, producing between 100 and 1000 kg of non-acutely hazardous waste in a calendar month) is subject to the following requirements:

- (1) He must determine if his waste is hazardous under 40 CFR 262.11 (§ 261.5(h)(1));
- (2) He may conditionally accumulate hazardous waste on-site provided he does not exceed the quantity limitation contained in § 261.5(h)(2);
- (3) After August 5, 1985, he must partially complete and sign a single copy of the Uniform Hazardous Waste Manifest to accompany any off-site shipment of hazardous waste (§ 261.5(h)(3)); and
- (4) He must treat or dispose of his hazardous waste on-site, or ensure delivery to an off-site treatment, storage, or disposal facility. The on-site or off-site facility must be either: (i) Permitted

by EPA pursuant to Section 3005 of RCRA or by a State having an authorized permit program under Part 271; (ii) in interim status under Parts 270 and 265; (iii) permitted, licensed, or registered by a State to manage municipal or industrial solid waste; or (iv) a facility which beneficially uses or reuses, or legitimately recycles or reclaims the waste, or treats the waste prior to reuse, recycling or reclamation (§ 261.5(h)(4)).

As discussed in the remainder of this preamble, 100-1000 kg/mo generators will be regulated under Part 262-266 and Parts 270 and 124 when today's rules become effective, to the extent that rules apply.

Generators of less than 100 kg of hazardous waste in a calendar month will remain conditionally exempt from most of the hazardous waste program, as provided in § 261.5(g). For example, generators of less than 100 kg are not required to comply with any manifesting provisions. No additional requirements apply to this class of hazardous waste generator under the existing rules unless the quantity limitations contained in § 261.5(g) are exceeded.

Generators that produce acutely hazardous waste and do not exceed the quantity limitations for such waste under § 261.5(e) will also be conditionally exempt from regulation. No additional requirements apply to this class of generators unless the quantity limitations contained in § 261.5(e) are exceeded, at which point the acutely hazardous waste becomes subject to the full generator requirements of 40 CFR Part 262.

#### 2. Minimum Rulemaking Requirements

Section 3001(d)(1) of the HSWA requires EPA to promulgate, by March 31, 1986, standards under sections 3002, 3003, and 3004, for hazardous wastes generated by a generator in a total quantity greater than 100 but less than 1000 kilograms in a calendar month. Standards developed under this section must be sufficient to protect human health and the environment but "may vary from the standards applicable to hazardous waste generated by larger quantity generators" [emphasis added] (section 3001(d)(2)). EPA is further authorized to promulgate standards for generators of less than 100 kg/mo of hazardous waste if the Administrator determine it is necessary to do so to protect human health and the environment (section 3001(d)(4)).

At a minimum, standards issued pursuant to section 3001(d)(1) must require that all treatment, storage, and disposal of hazardous wastes from

<sup>1</sup> While 100-1000 kg/mo generators are not now required to complete the entire manifest under Federal law, many States operating their own hazardous waste programs may already require additional information on the manifest or require use of the State's version of the Uniform Hazardous Waste Manifest.

generators of between 100 and 1000 kg of hazardous waste in a calendar month occur at a facility with interim status or a permit issued under section 3005 of RCRA. The standards must also allow generators of between 100 and 1000 kg of hazardous waste during a calendar month to store waste on-site for up to 180 days without being required to obtain a RCRA permit. If a generator must ship or haul his waste greater than 200 miles, that generator may store up to 6000 kg of hazardous wastes for up to 270 days without a permit (section 3001(d)(6)). These minimum requirements are embodied in today's final rule.

In addition, the Agency has interpreted the statute to require that, at a minimum, EPA's regulations must provide for continuation of the August 1985 requirement that off-site shipments of hazardous waste from 100-1000 kg/mo generators be accompanied by a single copy of the Uniform Hazardous Waste Manifest containing at least the information specified in section 3001(d)(3). See H.R. Report No. 198, 98th Cong., 1st Sess. 25-28 (1983); S. Rep. No. 284, 98th Cong., 1st Sess. 8 (1983); H.R. Rep. No. 133, 98th Cong., 2nd Sess., 101-103 (1984).

The Agency believes that at a minimum Congress intended that the Agency's regulations incorporate the partial Uniform Hazardous Waste Manifest requirements in order to provide notice of the hazardous nature of the waste to transporters and facilities. In addition, the Agency is specifically authorized to expand the manifest requirements if necessary to protect human health and the environment. See section 3001(d)(3). As discussed in Unit III.C.2. of today's preamble, EPA has concluded that additional manifest requirements are necessary to ensure protection of human health and the environment.

### 3. March 31, 1986 Hammer Provisions

If EPA had failed to promulgate standards for hazardous waste generators producing greater than 100 kg but less than 1000 kg in a calendar month by March 31, 1986, these generators would have been subject to certain legislatively stipulated provisions.

The promulgation of today's final rule prior to March 31, 1986, however, effectively voids the hammer provisions of the HSWA with respect to small quantity generators. Consequently, the requirements promulgated today are the only requirements which 100-1000 kg/mo generators must comply with. As discussed in Unit IV, the Part 262 requirements applicable to 100-1000 kg/

mo generators that manage waste off-site will take effect six months from today while the requirements of Parts 264 and 265 applicable to generators that manage waste on-site will take effect twelve months from today.

It should be noted that the HSWA specifically states that the requirements of this Section should not be construed to be determinative of the requirements appropriate for small quantity generators in developing a regulatory program. The hammer provisions of HSWA, therefore, do not dictate the content of these final rules for generators of 100-1000 kg/mo.

### 4. August 1, 1985 Proposal

On August 1, 1985, EPA proposed rules that would apply to generators of 100-1000 kg/mo of hazardous waste. The proposed rules represented the Agency's efforts to balance the need for regulation of this group of generators in a manner that would protect human health and the environment with the need to minimize the impacts of such regulation on small firms.

The proposed rules modified the existing standards for generators and treatment, storage, and disposal facilities to reflect the generally smaller quantities of waste and small business nature of many of these firms. In essence, EPA concluded that some relief from the administrative and paperwork requirements embodied in the Part 262 Generator Standards was appropriate for generators of 100-1000 kg/mo of hazardous waste.

EPA proposed to remove 100-1000 kg/mo generators from the existing § 261.5 small quantity generator provision, thus subjecting them to Part 262. In addition, the Agency proposed specific amendments to Part 262 to relieve these generators of some of the requirements of that Part. Under the proposed rules, generators of 100-1000 kg/mo would have been required under Part 262 to:

- Determine whether their wastes are hazardous (already required under § 261.5);
- Obtain an EPA identification number;
- Store hazardous waste on-site for no more than 180 or 270 days in compliance with specially modified storage standards (unless they comply with the full regulations for hazardous waste management facilities);
- Offer their wastes only to transporters and facilities with an EPA identification number;
- Comply with applicable Department of Transportation (DOT) requirements for shipping wastes off-site;
- Use a single copy of the Uniform Hazardous Waste Manifest to

accompany the waste from the generation site.

The proposed requirements for generators of 100-1000 kg/mo were intended to be less stringent than those applicable to large quantity generators in two significant respects. First, under the proposed rules, generators of 100-1000 kg/mo would not have been required to comply with the full manifest system required of larger hazardous waste generators that ship waste off-site for treatment, storage, or disposal. Instead, the Agency proposed a "single copy" manifest system intended to serve as a "notification" to subsequent handlers of the waste (*i.e.*, transporters and facilities) that the material is a hazardous waste and to provide essential information to those handlers as well as emergency personnel. EPA proposed to specifically exempt these generators from the existing manifest requirements pertaining to number and distribution of manifest copies as well as from the recordkeeping and reporting requirements associated with the full manifest system (*i.e.*, use and retention of manifest copies and exception and biennial reporting). EPA also proposed to exempt 100-1000 kg/mo generators from all of the manifest requirements under certain circumstances where the waste is reclaimed under contractual arrangements where either the generator or a reclaimer retains ownership of the material throughout the generation, transportation, and reclamation of the waste. Under such circumstances, EPA believed that the manifest would be unnecessary, provided that specific conditions are met.

A second significant difference for 100-1000 kg/mo generators was the proposed requirements affecting accumulation (*i.e.*, short-term storage) of hazardous waste on-site prior to shipment of waste off-site or management on-site in a treatment, storage, or disposal facility. The proposed rules implemented the statutory requirement to allow generators of 100-1000 kg/mo to accumulate (*i.e.*, store) waste on-site in tanks or containers for up to 180 days (or 270 days if they must ship their waste over 200 miles for treatment or disposal), without obtaining interim status or a permit. In addition, the proposed rules provided that these generators would need to comply with specific storage requirements which were reduced somewhat from those applicable to large quantity generators. Unlike large quantity generators, those producing between 100-1000 kg/mo would not be required to prepare a written contingency plan or have

formalized personnel training programs. They would, however, be subject to a reduced set of specific requirements for contingency and emergency procedures, and for ensuring that their employees are fully cognizant of those procedures as well as proper hazardous waste handling methods. Generators of 100-1000 kg/mo that accumulate wastes in tanks or containers would, however, be subject to the same requirements of existing Subparts I and J of Part 265 applicable to larger generators as well as to the preparedness and prevention standards contained in Subpart C of Part 265.

EPA also proposed that those 100-1000 kg/mo generators who treat, store, or dispose of their hazardous waste in on-site facilities and who do not qualify for the 180- or 270-day exclusion would be subject to the full set of Parts 264 and 265 facility standards currently applicable to other hazardous waste treatment, storage, and disposal facilities, including the need to obtain interim status and a RCRA permit. EPA saw no basis for reducing the technical standards for these generators since the potential hazards to human health and the environment appeared to be equivalent to those from other fully regulated treatment, storage, and disposal facilities. However, because of the major impact which these facility requirements would be likely to have on many of these firms, the Agency proposed to delay the effective date of this portion of the regulations an additional six months (*i.e.*, 1 year from the date of publication in the *Federal Register* of the final rules) to allow these firms additional time to either arrange for off-site management or to up-grade their on-site practices for compliance with the full set of Parts 264 and 265 facility standards.

#### B. Summary of Final Rule

Today's final rule adopts most of the provisions of the proposed rules for generators of 100-1000 kg/mo. Today's final rule subjects generators of 100-1000 kg/mo to regulation under Parts 262, 263, 264, 265, and 266 of the hazardous waste regulations by removing these generators from the conditional exclusion provisions of § 261.5. However, the Agency has decided not to formally redefine a "small quantity generator" as one who generates no more than 100 kg of non-acutely hazardous waste since the Agency has concluded that such a redefinition would increase, rather than reduce, confusion. Consequently, the term "small quantity generator" will continue to apply to all generators of

less than 1000 kg of hazardous waste in a calendar month.

As a result of today's final rule subjecting generators of 100-1000 kg/mo to the Part 262 requirements, these generators will be required to:

- Determine whether their wastes are hazardous (already required under § 261.5);
- Obtain an EPA identification number;
- Store hazardous waste on-site for no more than 180 or 270 days in compliance with specially modified storage standards (unless they comply with the full regulations for hazardous waste management facilities);
- Offer their wastes only to transporters and facilities with an EPA identification number;
- Comply with applicable Department of Transportation (DOT) requirements for shipping wastes off-site;
- Use a multi-part "round-trip" Uniform Hazardous Waste Manifest to accompany the waste to its final destination; and
- Maintain copies of manifests for three years;

EPA is today finalizing a number of the proposed modifications to the Part 262 requirements applicable to generators of 100-1000 kg/mo. These generators will not be required to submit biennial reports or file exception reports if a copy of the manifest is not returned by the destination facility. In addition, the proposed modifications to the accumulation provisions of § 262.34 exempting these generators from the requirements to prepare a formal contingency plan and conduct formal personnel training are also being finalized, as is the proposed exemption from all manifest requirements for wastes reclaimed under certain contractual arrangements. The Agency is also exempting 100-1000 kg/mo generators from the 50' buffer zone requirements for container storage of ignitable or reactive wastes during periods of on-site accumulation.

The most significant departure from the proposed rules is the Agency's determination that the multiple copy manifest system does not impose a significant burden and that, in fact, the multiple copy manifest system is essential to ensure protection of human health and the environment. Therefore, the modifications to the existing manifest system proposed for 100-1000 kg/mo generators are not being adopted in today's final rule. The reasons for this change are discussed in detail in Unit III.C. of this preamble.

### III. Response to Comments and Analysis of Issues

This Section of the preamble addresses the comments received on the August 1, 1985, proposed rules ("Proposal") and describes the Agency's position on the major issues raised in the proposal and during the comment period.

#### A. EPA's Approach To Regulating 100-1000 kg/mo Hazardous Waste Generators

As discussed in the preamble to the Proposal, EPA's approach in developing standards for 100-1000 kg/mo generators was one of balancing the two competing goals inherent in section 3001(d)—protecting human health and the environment and avoiding unreasonable burdens on the large number of small businesses affected by the standards. In assuring protection of human health and the environment, the Agency deemed it appropriate and consistent with Congressional intent to consider the "relative risk" posed by the small aggregate amounts of waste generated by the 100-1000 kg/mo generators. Given the lower relative risk that these generators pose compared to larger generators in terms of quantity of waste, varying the standards from those applicable to large quantity generators would still assure protection of human health and the environment.

EPA also evaluated the potential impact of full Subtitle C regulations with respect to both administrative and technical considerations, and concluded that the technical requirements were more essential than the administrative requirements to the general goal of protecting human health and the environment because they are directly concerned with controlling releases to the environment. In addition, Congress anticipated reducing administrative requirements, such as reporting and recordkeeping, as a means to reduce impacts on the 100-1000 kg/mo generators. Thus, EPA proposed to relieve these generators of some Part 262 standards that are administrative in nature while retaining all existing technical standards. The relief was only provided to generators who accumulate on-site for the statutorily-prescribed periods, because, given that the amount of waste accumulated would necessarily be limited, the relative risk from releases of such waste would be less than that from the unlimited amounts of waste accumulated by off-site facilities.

Most persons who commented on EPA's approach to regulation in this area supported the concept of reducing



burdens on small businesses and of fashioning the degree of relief provided from the level of risk involved; however, several commenters disagreed on the level of risk posed by waste from 100-1000 kg/mo generators. One commenter argued that the "relative risk" approach was not technically sound because the synergistic and antagonistic properties of waste streams were not considered, and mismanagement of even small quantities of waste, if not controlled or regulated, would eventually have the same impact as larger amounts of waste. One commenter pointed out that the relative risk approach is difficult to justify on a regional or local basis, where 100-1000 kg generators may contribute much more than the 0.3 percent nationwide contribution, and their proximity to populations as compared to large quantity generators should have been considered. Several commenters also asserted that Congress has judged the hazardousness of a given waste to be imparted by its inherent properties, not by its quantity.

As EPA explained in the Proposal, the Agency believes it to be both appropriate and consistent with Congressional intent to consider the relative risk posed by the smaller quantities of waste generated by 100-1000 kg/mo generators. Although it did evaluate several Congressionally-specified factors, such as waste characteristics, the Agency found that the only useful factor in drawing meaningful distinctions between large quantity generators and 100-1000 kg/mo generators was the quantity of waste generated. Thus, the Agency considered both the inherent properties and the quantities of waste generated in developing standards to assure protection of human health and the environment.

The Agency is aware that there can be concentrations of 100-1000 kg/mo generators in populated areas, and that their 0.3 percent nationwide contribution can be increased accordingly in some cases; however, overall the quantities of waste capable of being leaked or spilled during storage or transportation, as compared to that of large quantity generators, still poses relatively less risk. Moreover, the only type of relief being provided is where the technical standards deemed necessary to protect human health and the environment are not compromised in substance. The Agency believes that, by retaining all technical standards for storage, transportation, and treatment required of large quantity generators and by modifying some requirements of an administrative nature for the 100-1000

kg/mo generators, a fair balance between the goals of reducing burdens and protecting health and the environment is reached. The Agency does not believe that exempting the 100-1000 kg/mo generators from these administrative requirements will significantly increase the risks from storage, transportation, or disposal of the waste. In addition, as discussed below, the Agency's decisions to require the multiple-copy manifest, which will allow "tracking" of the waste to ensure proper disposal, will further reduce any potential risks.

Another group of commenters criticized EPA's approach in that it did not consider bases for providing relief in addition to that proposed. For example, several commenters asserted that 100-1000 kg/mo generators use less sophisticated waste management practices than large quantity generators, due in large part to economic constraints. This, along with the lesser relative risks, they asserted, dictates imposing less costly regulatory requirements, such as eliminating on-site storage permitting requirements for longer periods of time and larger quantities than EPA proposed.

While EPA did consider differences in waste management practices that would distinguish 100-1000 kg/mo generators from large quantity generators, it found that both classes use many of the same waste management practices (see 50 *FR* 31285 (Col. 1) (August 1, 1985)). The comments received on this subject do not provide evidence indicating otherwise. The Agency has recognized that the 100-1000 kg/mo generators generally have less manpower and fewer economic resources available to them, and that this would affect their ability to comply with the full regulatory requirements applicable to large quantity generators. However, Congress has already provided for on-site storage for longer periods of time to allow for more economical shipments. In addition, as discussed below, EPA is modifying certain facility requirements for on-site accumulation to simplify the requirements for contingency plans, emergency procedures, and personnel training (contained in Part 265, Subpart D and § 265.16). These requirements are being modified because they would be unduly burdensome and the underlying environmental objectives can be achieved in their modified form. However, full Parts 264-265 requirements would apply to generators that store their waste in tanks or containers for very long periods of time (*i.e.*, longer than 180 or 270 days) because the quantity of waste present,

over time, becomes significant. Similarly, the potential for release of hazardous waste to the environment becomes significant where 100-1000 kg/mo generators engage in waste management in surface impoundments, waste piles, landfills, or land treatment facilities. Thus, in order to fulfill its mandate to protect human health and the environment, EPA has rejected any suggestions to reduce the Parts 264 and 265 facility standards.

#### B. Applicability Issues

##### 1. Definition of "Small Quantity Generator"

In the August 1, 1985 proposal, EPA proposed to amend 40 CFR 261.5 to redefine a small quantity generator as one who generates no more than specified quantities of acutely hazardous waste and no more than 100 kg of other hazardous waste in a calendar month. The effect of the proposed redefinition would have been to remove 100-1000 kg/mo generators from the § 261.5 exemption for small quantity generators and subject them, instead, to Parts 262-266, 270, and 124 of the hazardous waste regulatory program. Under the proposed rules, generators of 100-1000 kg/mo would have been one of two classes of large quantity generator. The Agency also proposed changes to Part 262 that would specifically exempt these 100-1000 kg/mo generators from a number of the otherwise applicable administrative requirements.

A number of commenters expressed concern about the proposed redefinition of the small quantity generator provision to exclude generators of 100-1000 kg/mo. In particular, they stated that many of these generators were only now becoming aware of their status as regulated hazardous waste generators and that, for the most part, they recognized themselves as "small quantity generators". Changing these generators to large quantity generators, it was felt, would add to confusion and reduce the likelihood of compliance. It was also pointed out that many of the education materials being used to acquaint these generators with the RCRA requirements, including many of EPA's own materials, referred to this class of generator as "small quantity generators". Commenters suggested several specific labels to differentiate the various classes of generators, including such terms as "small *de minimis*", "very small quantity generators" or "extremely small quantity generators".

In proposing to remove the 100-1000 kg/mo generators from § 261.5, the Agency was attempting to address the complexity and confusion caused by having multiple classes of small quantity generator subject to significantly different standards. The Agency is sympathetic to the concerns of these commenters and in no way intended the redefinition to add to the confusion which many of these firms may experience in becoming subject to the bulk of the RCRA regulatory program for the first time. For the reasons discussed below, EPA has decided not to alter the existing definition of "small quantity generator" but is making modifications to § 261.5 that will provide a more explicit labeling scheme for regulatory purposes.

Section 261.5 has historically addressed those hazardous waste generators that were conditionally exempt from most of the hazardous waste regulatory program. Until the HSWA of 1984 and the subsequent codification of its early enactment provisions on July 15, 1985, only two major classes of small quantity generator existed: those generating or accumulating acutely hazardous wastes below certain quantity cutoffs and those generating or accumulating below 1000 kg of most hazardous wastes. Furthermore, both classes were largely exempt from the standards applicable to large quantity generators.

However, with the addition of a new class of small quantity generator designated by Section 3001(d) of HSWA (*i.e.*, those generating between 100 kg and 1000 kg of hazardous waste in a calendar month) that would be subject to most of the standards applicable to large quantity generators, continued use of the term "small quantity generator" would have no regulatory significance and would lead to confusion for the previously exempt class of generators.

The proposed redefinition was intended to distinguish between small quantity generators that were conditionally exempt from regulation under § 261.5 (*i.e.*, <100 kg/mo) and those that would be subject to most of the requirements applicable to large quantity generators (*i.e.*, 100-1000 kg/mo). By removing the 100-1000 kg/mo generator from § 261.5 and referring to these generators by their actual quantity limitations, the Agency intended to provide a more explicit, and therefore less confusing, regulatory scheme.

The Agency does not believe that the commenters' suggestion of retaining the term "small quantity generator" solely for 100-1000 kg/mo generators or creating new labels for different categories of small quantity generators

will reduce confusion; such labels would probably cause more confusion, especially where states have established their own small quantity generator definitions and exclusion levels. In fact, as a result of these comments, the Agency believes that the term small quantity generator is no longer sufficiently precise for most regulatory purposes.

For this reason, the Agency is making three regulatory changes affecting the use of the term "small quantity generator". First, the Agency is adding a definition of "small quantity generator" to Section 260.10 as follows:

"Small quantity generator" means a generator who generates less than 1000 kg of hazardous waste in a calendar month.

This definition conforms to the existing definition of the term and is being added to § 260.10 to alleviate any potential confusion over the definition of "small quantity generator".

Second, EPA is finalizing the proposed removal of generators of 100-1000 kg/mo from the conditional exclusion provisions of § 261.5 and will instead refer to these generators in the regulatory language as generators of 100-1000 kg/mo. This will retain the original premise of the redefinition which was to segregate in the regulations those generators that are predominantly exempt from regulation (*i.e.* generators of less than 100 kg/mo of hazardous waste and generators of acutely hazardous waste in less than specified quantities) from those who are more fully regulated (*i.e.* 100-1000 kg/mo generators). Since the 100-1000 kg/mo generators are no longer excluded from most of the Part 262 regulations by inclusion in § 261.5, the applicable portions of Parts 262-266, 270, and 124 will apply to these generators, as proposed.

Finally, the Agency is also modifying references to the term "small quantity generator" in § 261.5 and in other parts of the regulations to provide more explicit descriptions of the various classes of small quantity generator. Thus, generators of less than 100 kg/mo of hazardous waste or less than specified quantities of acutely hazardous waste will also be referred to by their quantity cutoffs or as generators who are conditionally exempt under Section 261.5. Section 261.5 will now be titled "Special Requirements for Hazardous Wastes Generated by Conditionally Exempt Small Quantity Generators."

The removal of the term "small quantity generator" from most regulatory use will in no way preclude continued use of the term "small

quantity generator" for general reference and educational purposes. The Agency recognizes the widespread use of the term "small quantity generator" by States, trade associations, Congress and others and has no intention of interfering with the continued use of that term by anyone choosing to use it to refer to the broad class generating less than 1000 kg in a calendar month. EPA will also continue to use the term "small quantity generator" in describing the collective group of generators below 1000 kg/mo but will use the terms "generators of less than 100 kg/mo" and "100-1000 kg/mo generator" for regulatory purposes. For example, in discussing methodology for counting quantities in order to determine generator status, it would be appropriate to refer to the small quantity generator class since it includes both the 100-1000 kg/mo generators and generators of less than 100 kg/mo.

## 2. Generator Category Determination

In the Proposal, the Agency discussed a number of issues relevant to making a determination of which generator category a given firm belonged to at any given point in time in order to determine what requirements that establishment was actually subject to. Among the issues covered were which wastes need not be included in quantity determinations (*e.g.*, spent lead-acid batteries destined for reclamation and used oil) and how to count wastes for purposes of determining generator status (*e.g.*, counting of wastes reclaimed on-site). The comments received on these proposed rules raised a variety of additional issues with respect to what types of activities and wastes were intended to be covered by the proposed rules, and whether the rules were applicable to "episodic generators" who might be fully regulated in one month but conditionally exempt the next. These issues are discussed below. In addition to the explanation provided in this preamble, the Agency intends to develop detailed, plain-English guidance and education materials to help the 100-1000 kg/mo generators understand and comply with the hazardous waste regulations.

*a. Counting Amendment to § 261.5:* In an effort to help clarify for small hazardous waste generators which wastes must be counted in determining their generator category, the Agency proposed an amendment to § 261.5.

The proposed amendment stated that for purposes of making quantity determinations under § 261.5, a generator need not count wastes which are specifically exempted from

regulation (see, e.g., § 261.4, or § 264.1(g) (2), (4), (5) and (6)) or which were not subject to substantive regulation under Parts 263, 264, 265, and the on-site accumulation provisions of § 262.34 were not subject to counting for purposes of determining generator status. Wastes that were subject to the provisions of § 261.6 (b) and (c) (recyclable materials), however, would be required to be counted in making quantity determinations. The proposal was designed to ensure that wastes that are not regulated are not counted. In addition, the counting amendment was intended to eliminate the multiple counting of wastes that are reclaimed and then reused many times during the calendar month. In this situation, the waste would only be counted once, even though it is reused and subsequently becomes a hazardous waste again after such reuse.

While the proposed amendment was intended to make it clear that any hazardous waste that is excluded or exempted from substantive regulation need not be included in the quantity determinations, a number of commenters either misunderstood the scope of the amendment or believed that additional clarification was necessary for the amendment to be understood. Although virtually all commenters on the proposed amendment supported the concept, several recommended specific changes to improve the clarity of the provision. Consequently, the Agency is today finalizing a slightly modified version of the amendment to § 261.5 to clarify which wastes are counted in making generator category determinations.

One commenter correctly noted that the amendment, as written, would not apply to generators of 100-1000 kg/mo since the amendment referred only to the quantity determinations under § 261.5. Since, under the rules being promulgated today, 100-1000 kg/mo generators will no longer be subject to the conditional exclusion provisions of § 261.5, the counting amendment would not have applied to these generators as proposed. Since this was contrary to the Agency's intent that the § 261.5(c) amendment be used by all generators in determining their generator status, the final regulatory language of this provision is modified to indicate that the amendment applies to quantity determinations under Parts 261-266 and 270 of the hazardous waste rules.

A second modification to this provision will make it clear that wastes which are not regulated under Parts 262-266 and 270 are not counted in making quantity determinations.

The majority of commenters on this provision asked for clarification on which wastes or processes were actually intended to be exempted from counting since the references to broad regulatory provisions or concepts such as "subject to substantive regulations" left many readers uncertain as to what the Agency considered to be "substantive regulation". For purposes of this provision, the term "substantive regulation" includes regulations which are directly related to the storage, transportation, treatment, or disposal of hazardous wastes. Regulations which would not be considered "substantive" for purposes of this provision would be requirements to notify and obtain an EPA identification number or to file a biennial report.

As a general guide, the following materials are included in the general category of exempted or excluded wastes that would not be counted in making quantity determinations for purposes of determining hazardous waste generator status:

- Any waste excluded from regulation under § 261.4. For example, wastes discharged to publicly owned treatment works (POTWs) and commingled with domestic sewage are not considered to be solid wastes when discharged, under § 261.4(a). Therefore, they are excluded from regulation under Subtitle C of RCRA and not counted for purposes of making quantity determinations (unless they are stored or treated in regulated units prior to being discharged). Such wastes are regulated instead under the Clean Water Act.<sup>2</sup>

- Any waste exempt from regulation under § 261.6 or wastes that are not stored or transported prior to being reclaimed. For example, under § 261.6(a)(3)(ii), spent lead-acid batteries that are returned to a battery manufacturer for regeneration are exempt from regulation under Parts 262-266, 270, and 124, and, therefore, are not counted in the quantity determination.

Also, used oil exhibiting a characteristic of hazardous waste, unless mixed with other hazardous wastes, is also currently exempt under § 261.6(a) and is not counted for purposes of making quantity determinations. EPA recently proposed to list used oil as a hazardous waste and

proposed special management standard for used oil that is recycled. (See 50 FR 49164, November 29, 1985.) These proposals, if finalized, will continue to exclude used oil from the quantity determinations of Parts 261-266 and 270. Under the proposed rules for used oil, generators would count their used oil separately from their other hazardous wastes against a separate small quantity generator cutoff that would be established for recycled oil. Under those proposed rules, generators would be subject to less stringent standards for their recycled used oil than for their other hazardous wastes, provided they do not mix other hazardous wastes with their used oils or dispose of the used oil rather than recycle it. Used oil which is disposed of, or mixed with other hazardous wastes, would be regulated like any other hazardous waste and counted separately against the 100 kg/mo cutoff being promulgated today for other hazardous waste generators.

- Any waste reclaimed on-site if it is not accumulated prior to recycling in such a way as to become subject to the accumulation provisions of § 262.34 or the permitting requirements for storage facilities under Parts 264 or 265 (i.e. if it is not accumulated or stored prior to reclamation on-site). Under the hazardous waste rules, the actual process of reclaiming wastes is not subject to regulation under Parts 262-265 and 270 and 124 of the hazardous waste regulations.

Only the accumulation, transportation, long term storage, or the management of residues or sludges resulting from the reclamation process are actually subject to regulation. For example, wastes which are continuously reclaimed in a still or solvent cleaning machine on-site without intervening storage and which are reused on-site are not regulated and are not required to be counted in determining generator status.

- Wastes exempt from regulation under §§ 264.1 or 265.1, provided they are also not subject to the substantive standards in 40 CFR Parts 262 and 263. For example, wastes treated in elementary neutralization units, wastewater treatment units or totally enclosed treatment facilities as these units are defined in § 260.10 are exempt from regulation under Parts 264 and 265.

- Wastes exempt from certain regulations under § 261.4(c). For example, wastes stored in a product or raw material storage tank are not subject to regulation under Parts 262-265, 270, 271, and 124, or to the RCRA 3010 notification requirements, and hence, are not counted.

<sup>2</sup> Waste discharged to a public sewer system is exempted from RCRA to avoid duplicative regulation since such wastes are regulated under the Clean Water Act. While disposal of hazardous wastes in this manner is not a violation of RCRA, the general pretreatment standards under the Clean Water Act contained in 40 CFR 403.5 prohibit the introduction of wastes into POTWs that would interfere with the operation of the treatment plant or subsequent POTW sludge management.

Therefore, generators are required to count for purposes of determining generator status any waste that is subject to the substantive regulations. Wastes are only counted once, however. A number of commenters claimed that although EPA discussed this in the preamble to the proposed rules, this point was not made clear in the actual regulatory language. The Agency agrees, and thus has added § 261.5(d)(3) to make it clear that a generator need not count the hazardous waste generated and then reclaimed and reused at the site of generation if the hazardous waste has already been included in the monthly totals. The Agency also is modifying § 261.5(d)(2) to make it clear that you only count the residue from treatment where the original hazardous waste was not counted.

The following examples may help to illustrate the regulatory scheme:

*(Example 1)* Manufacturer A uses solvent in a degreasing process yielding 500 kg of spent solvent in a month. If the solvent is to be reclaimed (e.g., distilled) on-site and is not sorted or accumulated prior to reclamation, it will qualify as a solid (and hazardous) waste but it will not be counted in the generator's monthly totals. The 90 kg of still bottoms from the distillation process are also hazardous waste and must be counted since they were not included in the monthly total. Consequently, 'A' will not be a generator of 100-1000 kg during the month in question.

If the solvent is stored or accumulated prior to distillation, the 500 kg of the spent solvent will qualify as a hazardous waste and will be counted in 'A's hazardous waste totals for the month in which it was generated. The still bottoms will also qualify as hazardous waste, but will not be counted because the spent solvents have already been counted once. The regenerated solvent, on the other hand, will not be a solid or hazardous waste. It will remain unregulated, just like the virgin material.

*(Example 2)* Manufacturer A generates 120 kg of hazardous spent solvent in one month which he distills without intervening storage. The regenerated solvent is then reused. Neither the spent solvent nor the regenerated solvent is counted and "A" is not a 100-1000 kg/mo generator. Alternatively, "A" distills the spent solvent, but stores it for less than 180 days before reclamation, and reuses the regenerated solvent until spent again, and then distills it once again. The spent solvent would be counted because it was stored before reclamation, but it would only be counted once. "A" is now a 100-1000 kg/mo generator. If the spent

solvent were stored for more than 180 days before reclamation, "A" would need a storage permit.

*(Example 3)* "A" generates 500 kg of hazardous spent solvent in one month and stores it in an earthen basin which is an impoundment, not a tank. The spent solvent is then discharged to a POTW. "A" must count the total quantity of spent solvent, as the impoundment is not a wastewater treatment unit by definition (§ 260.10), and hence, "A" is a 100-1000 kg/mo generator.

*(Example 4)* An automotive services center generates spent lead-acid batteries, which it sends to a battery breaker. The service center does not count the spent batteries in its monthly total because they are exempt from regulation until they reach the battery breaker. (See § 266.80(a).)

*b. Generators of Acutely Hazardous Waste:* Section 3001(d)(7) of HSWA states that the requirements applicable to generators of acute hazardous waste listed in §§ 261.31, 261.32, or 261.33(e) are not affected by the HSWA amendments.<sup>3</sup> Thus, today's regulatory amendments will not alter those requirements applicable to generators of acutely hazardous wastes and these generators will remain subject to the exclusion limits and requirements contained in § 261.5(e). The same counting rules as those described above are applicable.

*c. Generators of Non-acutely Hazardous Waste in Quantities of Less than 100 kg/mo:* Section 3001 of HSWA gives EPA authority to promulgate regulations for generators of less than 100 kg of hazardous waste per month if the Administrator determines that such standards are necessary to protect human health and the environment. The Agency is not required to promulgate such regulations and it did not propose to further extend coverage of the hazardous waste program to this class of hazardous waste generator in the August 1, 1985 proposal.

In the Proposal, the Agency stated that it had no data to indicate that additional regulation of generators of less than 100 kg/mo of non-acutely hazardous waste would provide any significant additional level of environmental protection. Generators of less than 100 kg/mo of hazardous waste account for only .07 percent of the total quantity of hazardous waste generated nationally. A review of damage cases also indicated that very few incidents involved quantities below 100 kg. Consequently, none of the regulations

promulgated today, with one exception, alter the existing § 261.5 provisions applicable to generators of less than 100 kg/mo. As discussed under the on-site accumulation provisions later in this preamble, the Agency has decided to modify § 261.5(g) to subject generators of less than 100 kg/mo who exceed the accumulation limit of 1000 kg to the modified standards for generators of 100-1000 kg/mo rather than to full regulation.

*d. Determination of Generator Status:* A number of commenters asked for clarification of the requirements that would apply to generators that do not generate hazardous waste at a uniform rate. Such "episodic generators" may generate, for example, less than 100 kg of hazardous waste one month, quantities of 100-1000 kg other months, or may periodically exceed 1000 kg in a single month.

Several commenters requested clarification of what standards would apply to these episodic generators under different circumstances. Various circumstances for which clarification was requested were raised; for example:

(1) A generator that exceeds the 100 kg/mo exclusion level periodically as a result of special operations such as tank cleaning;

(2) A generator that usually generates between 100 and 1000 kg/mo, but exceeds 1000 kg in one month;

(3) A generator that exceeds 1000 kg/mo several times and accumulates all waste in a single tank;

(4) A generator that periodically exceeds 1000 kg/mo and separates the "under 1000 kg/mo" waste from the "over 1000 kg/mo" waste.

The Agency has always taken the position that a generator may be subjected to different standards at different times, depending upon his generation rate in a given calendar month (See, e.g., 45 FR 76620, November 19, 1980). Thus, a generator of less than 100 kg in one calendar month would be deemed a conditionally exempt generator in that month, subject only to the requirements of § 261.5; however, if in the next calendar month, he generates more than 100 kg but less than 1000 kg of any regulated hazardous waste, he is subject to all of the standards being promulgated today, as his generator status has changed. Furthermore, if he generates more than 1000 kg in any calendar month, he is deemed to be a large quantity generator, subject to all applicable standards. Thus, any non-exempt waste that is generated during a calendar month in which the 1000 kg/mo cutoff is exceeded is subject to full regulation until it is removed from the

<sup>3</sup> At this time, only one acute hazardous waste, dioxin, is listed outside of § 261.33(e).

generator's site. If such fully regulated waste is mixed or combined with waste exempt or excluded from regulation or waste that is subject to reduced regulation under today's final rule, then all of the waste is subject to full regulation until the total mixture is removed from the generator's site. If, on the other hand, the generator stores separately that waste generated during a month in which less than 1000 kg (but more than 100 kg) of hazardous waste is generated, from waste generated during a month in which more than 1000 kg is generated, the former is subject to today's reduced requirements, while the latter is subject to full regulation.

Therefore, generators who expect to periodically exceed the 1000 kg/mo cutoff for the reduced requirements being promulgated today should be prepared to ship their waste off-site if they wish to avoid being subject to full regulation.

Several commenters have suggested alternative schemes for determining applicable standards, all of which the Agency must reject. One commenter suggested that generators would determine their generator status on the basis of a "moving average" over a 12 month period. If, for example, a generator exceeded 1000 kg/mo for several months but averaged between 100 and 1000 kg over the course of the year, he would be subject to the reduced standards being promulgated today for 100-1000 kg/mo generators. The major problem with this approach is that generators would not be able to determine what standards they were subject to until as much as a year after they should have been complying with a specific set of requirements. For example, a generator who generates over 1000 kg the first month but who expects his moving average to fall below 1000 kg after 12 months could avoid preparing a contingency plan or complying with the other requirements of Part 262 applicable to large generators. This would also present enforcement problems, since it would be unclear which standards apply at any given point. Thus, the Agency believes that such an approach would not significantly reduce the implementation difficulties it was designed to address.

The second approach suggested was establishment of a uniform time and quantity cutoff for all generators, applying the same standards to the same quantities, regardless of monthly generation rates. Under this approach, all generators would be allowed to utilize the 180- and 270-day storage periods, provided the 6000 kg "cap" was not exceeded for all accumulated

hazardous wastes so that the reduced standards of Part 262 for 100-1000 kg/mo generators would be extended to all generators who do not exceed 6000 kg on-site.

While this approach would be simpler to administer, it would be inconsistent with the approach that Congress has directed the Agency to take in developing standards for generators who produce different quantities of waste. While the Agency is authorized to consider such factors as small business impacts and management capabilities for 100-1000 kg/mo generators, it is not explicitly authorized to do so for larger generators. The Agency may not ignore in this rulemaking the fact that the statute has established generation rate as a factor in determining whether business impacts may be considered. Thus, as discussed further in Unit III.C.4., below, the Agency may not extend to all generators the same time and quantity limitations applicable to 100-1000 kg/mo generators.

#### C. Part 262 Generator Responsibilities

EPA is today finalizing amendments to Section 261.5 that will subject hazardous waste generators of 100-1000 kg/mo to the Part 262 generator standards and simplify a number of those requirements. This section of the preamble discusses the proposed amendments to Part 262 to relieve 100-1000 kg/mo generators of some of the administrative burden of complying with the hazardous waste regulatory program, the comments received on each proposal and the Agency's decision with respect to each of the proposed amendments.

The specific Part 262 requirements that EPA is amending for application to 100-1000 kg/mo generators are as follows:

- § 262.20 (General Manifest Requirements) is amended to exempt generators of 100-1000 kg/mo from all manifest requirements if their hazardous waste is reclaimed under certain contractual agreements provided the generator complies with specific recordkeeping requirements set forth in this section. Some modifications to this amendment are being made in response to comments.

- § 262.34 (Accumulation Time) is amended to extend the period of on-site storage allowed for 100-1000 kg/mo generators without the need to obtain interim status or a RCRA permit from 90 days to 180 (or 270) days for quantities not to exceed 6000 kg. In addition, § 262.34 is amended to specify the requirements that would apply to such on-site storage by these generators.

- A new § 262.44 to Subpart D of Part 262 is added to exempt generators of 100-1000 kg/mo from the requirements to file and maintain records of biennial and exception reports. This exemption does not apply to records pertaining to hazardous waste determinations under § 262.40(d) and the extension of retention periods under § 262.40(c).

#### 1. Notification and Identification Number Requirements—§ 262.12

In the August 1 proposal, EPA proposed that generators of 100-1000 kg/mo be subject to § 262.12, which provides that generators not excluded under § 262.10 or the provisions of § 261.5: (1) Must not treat, store, dispose of, transport, or offer for transportation, hazardous waste without receiving an EPA Identification Number; (2) must obtain an EPA identification number (and may do so by completing and submitting EPA form 8700-12); and (3) must not offer their hazardous waste to transporters or to treatment, storage, and disposal facilities that have not received an EPA identification number.

The majority of commenters on the requirement to obtain and use an EPA identification number supported the Agency's proposal not to exempt 100-1000 kg/mo generators from this provision. EPA believes that a centralized data base of firms subject to regulation under RCRA is essential for effective compliance monitoring and enforcement, as well as for characterizing the regulated community to provide information to Congress and to make resource projections. Use of a unique identifying number is necessary to effectively manage any large data base. Several commenters added that requiring identification numbers for all generators who are subject to substantial regulation minimizes confusion in the regulated community.

Commenters who opposed the requirement cited the Agency's cost estimate of \$40.00 per generator to obtain a U.S. EPA Identification Number, the complexity of the application form, and the lack of a specific statutory requirement for Identification Numbers. However, the Agency does not believe that the requirement to obtain a U.S. EPA Identification Number is overly burdensome to these generators, given the important function which this requirement fulfills.

Some commenters who opposed the requirement cited the complexity of the EPA Form 8700-12, "Notification of Hazardous Waste Activity." The Agency does not believe that the form is overly complex. EPA Regional Offices

have already received over 20,000 applications for U.S. EPA ID numbers from generators of less than 1000 kg/mo. In some cases, these applications were prompted by requirements from transporters and facilities that handle waste from these generators. In other cases, States require identification numbers for generators of less than 1000 kg/mo. While the Agency is unaware of any instances of 100-1000 kg/mo generators being unable to complete the form, EPA has initiated a major education program through trade associations, States, and grants to local governments and others, which would widely disseminate information that will help generators comply with today's rule. The Agency has also prepared a supplemental instruction sheet to provide additional information to generators of less than 1000 kg/mo who apply for U.S. EPA Identification Numbers. These instructions will contain the EPA waste codes for wastes commonly produced by these generators. This information will allow many generators to complete the application without additional information or research. In addition, generators may call the RCRA/Superfund Hotline or the Small Business Hotline for information and assistance. These numbers are provided at the beginning of today's notice.

Some commenters suggested establishing a telephone system for obtaining identification numbers. EPA considered this kind of system in the proposal and concluded that the lack of a signed record from the waste handler would allow a high potential for confusion and misrepresentation. The Agency still believes this to be true and no commenter was able to suggest a mechanism for avoiding this.

One commenter suggested that EPA modify the application form to require generators to indicate whether they generate less than 100 kg/mo, 100-1000 kg/mo, or more than 1000 kg/mo. EPA recently modified the form to require generators to indicate whether they generate more than 1000 kg/mo or less than 1000 kg/mo of hazardous wastes.

The Agency does not believe that there is any justification for exempting "infrequent generators" from the Identification Number requirement, as suggested by one commenter. EPA believes that all 100-1000 kg/mo generators should be known to the Agency, however infrequently they fit into the category, to allot follow-up if any problems arise. Also, use of an EPA Identification Number when wastes are shipped off-site helps enforcement

authorities to keep track of waste shipments.

The Agency believes that the EPA Identification Number requirement, as proposed, is the best system for ensuring that the Agency has adequate information about these new members of the regulated community. Consequently, EPA is not modifying § 262.12 for generators of 100-1000 kg/mo.

## 2. The Hazardous Waste Manifest System—Part 262, Subpart B

This Unit discusses the proposed modifications to the hazardous waste manifest system for 100-1000 kg/mo generators for wastes shipped off-site. The issues raised in the comments on the Proposal include the "single" versus "multiple" copy or "round-trip" manifest, the proposed exemption from manifesting for wastes shipped under certain reclamation agreements, and the applicability of the manifest waste minimization certification provisions of the HSWA.

*a. Number of Copies and Use of the Manifest:* The Proposal for generators of 100-1000 kg/mo of hazardous waste contained several modifications to the Uniform Hazardous Waste Manifest system. The proposed rules would have exempted 100-1000 kg/mo generators from the following requirements: 1) to compete a multiple copy manifest form (§ 262.22), 2) to retain a copy for the generators' records (§ 262.23(a)(3)), and 3) provide multiple copies of the manifest to the waste transporter (§ 262.23(b)). The effect of these proposed modifications to the manifest system would have been to exempt these generators from the "roundtrip" or "tracking" function of the manifest system (*i.e.*, establishment of a paper trail for enforcement purposes) while continuing to require that a single copy of a fully completed manifest accompany the waste shipment as a means to provide notice to subsequent handlers that the waste is hazardous. No modifications were proposed to the requirements to fully complete the manifest form, and to use established systems for obtaining forms from the appropriate State, except for a proposed elimination of the manifest document number from the required information.

These modifications to the manifest system were intended to minimize impacts on small business while still meeting the underlying goal of HSWA to protect human health and the environment. By reducing some of the paperwork requirements associated with the full manifest system, EPA believed that both of those goals could be served. In particular, EPA believed

that the requirement for these generators to obtain an EPA identification number, complete a single copy of the manifest for all off-site shipments and for facilities to keep these manifests in its files created a significant legal obligation that the waste would be managed at approved hazardous waste management facilities, as required under the HSWA. The Agency believed that this legal obligation would not be significantly enhanced by requiring the use, distribution, and retention of multiple copies of the manifest form.

In requesting public comment on the issue of the "single copy" manifest system, EPA pointed out that it was not fully convinced that the relief being offered was significant enough to offset the potential confusion which the single copy system might cause, or to offset the loss of the "tracking" function of the manifest as an enforcement mechanism. EPA received extensive negative comment on the proposed amendments which have convinced the Agency that the multiple copy manifest system should be adopted in the final rules.

Many commenters asserted that exempting 100-1000 kg/mo generators from the "round-trip" hazardous waste manifest system (*i.e.*, return of a signed copy by the designated facility to the generator as proof that the shipment arrived) would not significantly reduce administrative burden. Most commenters who represented both small and large businesses, State agencies and firms in the waste management industry believed that the information requested on the manifest was not particularly difficult to provide, and they did not object to the proposed requirements to provide essentially full manifest information. Many commenters argued that requiring full manifest information was appropriate for all generators, and that the preparation of multiple copies of the manifest presented no incremental burden over a single copy system since manifests are generally obtained in carbon sets, requiring no real additional effort. These commenters also pointed out that retention of a copy for the generator's files poses a minimal burden due to the limited number of shipments most 100-1000 kg/mo will need to make under the extended accumulation periods being promulgated today for these generators (See Unit III.C.4.). Given the limited number of shipments most generators will need to make to treatment or disposal facilities in a year (*i.e.*, 2-4), commenters asserted that filing a manifest copy and replacing it with a copy signed and returned by the designated facility was simply not

burdensome. Furthermore, virtually all commenters, many of whom represented small business, also indicated that retention of a copy of the manifest containing signatures of the transporter and facility would be done in any case, and was essential to demonstrate that a business had met its legal responsibilities in cases where the waste is mishandled by subsequent handlers.

Another major concern of many commenters with respect to the single copy manifest system was the confusion that would result from having two different manifest systems in place for 100-1000 kg/mo generators and for generators of over 1000 kg. While some commenters representing small businesses believed that the single copy manifest system was workable and provided a real reduction in administrative burden, virtually all other members of the waste management and regulated community argued for a uniform manifest system. Many commenters representing larger corporations and firms with multiple facilities argued that a single uniform system would be the least confusing and least burdensome system. In addition, many commenters believed that different State and Federal requirements would make it extremely burdensome for many small businesses to determine which manifest system applied to them. States, waste haulers, and facilities would also have the added burden of trying to verify the generator status of those utilizing a single copy form and because of the difficulty in administering a dual system, they would simply require that all generators comply with the full system.

One commenter also argued that the Agency's proposed single copy manifest was inconsistent with Congressional intent since the hammer provisions of Section 3001(d)(8), which included a requirement for return of a signed manifest by the facility to the generator, were intended by Congress to serve as the minimum regulatory standards. However, the Agency can find no evidence in either the statute or the legislative history that would lead the Agency to this conclusion. The plain language of the hammer provision states ". . . nothing in this section shall be construed to be determinative of those standards appropriate for small quantity generators", and Section 3001(d)(6) explicitly sets out the "minimum" standards that must be included in the regulations. In addition, the legislative history of Section 3001(d) indicates that the provisions of subsection (d)(6) were to be regarded as statutory minimums

rather than the hammer provisions of subsection (d)(8). See S. Rep. No. 284, 98th Cong., 1st Sess. 11-12 (1983); H.R. Rep. No. 1133, 98th Cong. 2nd Sess. 101, 103-104 (1984). Thus, the statute and legislative history provide extensive evidence that Congress gave EPA broad authority to establish whatever standards it deemed appropriate for these generators, and to vary the hazardous waste standards to minimize burden, consistent with protection of human health and the environment.

A number of commenters raised concerns with respect to the ineffectiveness of the single copy manifest system in ensuring that waste shipments are properly tracked from generator to transporter to facility. Under the proposed manifest system, a generator would be required to complete a single copy of the manifest and to give it to the transporter who in turn would be required to sign it and turn it over to the designated facility upon delivery of the waste shipment. The Agency felt that this chain created a substantial legal obligation that the waste would be managed at a Subtitle C facility. However, a number of commenters asserted that such a system would serve only to encourage unscrupulous transporters to either alter manifest information or simply dump the waste illegally, since the generator or others do not have any record of his accepting the waste shipment. A number of States were concerned that the absence of multiple copies of the manifest in the records of the generator, transporter, and facility would completely eliminate the ability of EPA or the States to enforce the requirement that the waste be managed at Subtitle C facilities. Further, these commenters felt that, whether or not the Agency takes an aggressive enforcement posture with respect to 100-1000 kg/mo generators, the mere existence of the multiple signed copies of a manifest serve as an essential incentive to properly manage the waste.

The Agency finds persuasive the arguments presented by commenters that requiring only the single copy manifest does not offer significant regulatory relief. The Agency has also concluded, based on public comment, that the single copy system may be insufficient to meet the statutory mandate to promulgate rules for 100-1000 kg/mo generators which are sufficient to protect human health and the environment.

The difference in burden between a single copy of the manifest and a multiple copy of the manifest, both containing essentially full information,

appears to be negligible, so there is no real reduction in burden from the single copy system. Retention of a manifest copy by the generator is also minimally burdensome and is in the generator's best interest. The absence of a round-trip or multiple copy manifest could encourage, rather than protect against, mismanagement of these wastes. Most importantly, requiring the generator to retain a copy for his records and provide multiple copies of the manifest to the transporter provides an essential incentive for all parties to fulfill their responsibilities under RCRA. Thus, the Agency has decided not to adopt the single-copy manifest system, as proposed.

Consequently, generators of 100-1000 kg/mo will be subject to all of the requirements of Subpart B of Part 262 with respect to the Uniform Hazardous Waste Manifest except for certain waste reclamation shipments as provided in Section 262.20, discussed below. In addition, these generators will be subject to the recordkeeping provisions of Subpart D of Part 262 with respect to manifest copies but will not be subject to the associated exception and biennial reporting requirements, as discussed in Unit III.C.3, below.

*b. Manifest Exemption for Certain Reclamation Shipments:* In the Proposal, EPA proposed to exempt generators of 100-1000 kg/mo from all of the manifest requirements of Part 262, Subpart B, provided the waste was reclaimed under certain specific conditions, including:

1. The generator would be required to have a written agreement with a recycling facility to collect and reclaim a specified waste and to deliver regenerated material back to the generator at a specified frequency;
2. The vehicle used to transport the waste to the recycling facility and to deliver regenerated material back to the generator must be owned and operated by the reclaimer of the waste;
3. Either the generator or the reclaimer must retain title to the material at all times; and
4. The generator and transporter/reclaimer must comply with specific recordkeeping requirements.

Specific regulatory requirements which would have to be met in lieu of the manifest requirements were proposed as follows:

1. A copy of the reclamation agreement is kept in the files of both the reclaimer and the generator for a period of at least three years;
2. The reclaimer/transporter records (for example, on a log or shipping document) the following information (which would be required of

transporters in a proposed amendment to § 263.20):

- The name, address and EPA identification number of the generator;
- The quantity of waste accepted;
- All DOT required shipping information;
- The date the waste is accepted by the transporter;

3. The above record accompanies the waste as it is shipped from generator to recycling facility; and

4. The reclaimer/transporter keeps these records for at least three years.

In proposing this exemption, EPA indicated that such agreements satisfied the Agency's concerns that subsequent handlers of the waste would have sufficient notification and knowledge of the hazardous nature of the wastes being handled and that the wastes would be tracked properly from the generator to the reclaimer and would not be mismanaged. In addition, the Agency believed that such an exemption would encourage beneficial recycling activities and would avoid discouraging current operations of this nature by not imposing paperwork obligations that have no corresponding environmental benefit. The Agency requested comment on the proposed manifest exemption and sought comment on other situations that might warrant reduced manifest requirements.

While some commenters opposed the proposed manifest exemption as providing an opportunity for "sham recycling", most commenters suggested that the exemption be expanded to cover all recycling situations or to cover a broader scope of activity than that proposed. Some commenters felt that the narrow nature of the exemption would afford some segments of the recycling industry an unfair competitive advantage. One commenter suggested that the exemption apply to reclamation agreements with firms that collect wastes for recycling but do not reclaim the wastes at their own facility, but rather, ship them via a licensed hazardous waste hauler to a separately owned and operated reclamation facility. This commenter argued that the same degree of protection would be afforded under these circumstances as under the proposed system since the waste would still be transported and reclaimed at licensed or permitted facilities. Other commenters argued that the exemption should also apply to legitimate recycling situations where ownership of the material may in fact change hands, such as cases where reclaimed material is not returned to the original generator but is instead sold to a third party. One commenter argued that the mere existence of a contract

provides sufficient notice to subsequent handlers of the nature of the waste and that adequate economic incentives exist in any recycling situation to ensure proper management.

The proposed restrictions on applicability of the manifest exemption were intended to serve the same functions that the manifest system does. The most important of these, the "tracking" function of the manifest, must be replaced with adequate contractual relationships and commercial incentives if the exemption is to meet the test of protecting human health and the environment while reducing administrative burden.

The Agency has considered various ways in which to expand the applicability of the exemption, including those suggested by commenters, and has concluded that unless the following proposed restrictions are retained, the exemption would allow unscrupulous persons to easily avoid the hazardous waste management system:

First, the Agency believes that the requirement that the generator and reclaimer have a written agreement for collection and reclamation of a specified waste and for redelivery of regenerated material at a specified frequency is essential. Such an arrangement (usually called a "tolling" arrangement) provides tracking and accounting of waste in place of the manifest system in waste disposal situations. A simple reclamation contract without return of regenerated material to the generator would provide no tracking of the waste, since the generator would have no incentive to check on subsequent waste handling after he turns it over to the transporter or reclaimer. In addition, allowing the exemption in any contractual situation would make no distinction between recycling activities and off-site waste disposal activities, where normally there are also contractual obligations. Requiring return of regenerated material as part of the contractual relationship places the proper incentive on the reclaimer to actually reclaim material for delivery to the generator (otherwise he would be in breach of the contract) and on the generator to scrutinize the practices of the reclaimer. Unlike off-site waste disposal, the generator would have some vested economic interest in ensuring proper management of the waste.

Second, the Agency believes that the vehicle used to transport the waste to the recycling facility and to deliver regenerated material back to the generator must be owned and operated by the reclaimer. This requirement precludes third parties not bound by the

reclamation agreement (*i.e.*, independent transporters) from entering the closed loop created by the tolling arrangement. This is necessary to ensure that the waste is not mismanaged. Even if a generator were to ship his waste via a licensed hazardous waste hauler, he would have no assurance that the waste would actually be delivered to the reclamation facility with which he has contracted. In such a third-party transporter situation, where the transporter has no vested interest in proper handling and management of the waste, the Agency would deem it necessary to impose additional significant recordkeeping requirements on all handlers of the waste, and possibly impose additional requirements on the generator. This would defeat the purpose of the manifest exemption, and may even impose greater burden than the manifest itself.

Third, the proposed recordkeeping requirements are an essential ingredient to providing the "paper trail" no longer provided by the manifest system.

While the Agency originally considered the retention of ownership requirement to be another essential element due the vested interest it created (*i.e.*, continuing legal responsibility for the material), a second look at this requirement, in light of comments received, has convinced EPA that it is unnecessary. The requirements of tolling and that the reclaimer and transporter be the same entity appear to adequately address the same concerns underlying the ownership requirement. While the vested interest in proper management of the waste may be theoretically increased if ownership is retained by the reclaimer or generator, it does not appear to add significantly to the economic interest created by the tolling arrangement. In addition, the concern that third parties would break the chain between generator and reclaimer is addressed by the requirement that the reclaimer and transporter be one entity. Moreover, the retention of ownership requirement may result in needless restriction on the type of commercial arrangements allowed between generators and reclaimers (*e.g.*, where a reclaimer buys the waste from the generator and sells regenerated material back to the generator or to other parties). Therefore, the Agency is deleting the ownership requirement from the final rule.

A number of commenters suggested that the Agency be more explicit in the regulation with respect to the periods of retention of the contractual agreements and the transportation logs since the proposed rule did not specify when the



3-year recordkeeping period was to begin. Consequently, the Agency is modifying the regulatory language of this amendment to specify that a copy of the reclamation agreement must be kept in the generator and reclaimer/transporter's files for 3 years after the expiration of the agreement. A copy of the collection log or shipping paper for each shipment must be kept in the transporter's files for a period of 3 years after the date of the shipment.

Several commenters also requested clarification on the applicability of the proposed exemption to waste mixtures where most, but not all, of the constituents were reclaimed. In the specific example cited, the Agency was asked to clarify whether spent cartridge filters used in dry cleaning operations would qualify for the exemption, even though only a portion of the waste constituents are actually reclaimed. The Agency believes such waste mixtures should also qualify for the manifest exemption, provided that the other conditions of the exemption are met. There is no basis for distinguishing between, for example, bulk spent solvents that have impurities removed by a reclaimer, which impurities must be subsequently managed as hazardous waste, and waste constituents in a mixture that may not be reclaimed and must be disposed of as a hazardous waste by the reclaimer. In both cases, the manifest exemption for shipments to the reclaimer would not affect the responsibility of the reclaimer to properly manage the residues from the reclamation process.

Another commenter requested clarification on whether the requirement that reclaimed material be returned to the generator limited the exemption to those situations where the generator received back the *same* waste sent for reclamation. The requirement that the generator receive regenerated material back from the reclaimer was intended to ensure that the generator maintain a vested interest in ensuring that the reclamation facility was in fact engaged in bona fide recycling. However, the Agency recognizes that most reclamation is conducted through commingling of relatively small quantities of recyclable materials from a number of generators. The manifest exemption only requires that the generator receive regenerated material back from the reclaimer, not that it be the identical material as was shipped to the reclaimer. The only requirement for receiving regenerated material back is that it be of the same *type or product specification* as the material originally shipped for reclamation. While the

Agency recognizes that this requirement will limit the exemption to situations where the generator purchases reclaimed solvent from one source, we do not agree with those commenters who believe this provides an unfair competitive advantage to firms with reclamation facilities. While the manifest exemption may reduce the paperwork burden for some firms who have waste materials collected on a frequent basis, the Agency does not believe that it provides such a reduction in burden that companies qualifying for the exemption would be able to reduce costs significantly.

Other commenters asserted that the proposed exemption would be appropriate for generators of more than 1000 kg/mo who recycle their wastes under the same circumstances. While the Agency recognizes that some of the regulatory amendments being promulgated today for generators of 100-1000 kg/mo could be considered for larger generators, to do so would require extensive review of the existing hazardous waste management system and case-by-case determinations as to the appropriateness of specific requirements. Furthermore, the elements that the Agency must consider in adopting rules for small quantity generators, including the economic impacts of full regulation on small businesses, are not necessarily relevant to the rules applicable to larger quantity generators. Therefore, the Agency is promulgating the manifest exemption today only for 100-1000 kg/mo generators.

*c. Waste Minimization:* Under section 3002(b) of HSWA, all generators must certify on the manifest required under subsection (a)(5) that they have in place a program to reduce the volume or quantity and toxicity of the waste they generate to a degree determined by the generator to be economically practicable. Generators must also certify that their current method of management is the most practicable method available to minimize present and future threat to human health and the environment.

On July 15, 1985, EPA published a rule codifying a number of interim HSWA requirements (50 FR 28702). A revised Uniform Hazardous Waste Manifest Form (EPA Form 8700-22) was included in the Appendix to Part 262, and contained a revised certification statement incorporating the waste minimization provision. In the Codification Rule, EPA explained that the waste minimization provision did not apply to small quantity generators generating less than the quantities of

acutely hazardous waste specified in § 261.5 or to generators of less than 1000 kg of other hazardous waste, unless the generator accumulated quantities which exceeded 1000 kg, and thus became subject to Part 262. The waste minimization requirements were not applicable to these generators because section 3002(b) refers to "the manifest required by [section 3002] subsection (a)(5)" and the interim manifest provisions are imposed by section 3001(d), not 3002(a)(5). However, because section 3001(d) of RCRA requires EPA to establish standards for 100-1000 kg/mo generators under sections 3002, 3003, and 3004, the waste minimization certification requirements would apply to 100-1000 kg/mo generators upon promulgation of such standards. Since EPA did not propose to exempt 100-1000 kg/mo generators from the waste minimization certification requirements of section 3002(b) when it proposed rules for 100-1000 kg/mo generators on August 1, 1985, these generators would be required to certify compliance with the waste minimization provision when the standards under today's rule become effective.

EPA believes that requiring 100-1000 kg/mo generators to comply with the waste minimization certification provision imposes little or no additional administrative or technical burden and could, in fact, have real environmental benefit. However, since the Agency did not provide the public with an opportunity to comment on the appropriateness of this provision for 100-1000 kg/mo generators, EPA is publishing a separate notice elsewhere in today's *Federal Register* which explicitly requests comment on the potential burden which this requirement could impose on generators of 100-1000 kg/mo. The specific reasons for proposing to apply the waste minimization certification provision to these generators are described in detail in that notice. As noted in the other *Federal Register* notice, EPA will accept public comment on this provision for 30 days. If, after consideration of the comments, EPA determines that no exemption from the waste minimization certification requirement is warranted at this time, 100-1000 kg/mo generators will need to comply with the requirement by operation of law as of the date that the other Part 262 requirements take effect (*i.e.*, six months from today).

### 3. Recordkeeping and Reporting—Part 262, Subpart D

In the proposed rules for generators of 100-1000 kg/mo, EPA attempted to

significantly reduce the recordkeeping and reporting burden on these generators, consistent with the statutory goals of protecting human health and the environment while reducing impacts on small business to the extent feasible. Specific proposed modifications to the recordkeeping and reporting requirements of Subpart D of Part 262 included:

- A proposed exemption from the recordkeeping requirements of § 262.40(a) for manifest retention and § 262.40(b) dealing with retention of Biennial and Exception Reports;

- A proposed exemption from the reporting requirements of § 262.41 (Biennial Reports) and § 262.42 (Exception Reports).

This section of the preamble addresses the comments received on these proposed modifications to recordkeeping and reporting requirements and the Agency's final decision in each of these areas.

*a. Recordkeeping—§ 262.40:* As noted in Unit III.C.2. of today's preamble, EPA received extensive comment on the proposed single copy manifest system which proposed to eliminate the need for retention of manifest copies as well as requirements for the use of a multiple copy manifest when shipping waste off-site. A large number of commenters were generally supportive of efforts to reduce recordkeeping requirements to the maximum extent feasible, and many felt that no recordkeeping requirements whatsoever should be imposed on 100–1000 kg/mo generators. However, many of these same commenters, when discussing the proposed single copy manifest, pointed out that most generators would opt to retain a copy of the manifest for their own records, in order to have a record of their waste management shipments, regardless of whether it was required by EPA. While some of these commenters did not want the retention of manifest copies to be required, they nevertheless felt such recordkeeping to be prudent. Other commenters believed that retention of manifest copies should be required, and that such a requirement does not impose an unreasonable burden since, as noted above, virtually all generators would retain a copy for their records in any case. These commenters also asserted that the existence of a copy of the manifest in the generator's records, containing the signature of the transporter and ultimately the signature of the designated facility when the manifest copy was returned, was essential.

The Agency agrees with these commenters that retention of manifest copies should be required. Existence of such records may be the only defense a

generator would have in enforcement actions or other litigation if the single manifest were to be changed by the transporter or if the waste is mismanaged. The existence of these records would allow a generator to demonstrate to enforcement personnel, should a problem in transporting or subsequent handling arise, that the generator had done his best to ensure proper management by fulfilling his generator responsibilities. While such proof would not eliminate any liabilities the firm may otherwise have under RCRA and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or "Superfund"), it could reduce the danger of the generator being considered the primary responsible party in a Superfund action. Also, as one commenter pointed out, given the large number of States, transporters and treatment, storage, and disposal facilities that would insist upon use of the full manifest system, it would not be appropriate for EPA to, in effect, encourage generators to deliver their only copy of the manifest to a transporter.

EPA agrees with those commenters that believe that retention of a copy of a manifest, signed by the designated facility and the transporter, does not pose an unreasonable burden for 100–1000 kg/mo generators, who will most likely be shipping only 2–4 shipments per year. This is particularly true in light of the generally universal agreement on the need for generators to retain a copy for their own protection. EPA also believes that retention of manifest copies provides the necessary incentive for all wastes handlers to execute their responsibilities in the manner required by state and Federal waste management requirements. Therefore, the Agency is not exempting 100–1000 kg/mo generators from the requirement to retain a copy of each manifest in their files for a period of three years from the date of shipment or until a signed copy of the manifest is returned by the designated facility and is substituted for the original manifest for a period of three years.

*b. Exception Reports—§ 262.42:* As discussed in the proposal, EPA proposed to exempt 100–1000 kg/mo generators from the requirement to file an exception report with EPA if the generator did not receive a signed copy of the manifest back from the designated facility within forty-five days of acceptance of the waste shipment by a hazardous waste transporter (§ 262.42). The proposed exemption from this requirement was based simply on the lack of manifest copies under the

proposed single copy manifest system. Under the proposed rule, a copy of the manifest was not required to be returned to the generator by the facility, so that there would have been no basis for a generator to make a determination as to whether or not his shipment actually arrived at the designated facility, and thus no basis for an exception report.

In deciding to return to a full manifest system for 100–1000 kg/mo generators, the Agency deemed it appropriate to evaluate whether also requiring exception reporting would impose an unnecessary administrative burden on these generators in light of the environmental benefit that would be gained. First, the Agency considered the responsibilities that would be imposed on the generators, which would include establishment of an internal tracking system, through filing or by computer, to allow the generator to determine whether a return copy of the manifest is overdue. In addition, the generator must contact the transporter and/or permitted facility to determine the status or location of the waste and manifest, and if unsuccessful, must file a report with a copy of the manifest and a cover letter describing his efforts to locate the waste and the results of his efforts. Several commenters objected to imposition of these requirements and argued that this is the very type of paperwork requirement that Congress intended EPA to scrutinize before applying to small businesses.

Second, the Agency considered the extent to which such reporting is necessary to protect health and the environment. Many commenters contended that the exception reports were essential to alert EPA and the States to lost shipments, and the Agency agrees that the exception report requirement is an important link in the full manifest scheme.<sup>4</sup> However, the Agency has received very few exception reports since the requirement was adopted, leading it to believe that the tracking function of the multiple-copy manifest system is also working as a self-policing mechanism, ensuring that

<sup>4</sup> One commenter cited legislative history as support for its argument that the modified exception reporting requirement of section 3001(d)(8) must be included in the regulations because Congress deemed it to be a minimum requirement. The legislative history of this provision indicates, however, that this was considered to be a minimum requirement only in the event that EPA did not promulgate final regulations by March 31, 1986, and that EPA is authorized to vary the manifesting and reporting requirements as long as the notice requirement is met. See S. Rep. No. 284, 98th Cong., 1st Sess. 11–12 (1983); H.R. Rep. No. 1133, 98th Cong., 2nd Sess. 103 (1984).

wastes reach their proper destination. In addition, the smaller relative risks associated with the smaller quantities of waste generated by 100-1000 kg/mo generators do not necessitate the same degree of double-checking needed for large quantity generator shipments.

In balancing the utility of the exception reporting requirements with the need to minimize the administrative and paperwork burden on small businesses, the Agency has concluded that its decision to require the multiple copy manifest system for 100-1000 kg/mo generators will provide sufficient assurance that waste shipments reach their proper destination, and that the incremental environmental benefits that may be gained by imposing the exception reporting requirement on these generators are outweighed by the associated administrative burdens. The capabilities of small businesses to develop and maintain internal tracking and follow-up systems are limited, and could prove to be very burdensome, especially where such follow-up reporting is seldom necessary. Consequently, while the Agency is today requiring generators of 100-1000 kg/mo to use a multi-part manifest form and requiring designated facilities to return a signed copy to the generator, the Agency has decided not to require generators of 100-1000 kg/mo to comply with the exception reporting provisions of Part 262. However, this exemption should not be construed as relieving the generators of the responsibility of assuring that their wastes are managed at Subtitle C facilities. This obligation, along with CERCLA liability should the waste ultimately be mismanaged, remains. Therefore, while EPA is today exempting generators of 100-1000 kg/mo from the requirement to file an exception report under § 262.42, it is specifically *encouraging* generators to perform the necessary follow-up to ensure that their waste shipments reach the designated facility. Should a shipment turn out to be truly lost, it will be in the generator's interest to send a copy of the manifest along with a brief explanatory note to EPA or the authorized State Agency in order to reduce the likelihood that the generator would be held solely responsible in an enforcement or Superfund action.

*c. Biennial Reports—§ 262.41:* Section 262.41 requires a generator who ships waste off-site to submit a biennial (*i.e.*, every other year) report to the Regional Administrator by March 1 of each even numbered year setting out the quantities of wastes generated during the previous odd numbered calendar year and the disposition of the wastes generated.

EPA proposed to exempt generators of 100-1000 kg/mo from the requirement to complete, file, and retain copies of a biennial report. The Agency's rationale for this exemption was based on four points. First, the extent of error in State summary reports used to compile nationwide waste generated by all small quantity generators. As a result, the value of the data from reports that would be filed by 100-1000 kg/mo generators would not significantly add to the value of the reports and the burden imposed would far outweigh the benefits to be gained. Second, the Agency explained that the large number of reports it would receive would far outweigh the agency's administrative ability to make use of the reports. Third, under the proposed single copy manifest system, generators would not have had the manifest copies that serve as the basis for preparation of biennial reports. Finally, the Agency explained that information on wastes generated by 100-1000 kg/mo generators would still be available from reports required to be filed by treatment, storage, and disposal facilities.

Several States submitted comments which generally favored retention of the biennial report requirement for 100-1000 kg/mo generators. Although generators would have available to them the manifest information needed to prepare biennial reports under today's final rule imposing the multiple copy manifest, the remaining reasons for proposing this exemption remain valid. In addition, EPA received extensive comment supporting the proposed exemption from biennial reporting requirements as an appropriate means of reducing administrative burden without sacrificing protection of human health and the environment. The Agency agrees that this exemption is appropriate.

One State specifically suggested that EPA require biennial reporting from all generators who generate more than 6000 kg or 12,000 kg in a calendar year and specifically requested clarification of the application of biennial report requirements to "episodic generators" (*i.e.*, generators that produce quantities of hazardous waste that place them in different generator categories from month to month). The Agency does not believe any benefit would be gained by establishing a new generator category based upon a yearly generation rate. Doing so would only add further confusion to an already complex regulatory scheme, and would be inconsistent with the month-to-month approach already established by statute and regulation. Also, episodic

generators must comply with the biennial report requirements for those months in which they are "large quantity generators"; that is, they must submit reports on their hazardous waste activities for those months in which their generator activities have changed and as long as the fully regulated waste remains on-site.

Thus, the Agency is today finalizing the proposed exemption from the biennial report requirements of § 262.41 for generators of 100-1000 kg/mo, including an exemption from the provisions of this section requiring a description of efforts taken during the reporting year to minimize waste generation.

#### 4. On-site Accumulation—§ 262.34

As discussed in Unit I.B.I. of today's preamble, generators of 100-1000 kg/mo are no longer conditionally excluded in Section 261.5 from the bulk of the hazardous waste regulatory program. Instead, these generators, like other regulated hazardous waste generators, are subject to the requirements of Parts 262-266, 270, and 124, to the extent those requirements apply. For generators of 100-1000 kg/mo, however, these requirements have been modified in certain instances to reflect their small business nature as well as specific statutory directives.

Section 262.34 contains the requirements for generators that accumulate hazardous waste on-site. Under § 262.34(a), a generator may accumulate hazardous waste on-site in tanks or containers in any quantity for up to 90 days without the need to have interim status or obtain a storage permit under RCRA (or comply with Parts 264 or 265) provided the generator complies with the limited requirements of § 262.34. These requirements specify that: (i) the date upon which the period of accumulation begins is clearly marked on the tank or container; (ii) the tank or container is labeled with the words "Hazardous Waste"; (iii) the generator complies with Subparts C and D of 40 CFR Part 265 (Preparedness and Prevention and Contingency Plan and Emergency Procedures, respectively); and (iv) the generator complies with Subpart I of 40 CFR Part 265 if the waste is placed in containers or with Subpart J of 40 CFR Part 265 if the waste is placed in tanks, and he complies with the personnel training requirements of § 265.16.

The proposed rules for generators of 100-1000 kg/mo would have added a number of modifications to the § 262.34 provisions, for 100-1000 kg/mo generators. This section of the preamble

discusses those proposed amendments and the issues raised by commenters to the proposed rules.

*a. Time and Quantity Limitations:* Section 3001(d)(6) directs EPA, in developing regulations for 100-1000 kg/mo generators, to allow storage of hazardous waste on-site without the need for interim status or a RCRA permit for up to 180 days. In addition, EPA is directed to allow these generators to store up to 6000 kg of hazardous waste for a period of 270 days without the need for interim status or a permit if the generator must ship or haul his waste greater than 200 miles. While no specific quantity cutoff was established for 180 day accumulation in section 3001(d) a de facto limitation of 6000 kg exists. (This is due to the fact that a 100-1000 kg/mo generator could produce no more than 6000 kg in a 180 day period without exceeding 1000 kg/mo at least once during that period, and thus become fully regulated under Part 262 instead of under the modified standards being proposed today for 100-1000 kg/mo generators.) EPA is today amending § 262.34 to allow for such on-site accumulation in tanks and containers by 100-1000 kg/mo generators for up to 180 days (or 270 days for long-distance transport) without the need to obtain interim status or a RCRA permit, in accordance with Section 3001(d)(6) of the HSWA, provided the requirements of § 262.34 are met.

A significant number of commenters suggested variations on the proposed time and quantity limitations for on-site accumulation. A number of States supported the application of the existing 90 day accumulation period to these generators in order to maintain consistency and reduce confusion. Still other commenters argued that the time limit for accumulation for 100-1000 kg/mo generators should be extended to a full year in order to allow economical shipments, provided the 6000 kg cutoff was not exceeded. Some commenters even favored unlimited accumulation time and quantity for these generators.

Because the time and quantity limitations are established in RCRA section 3001(d)(6), the Agency believes that it carries a heavy burden in varying these limitations. Except for emergency circumstances, as discussed below, the Agency does not believe that this burden has been met.

While the 6000 kg cap arguably applies only to the 270-day storage period, the Agency believes that the better interpretation is that the 6000 kg cap applies to both storage periods. As noted above, a maximum of 6000 kg of hazardous waste could be accumulated

during a 180-day period if the generator never generated more than 1000 kg in any given calendar month. Consequently, any quantity in excess of 6000 kg would mean that the generator was subject to full regulation at least one month during the 6-month period. Therefore, it is logical to apply the accumulation "cap" of 6000 kg to both storage for 180 as well as 270 days. In addition, as explained in the August 1 proposal, the total quantity of 6000 kg remains the same whether or not the waste is accumulated on-site for 180 or 270 days and the Agency could see no substantive difference in potential risk. Finally, EPA believed that the high cost of transportation would dictate that the waste be managed at the closest facility, regardless of the presence or absence of regulatory criteria.

One State commenter felt that the lack of specific criteria for allowing 270-day accumulation could have the effect of encouraging continued reliance on land disposal as there will be decreasing numbers of viable land disposal facilities in the future, and the remaining facilities will increasingly be located more than 200 miles away from the generator. This commenter suggested that EPA allow accumulation for only 180 days for wastes that are destined for disposal but allow accumulation for 270 days for wastes which will be treated or recycled. EPA does not believe that it has authority to make such a distinction since Congress has already established the condition that must be met for accumulation for 270 days: where the waste must be shipped over 200 miles. If the closest facility is a disposal facility located greater than 200 miles from the generator, to allow this generator only 180 days would directly conflict with the plain language of the statute.

Another commenter expressed concern over the enforcement of 180- or 270-day accumulation periods in the absence of any specific criteria. This commenter felt that an inspector would have no way of ascertaining whether wastes which have been stored longer than 180 days but less than 270 days are destined for management at a disposal facility or a treatment or recycling facility that is located further than 200 miles away. This commenter was particularly concerned that the lack of multiple copies of the manifest would eliminate the ability of the inspector to at least make a judgment based on the generator's previous waste shipments.

The Agency has decided not to establish specific criteria for determining if a generator may accumulate hazardous wastes on-site for 180 or 270 days. EPA believes that such criteria would not serve any useful

purpose. Under today's final rule, however, generators would retain copies of manifests which could be used to ascertain the location of the facility which the generator has utilized for previous shipments. Therefore, manifest copies (or reclamation agreements) will be available as a means to check the actual location of the destination facility. In addition, the Agency was concerned that establishing criteria for demonstrating that the closest facility was greater than 200 miles from the generation site would be unnecessarily confusing and could have the perverse effect of causing waste to go to less desirable management practices (e.g., where a disposal facility is located within 200 miles while a recycling facility is located over 200 miles from the generator, the generator could be forced to utilize the less desirable disposal facility). The absence of specific criteria will not pose an unreasonable obstacle to enforcement of the accumulation provisions. Thus, EPA is finalizing § 262.34(e) as proposed.

It should be noted that generators that have multiple waste streams which are managed at different facilities may actually be subject to different accumulation time limitations for the different waste streams. A generator may accumulate some wastes for 180 days if they will be managed at a facility under 200 miles away and other wastes for 270 days provided the generator never accumulates a total quantity of hazardous waste on site that exceeds 6000 kg and provided the generator complies with all applicable accumulation provisions.

Today's rules also apply the existing provisions of § 262.34(b) requiring compliance with Parts 264, 265, and 270 to 100-1000 kg/mo generators that exceed the time limitations in proposed § 262.34(d) and (e). Under the existing rules, and under the rules promulgated today, generators that exceed a time or quantity limitation must comply with the interim status requirements and obtain a storage permit. These requirements, as they would apply to 100-1000 kg/mo generators, are contained in new § 262.34(f).

An additional component of the proposed § 262.34(f) amendments would have allowed an additional 30-day accumulation period for generators of 100-1000 kg/mo at the discretion of the Regional Administrator where he determines that such an extension is warranted due to temporary, unforeseen, and uncontrollable circumstances. This amendment was based on an identical provision currently applicable to large quantity

generators. While most commenters on this amendment were supportive of the emergency extension provision, one commenter argued that the storage periods specified in the statute were clearly the maximum periods allowed. The Agency believes that Congress never intended for the Agency to promulgate rules so inflexible that they could not take into account, and accommodate, *legitimate* emergency circumstances. In addition, the Agency assumes that the emergency extension provision is consistent with Congressional intent since it did not explicitly preclude such an extension when it adopted section 3001(d)(6). Therefore, the Agency is promulgating this provision as proposed.

Several commenters requested the Agency to clarify the applicability of the "satellite provision" of 40 CFR 262.34. This provision allows generators to accumulate up to 55 gallons of non-acutely hazardous waste in "satellite" areas where the waste is generated in industrial processes without complying with the 90-day accumulation standards. See 49 FR 49568 (Dec. 20, 1984). Satellite areas are those places (under the control of the operator of the process generating the waste) where wastes are generated in the industrial process and must initially accumulate prior to removal to a central area. Within three days of accumulating over 55 gallons, the generator is required to comply with all applicable RCRA requirements for further management of any waste in excess of 55 gallons. When the satellite rule was promulgated, generators of less than 1000 kg/mo of non-acutely hazardous waste (or less than 1 kg/mo of acutely hazardous waste) were not subject to any of the requirements of the satellite accumulation rule. See 49 FR 49568-49570. This is because these generators were exempt from most of the hazardous waste management regulations, including Part 262. However, under today's rule, only generators of less than 100 kg/mo will remain exempt from the regulations. Therefore, 100-1000 kg/mo generators may accumulate up to 55 gallons of non-acutely hazardous waste in satellite areas without meeting the storage requirements being promulgated today, so long as the requirements of § 262.34(c) are met. Of course, as soon as the 55 gallon limit has been exceeded in any satellite area, any excess waste is subject to all applicable RCRA requirements within 3 days. This means that the 180/270 day on-site accumulation provision for 100-1000 kg/mo generators applies to any excess

waste three days after the 55 gallon limit has been exceeded.

Two commenters who operate off-shore drilling facilities requested clarification on the applicability of this provision to off-shore facilities and central collection points located on-shore. These commenters cited their desire to avoid manifesting or using transporters with EPA Identification numbers in shipping wastes from off-shore facilities to on-shore collection areas.

The satellite provision was intended to provide for extended accumulation of waste in specific areas of generation to allow for more economical transporting of waste within one site. The applicability of this provision does not address the extent to which a generator must comply with Parts 262 and 263 when it is shipping wastes off-site. EPA does not deem off-shore facilities and on-shore collection facilities to be "on-site", or the same site, as defined by 40 CFR 260.10. To the extent that each facility has various points of waste generation, the satellite provision would apply; however, as in any off-site hazardous waste shipment, the requirements of Parts 262 and 263 must be met when wastes generated at each off-shore facility are transported to an on-shore collection or storage facility.

*b. Standards Applicable to On-site Accumulation:* EPA proposed to modify certain of the requirements for on-site accumulation by 100-1000 kg/mo generators in order to simplify the requirements for contingency plans and emergency procedures, and personnel training (contained in Part 265, Subpart D, and § 265.16). The specific amendments to § 262.34 would be contained in new paragraphs (d), (e), and (f), specifying the particular requirements applicable to on-site accumulation by generators of 100-1000 kg/mo. No modifications were proposed to the standards for storage in containers and tanks (Part 265, Subparts I and J) or to the requirements for preparedness and prevention contained in Subpart C of Part 265. EPA indicated that it believed these standards were appropriate and necessary and not unduly burdensome. Several commenters have objected to the apparent inconsistency between application of the existing accumulation provisions of § 261.5 and § 262.34 and the proposed standards under Section 3001(d) of the HSWA. Under the existing rules for conditionally exempt small quantity generators under § 261.5 and the accumulation provisions of § 262.34, generators who either generate quantities above specific cutoffs or who

accumulate quantities above those cutoffs over any period of time become subject to additional requirements. Thus, if the proposed rules were to be finalized, generators of less than 100 kg/mo who accumulated over 1000 kg/mo would be subject to full regulation under Part 262, including a 90 day accumulation time limit followed by permitting requirements for longer on-site storage. Also, if more than 1 kg of acutely hazardous waste were accumulated, full Part 262 standards would apply, including a 90 day accumulation time limit followed by permitting requirements for longer on-site storage. Conversely, generators of 100-1000 kg/mo would be allowed to accumulate up to 6000 kg for up to 180 or 270 days and be subject to the specially reduced standards being promulgated today rather than full Part 262 regulation.

A number of commenters pointed out that generators who fall into different generator categories could be subject to different standards for essentially the same quantities of the same wastes. For example, a generator of just over 1000 kg/mo would be subject to full regulation as would a generator of just under 1000 kg/mo who happens to accumulate above 1000 kg. These regulations include full contingency planning and personnel training (as well as exception and biennial reporting). At the same time, a generator of between 100 and 100 kg per month may accumulate up to 6000 kg and be subject to the special standards being promulgated today, including reduced contingency planning and personnel training requirements and exemptions from exception and biennial reporting. Thus, 6000 kg of hazardous waste could be subject to lesser standards than quantities closer to 1000 kg/mo. Substantial confusion may also result in determining which storage standards apply, when, and for how long. The confusion is particularly troubling for so called "episodic generators" that may move from one generator category to another from month to month. (See Unit III.B.2.e.)

A number of commenters suggested a variety of alternatives schemes for eliminating the inequity and the confusion, including applying the reduced storage standards proposed for 100-1000 kg/mo generators to all quantities of waste accumulated up to 6000 kg., regardless of the source of the waste. These commenters believed that such a scheme would greatly simplify compliance and enforcement since quantity of waste would be the only

criteria needed in determining what storage standards should apply.

The Agency agrees that, in theory, an approach that uniformly applies the same requirements to the same quantities of waste has some merit. However, as discussed above, Congress has directed EPA to consider varying the standards for 100-1000 kg/mo generators only, and to consider their small business nature in determining which standards are appropriate for on-site accumulation. EPA is directed to relieve these generators of unnecessary burden, to the extent feasible, and consistent with protection of human health and the environment. Given that Congress has not extended such economic considerations to large generators, EPA is not authorized to vary applicable storage standards, if they are necessary to protect human health and the environment. EPA has already determined that the existing storage standards applicable to generators of more than 1000 kg/mo are necessary to reduce risks sufficiently. Therefore, EPA is retaining the existing standards for these generators.

With regard to generators of less than 100 kg/mo, EPA has more flexibility because they fall within the "small business" category that Congress was concerned about. The Agency decided in the proposed rules not to modify the accumulation provision for generators of less than 100 kg/mo because such a generator would need to accumulate waste for at least 10 months before exceeding 1000 kg. However, it appears to be inconsistent with Congressional intent that small businesses producing less than 100 kg/mo should be subject to more stringent accumulation standards than 100-1000 kg/mo generators for quantities between 1000 kg and 6000 kg. Therefore, EPA is today finalizing an amendment to § 261.5 that will subject generators of less than 100 kg/mo to the same provisions of § 262.34(d) as are applicable to generators of 100-1000 kg/mo, when they accumulate waste in quantities greater than 1000 kg but less than 6000 kg.

*i. Standards for Preparedness and Prevention—Part 265, Subpart C:* Under § 262.34(a), generators who accumulate hazardous waste on-site must comply with the requirements of Subpart C of Part 265 which contains requirements for facility preparedness and prevention. In the Proposal, EPA indicated its intention to apply all of the existing provisions of this Subpart, without modification.

The requirements for preparedness and prevention are as follows:

- Section 265.31 requires that facilities be maintained and operated to

minimize the possibility of fire, explosion, or any unplanned release of hazardous waste or hazardous waste constituents to the environment;

- Section 265.32 specifies that facilities must be equipped with certain kinds of equipment (*i.e.*, an internal communications or alarm system, a telephone or other device capable of summoning emergency assistance, and appropriate fire control equipment including fire extinguishers and water at adequate volume and pressure to supply fire control system) *unless* none of the wastes handled at the facility require a particular kind of equipment;

- Section 265.33 requires that this equipment be tested and maintained, as necessary, to assure its proper functioning;

- Section 265.34 requires that all persons involved in hazardous waste handling operations have immediate access to either internal or external alarm or communications equipment, unless such a device is not required under § 265.32;

- Section 265.35 requires the owner or operator of the facility to maintain sufficient aisle space to allow the unobstructed movement of personnel and equipment to any area of facility operation in an emergency, unless aisle space is not needed for any of these purposes; and

- Section 265.37 requires the owner or operator to attempt to make certain arrangements with police, fire departments, State emergency response teams, and hospitals, as appropriate for the type of waste handled at his facility and the potential need for the services of these organizations. Further, if State or local authorities decline to enter into such arrangements, the owner or operator must document the refusal.

The Agency did not propose any amendments to Subpart C because they are appropriate and necessary and not unduly burdensome. The requirements all involve common sense principles for preparedness and prevention which hazardous waste handlers can and should address in order to ensure safe handling of hazardous wastes. Also, since the requirements are structured such that specific equipment and procedures are required only on an "as needed" basis, the existing regulation provides complete flexibility for hazardous waste generators to tailor their preparedness and prevention activities to the specific kinds of wastes handled at the facility.

Most commenters believed that these requirements provided sufficient flexibility for 100-1000 kg/mo generators to tailor their preparedness activities to their specific waste management

activities and needs. While EPA requested comment on the possibility of imposing more specific but less numerous requirements in order to alleviate potential uncertainty over which procedures are appropriate for particular types of wastes, the Agency has decided that the broad principles embodied in Subpart C are preferable to the specific suggestions made by commenters. For example, one commenter felt that the requirement to make arrangements with state and local authorities, as needed, would confuse many generators and suggested that EPA substitute a simpler requirement that a generator simply request a visit from the fire department. EPA believes, however, that such a specific requirement would not provide sufficient preparedness in some cases, while in others it may be overly burdensome, as where no ignitable or flammable wastes are managed at that site.

A number commenters were concerned that the requirement to document refusals to make appropriate arrangements by state and local authorities and health care facilities would prove to be extremely burdensome to small businesses, particularly since refusals are seldom likely to be made in writing. EPA did not intend to convey a need for generators to obtain written refusals from every entity that declined to visit the facility. For purposes of this requirement, EPA will consider a signed and dated letter from the generator to the state or local entity which attempts to make such arrangements to be sufficient documentation of an attempt to make the appropriate arrangements.

One commenter believed that the requirement to make arrangements with appropriate state and local emergency service facilities was unnecessary where generators maintain their own fire, security, and emergency health care personnel at some of their larger facilities and that such facilities should be allowed to fulfill this requirement without making outside arrangements. While the Agency did not intend to preclude the use of on-site emergency personnel to provide preparedness in the case of emergencies, EPA does not agree that such arrangements alone will always be sufficient to comply with the requirements of Subpart C where the nature of the waste management operations at that facility could result in emergencies also requiring the involvement of State and local emergency services.

This commenter was also concerned that EPA's broad definition of "facility"

could require that preparedness and prevention measures be maintained throughout every portion of the generator's property instead of just those areas where waste is accumulated. EPA has never intended its broad definition of "facility" (see 50 FR 28712) to be used in application of the preparedness and prevention regulations; rather, the definition of "facility" in § 260.10 is used. Applying this narrower definition makes clear that the preparedness and prevention regulations only require the generator to take those precautions and maintain that equipment necessary to ensure that they are adequately prepared to respond to emergencies relating to the hazardous waste operations of the facility. If special equipment or precautions are not needed for this purpose in areas of a facility where hazardous wastes are not managed, then a generator is not expected to maintain them in those areas. At the same time, however, other precautions, such as adequate aisle space, may be needed in areas outside of the immediate waste accumulation area in order to ensure adequate access to emergency equipment in the event of a fire, explosion, or release of hazardous waste or hazardous waste constituents.

For the reasons discussed above, the Agency does not believe that modifications to Subpart C of Part 265 are appropriate for generators of 100–1000 kg/mo and is, therefore, applying the existing Subpart C requirements to these generators.

*ii. Standards for Contingency Plans and Emergency Procedures—Part 265, Subpart D, and Personnel Training Requirements:* Under § 262.34(a), generators who accumulate waste on-site must comply with certain requirements in Part 265, Subpart D, pertaining to contingency plans and emergency procedures and personnel training requirements. These requirements are contained in § 265.16. The § 265.16 requirements are intended to ensure that personnel are adequately prepared to manage hazardous waste and to respond to any emergencies that are likely to arise. EPA considered applying these same requirements to 100–1000 kg/mo generators since, for the most part, the requirements embody common sense principles that are necessary and appropriate for facilities managing hazardous waste. However, these requirements appeared to be unnecessarily burdensome in some cases (e.g. requiring formal classroom training and written, detailed contingency plans) and costly and could have unnecessarily severe impacts on many small businesses. The Agency

therefore proposed a simpler set of requirements for generators of 100–1000 kg/mo to reduce the administrative burden on small businesses while still protecting human health and the environment.

EPA proposed and requested public comment on the following requirements for 100–1000 kg/mo generators that would be contained in a new § 262.34(d):

- At all times, an "emergency coordinator" (E.C.), (*i.e.*, someone familiar with these requirements), must be on-site (or on call). The coordinator may also designate someone to act in his place.
- The generator must post certain information next to the telephone, including: the name and telephone number of the E.C.; location of fire extinguishers and spill control material; and the phone number of the fire department;
- The generator must ensure that all employees are thoroughly familiar with proper waste handling and emergency procedures;
- The generator (or the E.C.) would have to respond to any emergencies that arise. In the case where an emergency was serious enough to warrant a visit by the fire department or when the generator (or E.C.) has knowledge of a spill of hazardous waste that could reach surface water or otherwise threaten human health or the environment, the generator would have to notify the National Response Center and file a report with the EPA Regional Administrator as provided by proposed § 262.34(c)(3)(E).

EPA believed these requirements to be adequate to protect public health and the environment from fires, leaks, spills, or other releases from generators of 100–1000 kg/mo who are accumulating waste on-site prior to shipment off-site.

While many commenters supported the reduced contingency plan, emergency procedures, and personnel training requirements as proposed, a number of commenters did not agree with the proposed modifications. Several commenters believed that relaxing the standards for on-site accumulation for 100–1000 kg/mo generators would not be appropriate given the increased quantities of waste which can be accumulated (*i.e.*, 6000 kg) and the generally less sophisticated waste management expertise of smaller firms. Some commenters suggested various approaches including requiring full Subpart D compliance for all quantities accumulated above specific limits, such as 1000 kg or 3000 kg. Other commenters argued that the reduced standards were appropriate not only for

generators of 100–1000 kg/mo, but also to larger generators and suggested that the reduced standards apply to all accumulated quantities between 1000 kg and 6000 kg.

Since the Agency recognized in the proposed rules that applying standards to 100–1000 kg/mo generators accumulating waste on-site in quantities up to 6000 kg was of some concern, it was careful to modify the standards only where administrative requirements not essential to the substantive functioning of the standards were involved. Thus, the standards, as modified, are sufficient to protect human health and the environment from release of wastes accumulated by 100–1000 kg/mo generators.

EPA does not believe it is appropriate to apply the reduced standards to wastes accumulated by generators of more than 1000 kg/mo. As previously discussed, EPA's authority to consider areas in which to reduce burdens extends to small quantity generators. Also, as discussed in Unit III.A. above, the relative risks posed by wastes accumulated by large quantity generators are greater. Thus, generators of greater than 1000 kg/mo must comply with the requirements of Subpart D of Part 265 if wastes are accumulated on-site prior to shipment off-site.

A number of commenters also suggested several modifications to the proposed standards. Some commenters were concerned that the requirement that each business designate an emergency coordinator to be on call at all times would impose an undue burden because this would require that the emergency coordinator be trained in emergency response procedures. One commenter believed that the term "emergency coordinator" would be confusing since it implies that the individual must have a high degree of training in risk assessment and abatement.

The intent of this requirement was simply to ensure that each generation facility had at least one person available at all times who could be contacted and would know what steps to take in the event that an emergency should arise. EPA envisioned that for most small businesses, the owner or manager already fulfills this requirement by being available 24 hours a day in case an emergency, such as a fire or burglary, occurs at that facility. EPA does not intend that generators must hire and train a new employee for this task. Viewed in this light, this requirement is reasonable and not unduly burdensome. In addition, there is no reason why small businesses would confuse the

term "emergency coordinator" with the more formal On-Scene Coordinators at Superfund clean-up sites.

With regard to the proposed personnel training requirement that a generator ensure that all employees be made thoroughly familiar with waste handling and emergency procedures, several commenters were in favor of more stringent personnel training requirements. One commenter noted that personnel training is necessary to manage tanks properly and to prevent tank contamination and recommended that the Agency adopt more stringent personnel training requirements if more than 15 drums or 7,500 pounds (approximately 3400 kg) are accumulated on-site. Another commenter objected to allowing 100-1000 kg/mo generators, who typically have fewer resources and less expertise than large quantity generators, to accumulate 6000 kg on-site with reduced personnel training standards, and suggested that personnel training plans be required whenever more than 3000 kg are accumulated on-site. This commenter suggested that criteria such as the nature of the waste and the history of spills and releases from the generator be established to allow EPA or State agencies to require a generator of 100-1000 kg/mo to establish and implement a personnel training plan.

In the absence of any justification provided by commenters, the Agency does not believe that establishing an intermediate limit on accumulation, after which more formal personnel training requirements apply, would result in any significant increase in protection to human health and the environment. While EPA agrees that risks involved increases as waste is accumulated, it believes that the requirements adopted are adequate to protect against the risks from fires, leaks, spills, or other releases. The proposed requirements embody the same principles contained in the existing personnel training requirements, but rely less on the preparation of written plans in order to reduce the burdens on 100-1000 kg/mo generators.

One commenter suggested that if a 100-1000 kg/mo generator at any time is required to prepare a personnel training plan because he generated more than 1000 kg in any one month, he should be required to maintain the personnel training plan for at least the following six months even though he produces no more than 1000 kg/mo during that period. The commenter suggested that this requirement would impose little burden because the plan would already

be in existence and would only need to be implemented. The Agency is not adopting this suggestion. No rationale was offered by this or other commenters regarding any additional protection that this approach would provide. In addition, the Agency disagrees with the conclusion that little burden would be imposed in maintaining a plan. For example, the generator would be required to update job titles, job descriptions, job qualifications, names of employees in each position, and standards for the introductory and continuing training needed for persons in each position. Furthermore, even if not required by regulations to maintain and follow their plans, many of the generators of 100-1000 kg/mo who were previously generators of more than 1000 kg/mo will nevertheless continue to use their plans as the basis for their personnel training program.

Another commenter in favor of more stringent personnel training requirements argued that the approach proposed by EPA is too broad and unenforceable, and that the Agency should require employees to sign a document stating the "what, when, and where of employee training." The Agency believes that such an approach would add considerable burden to the generator without providing any substantial additional degree of protection, particularly since the "what, when, and where" are not explicitly prescribed under either the current rules or today's amendments.

Two commenters argued that 100-1000 kg/mo generators should be exempt from all personnel training requirements on the basis that personnel training would be too costly and burdensome for most small businesses and because less than 1000 kg/mo would be "too small to endanger the environment or public health". The Agency does not agree that 100-1000 kg/mo generators should be exempt from all personnel training requirements. While the Agency agrees that the risk to human health and the environment posed by 100-1000 kg/mo generators is less than the risk posed by large quantity generators, some risk is still present. The Agency has, therefore, proposed less stringent rules for 100-1000 kg/mo generators, which will mitigate this risk while minimizing the regulatory burden upon these generators.

A number of commenters suggested that the Agency limit the scope of the training requirement since it is inappropriate to require that all employees of a generator receive personnel training, regardless of their job responsibilities. According to these

commenters, some firms, particularly large companies, may have clerical and office staff as well as some part-time and temporary personnel "who will never be involved or even remotely associated with the firm's handling of hazardous waste", and requiring these employees to be thoroughly familiar with hazardous waste management techniques would be a poor use of the firm's resources. One commenter suggested that this requirement be applied only to those employees who handle hazardous waste as part of their job.

The Agency agrees that it would not make sense to require training in topics not germane to an employee's areas of responsibility since this would add considerable burden to some firms without corresponding environmental or health benefits. Thus, the Agency has amended the regulations to clarify this issue. The rule promulgated today states that generators "must ensure that all employees are thoroughly familiar with proper waste handling and emergency procedures relevant to their job responsibilities during normal facility operations and emergencies," just as for large quantity generators subject to § 265.16, implicit in the regulations is the requirement that the type and amount of training necessary for each employee stems from his specific responsibilities. Employees who handle hazardous wastes as part of their normal job responsibilities or are likely to handle wastes in an emergency situation must be thoroughly familiar with proper waste handling and emergency procedures. Employees who work in or adjacent to areas where hazardous wastes are generated, handled, or stored but do not handle hazardous wastes, must still be trained to be thoroughly familiar with basic emergency procedures. Part-time or temporary employees must also receive appropriate training.

*iii. Standards for Accumulation in Containers—Part 265, Subpart I:* Section 262.34 requires that in order to accumulate hazardous waste on-site without a permit, the generator must meet certain requirements. If the waste is stored in containers, the generator must comply with Subpart I of Part 265 (§§ 265.170 thru 265.177) which contains the following general requirements applicable to the management of hazardous waste storage containers:

- They must be kept in good condition and any leaking containers replaced (§ 265.171);
- The containers must be compatible with the hazardous waste stored in them (§ 265.172);



- Containers holding hazardous waste must always be closed during storage (except when necessary to add or remove wastes) and must not be handled in a way that would cause them to rupture or leak (§ 265.173);

- Containers must be inspected at least weekly to check for leaks and any signs of corrosion (§ 265.174);

- Containers holding ignitable or reactive wastes must be placed at least 50 feet from the facility's property line (§ 265.176); and

- Incompatible wastes must not be placed in the same container so as to cause fires, leaks, or other discharge of hazardous waste or hazardous waste constituents (§§ 265.177 and 265.17(b)).

In addition, § 262.34(a)(2) requires that the date upon which each period of storage begins is clearly marked on each container and § 262.34(a)(3) requires that each container be marked with the words "Hazardous Waste".

Since these requirements embody common sense "good housekeeping" requirements necessary to avoid releases into the environment, EPA proposed no modifications to these standards for 100-1000 kg/mo generators. Comments received generally indicate that these requirements were not unduly burdensome and would be appropriate for 100-1000 kg/mo generators. The one major concern raised by a number of commenters, however, is the requirement that a buffer zone of at least 50' from the property boundary be maintained for reactive or ignitable wastes. Since many smaller generators are located in urban areas, it is not uncommon for these generators to be located on lots that would not permit the maintenance of a 50-foot buffer zone.

EPA agrees with commenters that this requirement would put many small businesses in a situation in which it would be impossible to comply. Since the Agency has already proposed to modify the buffer zone requirement to increase flexibility in such situations (49 FR 43290, June 5, 1984), it would make sense for the Agency to exempt 100-1000 kg/mo generators from the 50-foot buffer zone requirement until the Agency promulgates final storage standards. Whether the Agency ultimately decides to apply the proposed standards to these generators or to propose a more tailored set of standards, it would be inconsistent with the directives contained in HSWA Section 3001(d) to consider impacts on small business to include, in the interim, the existing buffer zone requirement. Therefore, as an interim measure, the Agency is exempting 100-1000 kg/mo generators from the § 265.176 requirement that

containers holding ignitable or reactive wastes must be placed at least 50 feet from the property boundary. Of course, 100-1000 kg/mo generators should endeavor to store ignitable or reactive wastes as far from the property boundary as is practicable.

With the exception of the modified buffer zone requirement, EPA is incorporating by reference the requirements of Subpart I of Part 265 into § 262.34(d).

*iv. Standards for On-site Accumulation in Tanks—Part 265, Subpart J:* As in Subpart I, Subpart J contains general standards that must be followed by generators storing hazardous waste in tanks under § 262.34:

- Wastes must not be placed in tanks if they could cause ruptures, leaks, corrosion, or otherwise cause the tank to fail (§ 265.192(b));

- Uncovered tanks must be operated with at least 60 centimeters (2 feet) of freeboard or a secondary containment dike or trench to prevent overflowing spillage (§ 265.192(c));

- Where waste is continuously fed into a tank, the tank must be equipped with a waste feed cutoff or bypass system to stop the inflow to the tank (§ 265.192(d));

- At least once each operating day, a generator must inspect, where present, discharge control equipment (e.g., waste feed cut-off systems and drainage systems), data gathered from monitoring equipment (e.g., pressure and temperature gauges), and the level of waste in the tank to assure compliance with the above freeboard requirements (§ 265.194 (a)(1), (a)(2), and (a)(3));

- At least weekly, a generator must further inspect the construction materials of the tank and the area immediately surrounding the tank to detect corrosion or obvious signs of leakage (§ 265.194 (a)(4) and (a)(5));

- Special requirements apply to ignitable or reactive waste, and incompatible waste that are more or less analogous to those in Subpart I. The major difference is in the requirements for ignitable or reactive waste which, when stored in a covered tank, must be in compliance with buffer zone requirements contained in Tables 2-1 through 2-6 of the National Fire Protection Association's (NFPA) "Flammable and Combustible Liquids Code." These requirements are based on the hazardous characteristics of all combustible and flammable liquids and, as such, are applicable to any type and size of tank. While the Agency is modifying the buffer zone requirements for containers, as discussed in the previous section, the Agency did not receive any comments indicating that

compliance with the NFPA code with respect to tanks would be impossible for small quantity generators. Therefore, the existing buffer zone requirements for tanks will apply to generators of 100-1000 kg/mo.

The requirements of Subpart J are meant not only to protect human health and the environment, but are in the generator's best interest by reducing the likelihood of damages or injuries caused by leaks and spills. The Agency did not propose to modify these standards for 100-1000 kg/mo generators, and no commenters raised any objections to application of the existing Subpart J requirements to 100-1000 kg/mo generators. Thus, the Agency has no reason to believe that the existing tank requirements present a problem for these generators, and is including them in this rule.

As discussed in detail in the Proposal, the Agency is developing new management standards for tank storage that may require secondary containment for accumulation tanks. These proposed amendments to Subpart J (50 FR 26444, June 26, 1985) could impose additional costs if applied to generators of 100-1000 kg/mo who accumulate hazardous waste in tanks. In the Proposal, the Agency requested and received public comment on a variety of options related to the proposed tank amendments. However, the Agency has not yet completed its evaluation of this issue and has not issued any final amendments to Subpart J. Accordingly, the Agency is today applying to generators of 100-1000 kg/mo only those Subpart J requirements currently required under § 262.34. Application of any modified tank standards to generators of 100-1000 kg/mo will be evaluated in the final tank rule after consideration of all comments received on both the August 1 Proposal and the tank proposal of June 26, 1985.

The requirements of existing Subpart J of Part 265 are, therefore, incorporated by reference in § 262.34(d), and are applicable to generators of 100-1000 kg/mo.

#### 5. International Shipments

On March 13, 1986, EPA proposed regulations under § 3017 of HSWA regarding exports of hazardous waste (See 51 FR 8744). The proposed regulations would prohibit export of hazardous waste unless certain requirements are met. These requirements include advance written notification to EPA of any plans to export hazardous waste, prior written consent to such plan by the receiving country, attachment of a copy of the consent to the manifest accompanying

each waste shipment, and conformance of the shipment to such consent. EPA also proposed a manifest pursuant to 40 CFR Part 262, Subpart B, or equivalent State provision, which specifies a treatment, storage or disposal facility in a foreign country as the facility to which the waste will be sent. Under 40 CFR 261.5 and today's final rule all generators, including those generating less than 100 kg/mo, would qualify as exporters under the export proposal. Although the Agency is not aware of any exports by generators of less than 1000 kg/mo, and hence, did not propose to change the applicability of the export requirements to these generators, the Agency has requested comment from generators of less than 1000 kg/mo on whether the Agency should partially or totally exempt them from the proposed export requirements. Thus, generators affected by today's final rule should be aware that they may be subject to additional regulatory requirements in exporting hazardous waste, and that they have the opportunity to submit comments regarding the applicability of those requirements to the public docket established for the export proposal.

#### *D. Transportation Issues*

The existing standards for transporters of hazardous waste are contained in 40 CFR Part 263, and are applicable to any form of hazardous waste transportation that requires the use of a hazardous waste manifest (§ 263.10(a)). These standards pertain to compliance with the manifest system, recordkeeping, and actions to be taken in response to spills or discharges of hazardous waste. Taken in conjunction with U.S. Department of Transportation (DOT) requirements under the Hazardous Materials Transportation Act (HMTA) regarding labeling, marking, packaging and placarding (incorporated in 40 CFR Part 262, Subpart C), such standards are deemed by the Agency to be those necessary to protect human health and the environment during the transportation of hazardous waste.

In directing EPA to develop standards for generators of 100-1000 kg/mo, Section 3001(d)(7) of RCRA, as amended, specifically states that "nothing in this subsection shall be construed to affect or impair the validity of regulations pursuant to the Hazardous Materials Transportation Act." Consequently, EPA did not propose any substantive amendments to applicable DOT requirements or to Part 263. However, several minor amendments are necessary to bring the transporter standards into conformance

with today's final standards for 100-1000 kg/mo generators.

In addition, commenters on the proposed rules raised a number of transportation-related issues. The Agency is finalizing proposed § 263.20(b) to specify certain recordkeeping requirements for transporters (who are also reclaimers) accepting unmanifested hazardous waste from generators utilizing the § 262.20(e) exemption for wastes reclaimed under contractual agreements. While one commenter argued that these recordkeeping requirements were too burdensome, the Agency does not agree. The manifest exemption is an entirely voluntary arrangement that substantially reduces the paperwork for both generators and transporters. The transporter need not maintain the prescribed records if he chooses instead to comply with the manifest system. A number of commenters were concerned about the lack of established transportation networks for the collection and transportation of less than full truckloads of hazardous waste. Three commenters stated that EPA should take steps to encourage such networks, and suggested various alternatives. Two commenters suggested that EPA encourage the establishment of collection centers for waste from 100-1000 kg/mo generators by extending the current 10-day period for transportation to 21 days and accelerating the issuance of storage permits for facilities which serve as collection and transfer stations for small quantity generator waste. One of these commenters specifically suggested that development of a class permit concept for these facilities might be a viable solution.

EPA agrees that the development of networks and centralized collection centers will help to increase compliance with these regulations. However, commenters have not adequately demonstrated a need for longer transportation time than the 10 days currently provided. Nor does EPA believe that the establishment of an expedited permit process for these facilities is feasible. Both of these issues are discussed in greater detail in the following section on facility standards. It should be noted here, however, that such networks can be established at any time within the confines of the applicable regulations.

Some commenters expressed concern about EPA's discussion in the proposed rules of self-transportation of hazardous wastes, stating that all of the standards for hazardous waste transportation should be imposed on such generators. In the proposal, EPA explained that self-

transportation of hazardous waste by generators was not precluded by the regulations, provided the generator obtained a U.S. EPA ID number and complied with the provisions of Part 263 and the applicable portions of Department of Transportation regulations. EPA did not intend to create the impression that self-transportation could be conducted without compliance with the full Part 263 standards for hazardous waste transportation.

Other commenters supported the concept of licensing transporters to assume the responsibilities of the generator with respect to manifesting. As EPA explained in the Proposal, transporters may currently assume most of the generators' manifesting responsibilities except for signing the certification statement. One commenter believed that the transporter of a hazardous waste shipment should assume liability for the waste if that transporter completed the manifest and removed the waste from the generator's establishment. EPA may not alter the liabilities established by statutes such as CERCLA, which applies the concept of joint and several liability to all handlers of a hazardous substance. In addition, EPA believes that removing RCRA liability from generators would remove an important incentive for them to ensure that their wastes are properly transported and managed. EPA, therefore, is taking no action that would alter a generator's liability under current regulations and statutes.

Two States requested an amendment to § 262.20(e) to allow generators of 100-1000 kg/mo to transport waste to a temporary collection site of a hazardous waste clean-up program or Amnesty Day without the need to complete a manifest. They stated that the requirement to complete a manifest may discourage some establishments from participating. Under most "Amnesty Day" programs of which the Agency is aware, homeowners are encouraged to bring their unwanted household hazardous wastes to a central collection point where they are sorted, packaged, and subsequently transported to an approved hazardous waste management facility. In some cases, small quantity generators have been allowed to discard their wastes through similar programs.

Section 261.4(b)(1) exempts household waste from all of the hazardous waste requirements of RCRA. Thus, no manifesting is required for transport of wastes that are exempt from regulation under § 261.5. However, because quantities of hazardous wastes from generators of 100-1000 kg/mo could pose a substantial risk if improperly

managed, the Agency has decided to impose manifest requirements on these generators, except in the case of certain reclamation agreements. The existence of a State-approved collection center does not, on its own, provide assurance that the waste would be transported or handled properly prior to or during transportation to such a facility, or indeed, that the shipment would ever reach such a facility. Consequently, development of some recordkeeping and transportation requirements would be needed which would offset any potential savings of such an exemption.

#### *E. Part 264/265 Facility Standard Issues*

The requirements for facilities that treat, store, or dispose of hazardous waste are contained in Parts 264 and 265 of the hazardous waste regulations. The Part 265 standards are applicable to facilities under interim status, a condition which allows a facility to continue operating until it receives a full RCRA permit. (See HSWA section 3005(e)). The Part 264 standards establish the minimum standards to be incorporated into a full RCRA permit by EPA or a State with an EPA authorized hazardous waste program.

Section 261.5(b) previously exempted generators of 100-1000 kg/mo of hazardous waste from the facility requirements of Parts 264 and 265 that cover the on-site treatment, storage, or disposal of hazardous waste, provided the facility is at least approved by a State to manage municipal or industrial (non-hazardous) solid waste and no more than 1000 kg of hazardous waste were accumulated at any time. Under the rules promulgated today, this exemption will continue to apply only to generators of less than 100 kg/mo of hazardous waste. Generators of 100-1000 kg/mo of hazardous waste will be subject to full regulation under Parts 264 and 265 if they accumulate hazardous waste on-site for greater than 180 (or 270) days, exceed the 6000 kg accumulation limit, engage in waste treatment in other than tanks, or manage their waste in surface impoundments, waste piles, landfills, or land treatment facilities. In addition, those State-approved municipal or industrial waste facilities that manage wastes only from generators of 100-1000 kg/mo will also no longer be exempted from the Part 264 and 265 permit requirements. In the proposed rule, the Agency requested comments concerning the application of the uniform Part 264 and 265 requirements to generators of 100-1000 kg/mo and to the treatment, storage, and disposal facilities that accept waste from the generators.

##### 1. Activities Requiring Permits

Under today's final rules, 100-1000 kg/mo generators will be required to obtain a permit if they treat or dispose of hazardous waste on-site (except for treatment in tanks or containers during the 180/270 day accumulation period in conformance with Subparts J or I of Part 265, respectively) or accumulate hazardous waste on-site in tanks or containers for more than 180 (or 270) days.

A number of commenters agreed with the need to manage wastes from generators of 100-1000 kg/mo at fully permitted facilities. They argued that no special exemptions or requirements should be applied to the management of waste from these generators because the characteristics of the waste, not the source of the waste, poses the threat to human health and the environment.

Two commenters opposed the requirement for generators of 100-1000 kg/mo who accumulate waste on-site for longer than 180 (or 270) days to obtain RCRA permit, and argued that the accumulation time limit before permitting is required should be extended. One of the commenters also maintained that determining the maximum quantity of hazardous waste that may be accumulated at a non-permitted facility should be based on the degree of hazard posed by the waste and the generator's capacity to transport the waste off-site. The EPA disagrees with both of these positions. As noted in Unit III.C.4.a. of today's preamble, the HSWA of 1984 clearly limit Agency discretion in this matter. The Agency carries a heavy burden in extending the time limits established under section 3001(d)(6), and except for emergency circumstances, the Agency does not believe there to be sufficient justification for extending the limits Congress has established.

Another commenter opposed any permitting requirement due to the economic burden that would be placed on a small number of generators. While some generators of 100-1000 kg/mo may be burdened financially by the requirements promulgated today, Congress has already judged that outside of the accumulation limits allowed for in Section 3001(d)(6), disposal of wastes from these generators at permitted facilities is necessary to protect human health and the environment. In addition, since the rules allow generators to manage their hazardous wastes off-site, they are able to avoid the cost of acquiring a RCRA permit, if they so choose.

Several commenters suggested exemptions from the RCRA permitting requirements or reduced permit

requirements for on-site waste treatment. Some commenters stated that there is a need to encourage on-site treatment to reduce the amount of wastes sent off-site and that the permitting requirements may hamper the ability of generators to treat wastes at their facilities.

The Agency disagrees that on-site treatment should be encouraged by exempting those generators of 100-1000 kg/mo from the RCRA permitting requirements. To the extent that these generators are conducting the same treatment/storage or treatment/disposal as other permitted facilities, their on-site treatment activities pose a potential risk to human health and the environment. Therefore, reduced or eliminated permitting requirements would be inappropriate.

Of course, no permitting would be required if a generator chooses to treat their hazardous waste in the generator's accumulation tanks or containers in conformance with the requirements of § 262.34 and Subparts J or I of Part 265. Nothing in § 262.34 precludes a generator from treating waste when it is in an accumulation tank or container covered by that provision. Under the existing Subtitle C system, EPA has established standards for tanks and containers which apply to both the storage and treatment of hazardous waste. These requirements are designed to ensure that the integrity of the tank or container is not breached. Thus, the same standards apply to a tank or a container, regardless of whether treatment or storage is occurring. Since the same standards apply to treatment in tanks as applies to storage in tanks, and since EPA allows for limited on-site storage without the need for a permit or interim status (90 days for over 1000 kg/mo generators and 180/270 days for 100-1000 kg/mo generators), the Agency believes that treatment in accumulation tanks or containers is permissible under the existing rules, provided the tanks or containers are operated strictly in compliance with all applicable standards. Therefore, generators of 100-1000 kg/mo are not required to obtain interim status and a RCRA permit if the only on-site management which they perform is treatment in an accumulation tank or container that is exempt from permitting during periods of accumulation (180 or 270 days).

Two commenters suggested that a mechanism should be created to tailor RCRA permits to the circumstances of individual facilities. For example, one commenter specifically asked for a simplified and streamlined permit for the incineration of spent paint spray

booth filters. The Agency accepts the need to consider individual circumstances when drafting RCRA permits. However, in order to protect human health and the environment, the Agency must impose certain minimum permit requirements for each waste management facility. Additional provisions may be incorporated into a permit to account for unique circumstances at individual facilities (see § 270.32). At the present time, the Agency has decided not to take any action regarding the tailoring of regulatory requirements for permitting specific types of waste management activities for generators of 100-1000 kg/mo. At a future date, the Agency may consider altering the regulatory requirements for specific waste types or handling practices that pose a low potential for harm to human health and the environment.

Two commenters discussed the need for establishing regional collection centers for the temporary storage of wastes from generators of 100-1000 kg/mo before being sent to treatment, storage, or disposal facilities. One of these commenters suggested that the collection centers may also offer waste identification and packaging services and could be sponsored by State or local governments. Both commenters contended that regional collection centers will be needed because most waste shipments from generators of 100-1000 kg/mo will be too small to justify the expense of direct transportation to TSDFs in less than truckload quantities. The commenters further stated that these collection centers should not be required to meet the full RCRA permit requirements for storage facilities.

While the rules promulgated today may increase the cost of waste transportation services for many generators of 100-1000 kg/mo, generators of 100-1000 kg/mo are allowed to accumulate hazardous waste at their facilities for 180 (or 270) days, thereby reducing the need for frequent shipment off-site and off-site collection centers. Nevertheless, if regional collection and storage facilities are established, these centers will probably accumulate significant volumes of various types of hazardous waste. The storage of large amounts of hazardous waste, regardless of its point of origin, poses the potential for harm to human health and the environment. Therefore, the Agency believes that the requirements for storage and disposal facilities as described in Parts 264 and 265 must also apply to regional collection facilities. Furthermore, wastes shipped from a generator of more than

100 kg/mo to a collection center must be properly identified, manifested, packaged, labeled, marked, placarded, and transported in accordance with Parts 262 and 263 and applicable regulations promulgated under the Hazardous Materials Transportation Act.

One commenter proposed that generators of 100-1000 kg/mo be exempted from the full corrective action for continuing releases provisions of RCRA section 3004(u), which apply to all solid waste management units at a Subtitle C facility seeking or issued a permit. EPA disagrees with the suggestion. Section 3004(u) applies to releases to all media; however, the Agency believes that action is required only where necessary to protect human health and the environment. Section 3004(u) requires that all permits issued to Subtitle C facilities after November 1984 shall include schedules of compliance and financial assurance for completing any necessary corrective actions for releases of hazardous waste or constituents from any solid waste management unit at the facility, regardless of the time at which such waste was placed in such unit. The clear statutory directive precludes a reading of the statute that limits an owner's or operator's responsibilities to waste placed in units during his or her tenure or for releases from solid waste management units that are not "regulated units."

The corrective action requirements will apply only to the few generators of 100 to 1000 kg/mo who choose to seek permits. Thus, the potential burden of corrective action must be accepted by those who choose to manage their hazardous waste on-site. Should such a generator become subject to the corrective action provisions, the Agency is considering the advisability of taking into account the firm's ability to pay when establishing a compliance schedule and thereby reduce the burden to generators of 100-1000 kg/mo. Nonetheless, the goal of these rules is to reduce the risk to human health and the environment from uncontrolled releases of hazardous waste. The risks associated with such releases depend on the nature of each individual release, not on the quantity of hazardous waste generated by the facility. There is no rational basis for distinguishing between generators of 100 to 1000 kg/mo and larger quantity generators when determining whether a release, once it occurs, poses an imminent threat to human health and the environment and needs to be cleaned up.

## 2. Applicability of Permitting Requirements to Recycled Wastes

Several commenters addressed the issue of recycled wastes. One commenter stated that generators of 100-1000 kg/mo who recycle the generated products should not be required to meet full Parts 264 and 265 facility standards. The commenter argued that since recyclable wastes are frequently handled as if they were original products, they should not be subject to regulation. This approach has already been considered by the Agency and rejected (See 50 FR 614, 617 (January 4, 1985)). At the time, EPA indicated that wastes often have little independent economic value, but are recycled to avoid disposal costs. Unless the wastes are extremely valuable (as in the case of precious metal-containing wastes), there is little incentive to avoid leaks and spills. EPA sees no reason to reconsider the issue at this time.

Two other commenters sought clarification concerning whether the proposed rule requires on-site waste recycling operations to be permitted under Parts 264 and 265. While the actual recycling operation is generally not subject to permitting, the rule does, indeed, require (or will require) permitting for certain recycling activities and for storage associated with recycling activities. Generators of 100-1000 kg/mo of recyclable materials must obtain a permit or interim status if all of the following conditions are met:

(1) The material is a solid waste. Whether or not a material qualifies as a solid waste depends upon both what the material is and how it is being recycled. See §§ 261.2 and 261.4(a).

(2) The solid waste is a hazardous waste. Generally, the waste must be listed or exhibit one of four characteristics. See §§ 261.3 and 261.4(b).

(3) The hazardous waste is not exempt from regulation under § 261.6. Exempted materials include industrial ethyl alcohol that is reclaimed and scrap metal.

(4) The non-exempt hazardous waste is stored on-site for more than 180 days (or 270 days if it is to be transported at least 200 miles). See § 262.34(d).

If the solvent is stored in anticipation of reclamation for more than 180 days, however, the generator must obtain a permit or interim status. See § 262.34(f). In addition, use constituting disposal and burning for energy recovery would also be recycling activities requiring a permit.

### 3. Permit By Rule

Two commenters argued that generators of 100-1000 kg/mo should be allowed to obtain a RCRA "permit by rule" (under § 270.62) and by-pass the Parts 264 and 265 permitting process. Permits by rule have been granted by EPA to facilities already regulated and permitted under other Federal laws, provided that the facilities are in compliance with their permits and other specified requirements. For example, ocean disposal barges or vessels are granted permits by rule under RCRA § 270.60(a) for ocean dumping because those activities are already permitted under the authority of the Marine Protection, Research, and Sanctuaries Act, as amended U.S.C. 1420 *et seq.*

The commenters are requesting EPA to apply permits by rule in such a manner that could effectively exempt generators of 100-1000 kg/mo from Federal requirements. They have suggested that the proposed rule requiring full Part 264 and 265 standards for generators of 100-1000 kg/mo would be too burdensome. One commenter noted that a permit by rule would allow for relief from full RCRA requirements and thus allow for continued waste treatment/minimization activities on-site. The second commenter explained that 100-1000 kg/mo generators are already regulated under State and local environmental programs. This commenter suggested that permits by rule should be issued for generators of 100-1000 kg/mo who are in compliance with "adequate State and local environmental programs and permits."

EPA does not believe that it is appropriate to effectively exempt these generators from Parts 264 and 265. First of all, Congress explicitly directed EPA to require that wastes from these generators be managed at Subtitle C facilities. Second, EPA believes that compliance with the permitting process is essential to provide protection of human health and the environment. EPA disagrees that State and local regulatory programs for generators of 100-1000 kg/mo are sufficient to maintain proper protection of human health and the environment, since most State programs do not now require that such waste be managed at Subtitle C facilities. Of course, States with authorized RCRA programs may adopt equivalent (or broader or more stringent) requirements and administer State programs for these generators.

### 4. Modifications to Part A Permit Applications

One commenter questioned whether requiring revisions to Part A and Part B

permits for facilities handling waste from generators of 100-1000 kg/mo will be too time-consuming and may delay the implementation of the proposed rule.

EPA is aware that the rule promulgated today will require changes in the Part A applications for off-site facilities that manage wastes from 100-1000 kg/mo generators. As explained in the preamble to the proposed rule, off-site interim status facilities managing wastes from both fully regulated large quantity generators and generators of 100-1000 kg/mo may be required to modify their Part A permit applications under § 270.72 to account for wastes from 100-1000 kg/mo generators if those wastes are currently being managed as exempt pursuant to § 261.5 and are not currently identified on the Part A application. Thus, facilities that receive wastes from generators of 100-1000 kg/mo only, which previously were not required to fill out Part A forms under § 270.41 are now required to do so. Similarly, facilities that receive wastes from generators of 100-1000 kg as well as large quantity generators, must modify their permits to reflect the wastes received from 100-1000 kg/mo generators.

The Agency does not believe that the proposed changes requiring facilities receiving wastes from generators of 100-1000 kg/mo to add new information to Part A applications or requiring facilities to begin filing Part A applications will be overly time-consuming.

One commenter sought to clarify that facilities that only handle hazardous waste from generators who generate no more than 100 kg/mo will still operate under a blanket exemption from Part 264 and Part 265.

Under the Hazardous and Solid Waste Amendments of 1984, generators of less than 100 kg/mo and those treatment, storage, or disposal facilities that serve those generators will continue to operate under the conditional exemption from Part 264 and Part 265 that is contained in Section 261.5.

### IV. Delayed Effective Dates

EPA proposed that the effective date of the regulatory requirements for 100-1000 kg/mo generators be six months from the date of promulgation of the rules. It was also proposed that the effective date of the Parts 264 and 265 facility standards for generators that manage waste on-site be delayed an additional six months, to become effective one year from the date of promulgation.

Of the four comments received on this issue, one opposed any delay in effective dates beyond March 31, 1986, on grounds that it is one of the hammer

provisions and would not be in the best interest of enforcement. Another commenter suggested a one year delay for all of the requirements. The Agency does not agree with either commenter. First, the plain language of section 3001(d)(9) states that the last sentence of section 3010(b), which allows for a less than six month effective date under certain circumstances, shall not apply to standards issued under section 3001(d). Thus, the language of the statute appears to preclude an effective date of less than six months. Although it is arguable that the statute and its legislative history indicate some intent that the regulations become effective immediately,<sup>5</sup> the Agency believes that a better reading of the statute requires a delay in the effective date of the rules for at least six months.

Second, the Agency believes that a six month effective date for the generator requirements is essential from a policy perspective in order to allow these small businesses to become familiar with the hazardous waste regulations, obtain an EPA Identification number, and find hazardous waste transporters and Subtitle C management facilities. Finally, EPA has determined that the six month effective date is consistent with the statutory directive to promulgate rules for these generators that attempt to minimize the burden on small business. Thus, EPA believes that allowing six months for these generators to comply with most of the provisions of the newly applicable hazardous waste management system is a reasonable response to the directives of section 3001(d). As discussed below, the Agency does not believe, however, that a full year is needed for compliance with rules other than those relating to on-site waste management.

With regard to the additional six month delay for compliance with on-site management standards, one commenter supported the proposal while another opposed it as legally unjustifiable and not protective of public health. This commenter asserted that the effective

<sup>5</sup> While the Agency does not believe that the hammer provisions in section 3001(d)(8) dictate the content of the final rules, it is arguable that a March 31, 1986 effective date was intended. The fact that Congress required final rules to be promulgated by March 31, 1986, under section 3001(d)(8), in conjunction with a statement in the Conference Report that the section 3010(b) six month delay in effective dates does not apply to 3001(d)(1) regulations (see H.R. Rep. No. 1133, 98th Cong. 2d Sess. 101 (1984)) raises some question regarding the applicability of the six month delay of section 3010(b). Since the plain meaning of the statutory language in section 3001(d)(9) is so clear, however, the Agency does not believe that the legislative history should prevail.

dates for on-site and off-site activities should be the same.

EPA disagrees that the effective dates for compliance must be the same for on-site and off-site management activities. The same concerns regarding undue burdens that would be imposed by an immediate effective date for the full set of regulations led the Agency to conclude that a reasonable period of time was necessary for on-site compliance with Parts 264 and 265.

Generators of 100-1000 kg/mo who engage in on-site management activities will generally have to change their waste management practices in more dramatic ways than those generators who simply ship their wastes for management off-site. Most will modify their current practices in one of the following ways: (1) By adopting on-site management practices exempt from Parts 264 and 265, (2) by shifting to off-site management practices, or (3) by adjusting any non-exempt on-site practices so they comply with the full Parts 264 and 265 facility standards. The delayed effective date will permit these generators to effect the necessary changes in a safe and effective manner. Under the final rule, 100-1000 kg/mo generators will have an additional six months to qualify for interim status and come into compliance with the Part 265 interim status facility standards if they manage their wastes on-site, as opposed to off-site. The interim status facility standards include a number of requirements that call for substantial time and investment, especially the requirement for implementation of a ground-water monitoring program. The installation, operation and maintenance of the monitoring system to determine impact on ground-water quality includes installation of wells, which will require some time to be constructed. In the meantime, there will be some protection to health and the environment by the need for approval by States for these generators to manage municipal or industrial (non-hazardous) solid waste.

Generators who manage their waste off-site will not need this additional time to comply with today's rule. In many cases, their current waste management practices will be allowed under this rule. Even if they must arrange for new off-site management, six months should be sufficient time for this transition.

Therefore, the Agency is retaining the proposed effective dates.

#### V. Impact on Authorized States

##### A. Applicability in Authorized States

Under Section 3006 of RCRA, EPA may authorize qualified States to administer and enforce their own

hazardous waste programs pursuant to Subtitle C (See 40 CFR Part 271 for the standards and requirements for authorization.) Following authorization, EPA retains enforcement authority under sections 3008, 3013 and 7003 of RCRA, although authorized States have primary enforcement responsibility.

Prior to the Hazardous and Solid Waste Amendments of 1984 (HSWA), a State with final authorization administered its hazardous waste program entirely in lieu of the Federal program. The Federal requirements no longer applied in the authorized State, and EPA could not issue permits for any hazardous waste management facilities which the State was authorized to permit. When new, more stringent Federal requirements were promulgated or enacted, the State was obligated to enact equivalent authority within specified time frames, however; the new Federal requirements did not take effect in an authorized State until the requirements were adopted as State law.

In contrast, under newly enacted section 3006(g) of RCRA, 42 U.S.C. 6926(g), new requirements and prohibitions imposed by the HSWA take effect in authorized States at the same time that they take effect in nonauthorized States. EPA is directed to carry out those requirements and prohibitions in authorized States, including the issuance of permits, until the State is granted authorization to do so. While States must still adopt HSWA provisions as State law to retain final authorization, the HSWA requirements apply in authorized States in the interim.

Today's final rule is promulgated pursuant to section 3001(d) of RCRA, a provision added by HSWA. Therefore, it is being added to Table 1 in § 271.1(j), which identifies the Federal program requirements that are promulgated pursuant to HSWA and that take effect in all States, regardless of their authorization status. States may apply for either interim or final status for the HSWA provisions identified in Table 1, as discussed in the following section of this preamble.

##### B. Effect on State Authorizations

As noted above, EPA will implement the standards in authorized States until they revise their programs to adopt these rules and the revisions are approved by EPA. Because the rule is promulgated pursuant to HSWA, a State submitting a program modification may apply to receive either interim or final authorization under section 3006(g)(2) or 3006(b), respectively, on the basis of requirements that are substantially equivalent or equivalent to EPA's. The

procedures and schedule for State adoption of these regulations under section 3006(b) are described in 40 CFR 271.21 (49 FR 21678, May 22, 1984). The same procedures should be followed for section 3006(g)(2).

Applying § 271.21(e)(2), States that have final authorization must modify their programs within one year from the date of today's promulgation of EPA's regulations if only regulatory changes are all that are necessary, or within two years if statutory changes are necessary. These deadlines can be extended in exceptional cases (40 CFR 271.21(e)(3)).

States with authorized RCRA programs may already have requirements similar to those in today's rule. These State regulations have not been assessed against the Federal regulations being promulgated today to determine whether they meet the tests for authorization. Thus, a State is not authorized to implement these requirements in lieu of EPA until the State program modification is approved. Of course, States with existing standards may continue to administer and enforce them as a matter of State law. In implementing the Federal program, EPA will work with States under cooperative agreements to minimize duplication of efforts. In many cases, EPA will be able to defer to States in their efforts to implement their programs rather than take separate action under Federal authority.

States that submit official applications for final authorization less than 12 months after today's promulgation of EPA's regulations could be approved without including standards equivalent to those promulgated. Once authorized, however, a State must modify its program to include standards substantially equivalent or equivalent to EPA's within the time period discussed above.

#### VI. CERCLA Impacts

Today's final rule does not change existing CERCLA requirements relating to releases of reportable quantities of CERCLA hazardous substances. Whenever a hazardous waste or waste stream is listed under section 3001 of RCRA, it automatically becomes a hazardous substance under section 101(14) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA). Section 103 of CERCLA requires that persons in charge of vessels or facilities from which hazardous substances have been released in quantities that are equal to or greater than the reportable quantities (RQs) immediately notify the National Response Center (NRC) (1-800)

424-8802 or (202) 426-2675) of the release. (See 50 FR 13456-13522, April 4, 1985).

The term "hazardous substance" includes all substances designated in § 302.4(a) of the April 4, 1985 final rule (50 FR 13474), as well as unlisted hazardous wastes exhibiting the RCRA characteristics of ignitability, corrosivity, reactivity, and extraction procedure toxicity. (See § 302.4(b) of the April 4, 1985 final rule.)

All persons who release a reportable quantity of a CERCLA hazardous substance into the environment, including small quantity generators, are subject to notification provisions of section 103 of CERCLA (see 40 CFR 302.6(a) and (b)). However, as stated in CERCLA section 103(f)(1), no notification shall be required under CERCLA sections 103(a) and (b) for any release of a hazardous substance which is required to be reported (or specifically exempted from a requirement for reporting) under subtitle C of the Solid Waste Disposal Act or regulations thereunder and which has been reported to the National Response Center (NRC).

#### VII. Executive Order 12291—Regulatory Impact

Executive Order 12291 (46 FR 13193, February 9, 1981) requires that a regulatory agency determine whether a new regulation will be "major" and if so, that a Regulatory Impact Analysis be conducted.

The Administrator has determined that today's final rule is not a major rule, because it has total estimated costs of less than \$100 million per year, and has no significant adverse economic effects. These conclusions, are based on an economic analysis of today's proposal. This analysis involved developing cost estimates of both current waste management practices used by 100-1000 kg/mo generators and practices required by today's final rule. Some of these estimates were firm-specific and others were waste stream-specific. These costs were used along with estimates of the changes in waste management practices likely to result from today's final rule to estimate the annual incremental compliance costs to 100-1000 kg/mo generators (\$46.9 million). These costs were added to the estimated government costs of implementing the regulation of \$12 million for a total social cost of \$58.9 million.

##### A. Estimates of Per Firm Costs

###### 1. Part 262 Generator Standards

The estimated incremental compliance costs attributable to Part 262 requirements can be divided into an initial, one-time, cost of \$2267 per firm, and an annual recurring cost of \$222 per firm. These costs will be incurred by all

100-1000 kg/mo generators that would be subject to the requirements of today's regulation with two exceptions—generators disposing of their wastes by sending them to POTW's and generators that have their waste reclaimed under certain contractual agreements. Generators sending wastes to POTW's will incur no Part 262 related costs as a result of the regulation (unless the waste is accumulated prior to discharge; see 3.a. of this Unit). Generators using reclamation agreements would incur a cost of \$1694 initially and no annual costs.

###### 2. Transportation Costs

Under today's rule, generators of 100-1000 kg/mo will be required to either contract with an authorized hazardous waste transporter or haul the hazardous waste to a hazardous waste management facility that has a permit from the Agency or an authorized State, or is in interim status. Incremental transport costs depend on current generator practices, the distance which wastes are transported, the quantity of wastes transported, and the number of times wastes are loaded and transported each year.

In many cases, there will be no incremental transportation costs due to these regulations because current waste management practices involve waste transportation. Where this is not the case, average incremental costs that would be imposed on 100-1000 kg/mo generators for the transportation of their hazardous waste are estimated to be between \$838 per year (for generators that ship 600 kg of waste a short distance twice yearly) and \$1882 per year (for generators that ship 6000 kg of waste a longer distance twice yearly).

###### 3. Treatment, Storage and Disposal Costs

*a. On-Site Accumulation:* Under today's final rule, generators of 100-1000 kg/mo would be allowed to store hazardous waste on-site without a permit or interim status for up to 180 days, or for up to 270 days if the waste is to be shipped over 200 miles.

Generators of 100-1000 kg/mo who store hazardous waste on-site, within the 180-day (or 270-day) period specified under the provisions of the storage exemption, will have to comply with Part 265, Subpart C (Preparedness and Prevention), a reduced set of requirements in Subpart D (Contingency Plan and Emergency Procedures), and limited requirements for personnel training (Section 265.16 of Subpart B). The incremental compliance costs for facilities that choose this management option are divided into an initial start-up cost of \$1447 and an annual cost of \$53.

Generators that store hazardous waste on-site within the 180-day (or 270-

day) period may also incur costs related to storage container (Subpart I) and storage tank (Subpart J) requirements. The incremental costs for these requirements depend on a number of factors, including the current practices of the generator, the generator's storage capacity, and the composition of the hazardous waste being stored. The range of incremental costs, as a result, is fairly large. For container storage, initial incremental costs range from practically zero to \$1854 and annual costs range from \$404 to \$447. The corresponding incremental cost estimates for the existing rules for tanks are \$155 for initial costs, and \$770 for annual costs.

*b. Treatment and Disposal:* After analyzing the cost of on-site treatment and disposal for 100-1000 kg/mo generators relative to off-site costs, the Agency has determined that in nearly all cases, the least expensive hazardous waste management alternatives available to these generators involve off-site activities. The small quantities of waste generated by these establishments simply do not permit them to operate expensive on-site management facilities on an economically efficient basis. The costs of off-site commercial treatment and disposal upon which this conclusion is based are derived from a composite of various existing sources of data on commercial waste management prices. They range from \$150 to \$250 per metric ton (for secure landfills) to \$200 to \$1200 per metric ton (for either treatment or incineration), depending on the characteristics of the wastes.

##### B. Estimates of Nationwide Incremental Cost Burden on Generators of 100-1000 kg/mo

The aggregate costs for today's rule were developed by comparing the costs of current (baseline) management practices with hazardous waste management practices which are required by the rule. The Agency has determined, based on this analysis, that the annual incremental compliance cost for this proposal would be approximately \$46.9 million.

On a per metric ton basis, the average incremental compliance cost over all wastes is about \$180. Because of differences in baseline practices, and, hence, the cost of compliance, the incremental costs vary substantially among different wastes. In fact, the baseline method of waste management by these generators is adequate to comply with the regulations in many cases. Others will have to change waste management practices in order to comply. Much of the \$46.9 million in compliance cost, is focused on a few types of wastes (spent solvents dry cleaning filtration residues, acids, and

alkalies, and ignitable wastes) that constitute a large proportion of the wastes generated by these generators.

### C. Estimates of the Economic Impacts of Today's Final Rule

An analysis of the effects of compliance costs on the sales and profitability of 289 model plants indicates that in over 80 percent of plants the incremental costs are less than 10 percent of profits. A few of the plants, particularly in service industries, show incremental costs of greater than 10 percent of profits. Nearly three quarters of the models most affected by the proposal have annual revenues of less than \$500,000. Some of these establishments are low profit or non-profit by design, such as public or private golf courses, hospitals, and other public institutions.

Only six plants have incremental compliance costs which exceed 1 percent of sales and 25 percent of profits. For each of these model plants, a more detailed evaluation was conducted to determine whether these plants would be likely to close. This analysis indicated that plant closings as a result of this regulation would be unlikely.

### VIII. Regulatory Flexibility Act

The Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*), requires the Agency to evaluate the impacts of regulations on small businesses, small organizations and small governmental jurisdictions. The Regulatory Impact Analysis for today's final rule includes such an evaluation. The Administrator has determined that this regulation will not have a significant impact on a substantial number of small firms.

Today's proposed regulations are expected to primarily affect small firms. Therefore, the Regulatory Flexibility Act requirement concerning effects on small businesses is addressed to a large extent by the overall economic analysis performed in conjunction with this rulemaking.

Throughout the development of today's final rule, the Agency's goal has been promulgation of requirements that would be the least burdensome to small businesses and also meet the Congressional mandate of protecting human health and the environment. In our effort to design regulations that would meet this goal, we have worked closely with small business organizations, trade associations, State and local governments, EPA's Small Business Ombudsman in the Office of Small and Disadvantaged Business Utilization, and the Federal Small Business Administration to assess the needs and capabilities of small businesses. EPA believes that this rule is a balanced approach to regulating hazardous waste from these generators

while considering their small business nature.

For purposes of this analysis, "small entities" were defined as firms comprised of fewer than 50 employees for all of the sectors except manufacturing (<100 employees). In many cases, these classifications are approximations because the Small Business Administration establishes size standards in terms of sales levels, and the size standards vary within sectors. For example, most small entity size standards for manufacturing industries range between 500 and 1000 employees.

The results of this analysis indicate that less than 10 percent of small entities within the impacted industries will be affected by the regulations. Most small businesses will not be affected by these regulations because they: 1) Do not generate hazardous waste, 2) generate less than 100 kg/mo, or 3) generate over 1000 kg/mo and are already subject to hazardous waste regulations.

Even though only a relatively small percentage of potentially affected small businesses will probably be affected, the more important issue to analyze is whether or not a large number of those which are affected will be severely impacted. Three commonly accepted tests were used to measure whether or not businesses would be severely impacted:

(1) Annual compliance costs will increase the relevant production costs for small entities by more than five percent;

(2) Capital costs of compliance will represent a significant portion of the capital available to small entities,

(3) The costs of the regulation will likely result in closure of small entities.

To analyze the significance of compliance costs on small businesses, data were developed for 25 different types and sizes of model plants representing those most likely to be severely impacted by the proposed regulations. Compliance costs were computed for these model plants based on the economic analysis described in the previous section of this preamble.

In general, these regulations will not cause significant impacts on small firms. None of the model plants established for this analysis show cost increases of more than five percent as a direct result of compliance costs. The regulations require no significant capital outlays and thus should not affect capital requirements or availability. Even the most severely impacted model plants would not close under the assumptions of this exercise and would continue to operate at a profit.

In summary, it appears that the impact on small firms will not cause a significant number of hardships. There will be isolated cases, involving on-site

management or transportation over long distances, where compliance costs for some individual firms may be severe. In the case of on-site management, however, the Agency believes that most 100-1000 kg/mo generators will switch to off-site practices rather than face the high costs of obtaining interim status or a permit. Furthermore, approximately 70 percent of these generators are in metropolitan areas, and would thus be able to reduce transportation costs by allowing transporters to consolidate shipments by picking up waste from more than one generator at a time.

### IX. Paperwork Reduction Act

The information collection requirements contained in this rule have been approved by the Office of Management and Budget (OMB) under the Paperwork Reduction Act of 1980, 44 U.S.C. 3501 *et seq.*, and have been assigned OMB control numbers 2050-0028 (Notification) and 2050-0039 (Manifest).

#### List of Subjects

##### 40 CFR Part 261

Intergovernmental relations, Hazardous materials, Waste treatment and disposal, Recycling.

##### 40 CFR Part 262

Intergovernmental relations, Hazardous materials, Labeling, Packaging and containers, Reporting requirements, Waste treatment and disposal.

##### 40 CFR Part 263

Intergovernmental relations, Hazardous materials transportation, Waste treatment and disposal.

##### 40 CFR Part 270

Administrative practice and procedure, Confidential business information, Hazardous materials transportation, Hazardous waste, Reporting and recordkeeping requirements, Water pollution control, Water supply.

##### 40 CFR Part 271

Administrative practice and procedure, Confidential business information, Hazardous materials transportation, Hazardous waste, Indian lands, Intergovernmental relations, Penalties, Reporting and recordkeeping requirements, Water pollution control, Water supply.

Dated: March 14, 1986.

Lee M. Thomas,  
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 continues to read as follows:

**Authority:** Secs. 1006, 2002(a), 3001 through 3007, 3010, 3014, 3015, 3017, 3018, 3019, 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(a), 6921 through 6927, 6930, 6934, 6935, 6937, 6938, 6939, and 6974).

2. Section 260.10 is amended by adding a new definition, alphabetically, as follows:

### § 260.10 Definitions.

"Small Quantity Generator" means a generator who generates less than 1000 kg of hazardous waste in a calendar month.

## PART 261—IDENTIFICATION AND LISTING OF HAZARDOUS WASTE

3. The authority citation for Part 261 continues to read 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 261.1 is amended by revising paragraph (a)(1) to read as follows:

### § 261.1 Purpose and scope.

(a) Subpart A defines the terms "solid waste" and "hazardous waste", identifies those wastes which are excluded from regulation under Parts 262 through 266 and 270 and establishes special management requirements for hazardous waste produced by conditionally exempt small quantity generators and hazardous waste which is recycled.

5. Section 261.5, is revised to read as follows:

### § 261.5 Special requirements for hazardous waste generated by conditionally exempt small quantity generators.

(a) A generator is a conditionally exempt small quantity generator in a calendar month if he generates no more than 100 kilograms of hazardous waste in that month.

(b) Except for those wastes identified in paragraphs (e), (f), (g), and (j) of this section, a conditionally exempt small quantity generator's hazardous wastes are not subject to regulation under Parts 262 through 266 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 paragraphs (f), (g), and (j) of this section.

(c) Hazardous waste that is not subject to regulation or that is subject only to § 262.11, § 262.12, § 262.40(c), and § 262.41 is not included in the quantity determinations of this Part and Parts 262 through 266 and 270 and is not subject to any of the requirements of those Parts. 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 Part and is subject to the requirements of Parts 262 through 266 and 270.

(d) In determining the quantity of hazardous waste generated, a generator need not include:

- (1) Hazardous waste when it is removed from on-site storage; or
- (2) Hazardous waste produced by on-site treatment (including reclamation) of his hazardous waste, so long as the hazardous waste that is treated was counted once; or
- (3) Spent materials that are generated, reclaimed, and subsequently reused on-site, so long as such spent materials have been counted once.

(e) If a generator generates acute hazardous waste in a calendar month in quantities greater than set forth below, all quantities of that acute hazardous waste are subject to full regulation under Parts 262 through 266 and Parts 270 and 124 of this chapter, and the notification requirements of section 3010 of RCRA:

- (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 clean-up 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).

(f) In order for acute hazardous wastes generated by a generator of acute hazardous wastes in quantities equal to or less than those set forth in paragraph (e)(1) or (e)(2) of this section to be excluded from full regulation under this section, the generator must comply with the following requirements:

- (1) Section 262.11 of this chapter;
- (2) The generator may accumulate acute hazardous waste on-site. If he accumulates at any time acute hazardous wastes in quantities greater than those set forth in paragraph (e)(1) or (e)(2) of this section, all of those accumulated wastes are subject to regulation under Parts 262 through 266 and Parts 270 and 124 of this chapter, and the applicable notification requirements of section 3010 of RCRA. The time period of § 262.34(d) for accumulation of wastes on-site begins when the accumulated wastes exceed the applicable exclusion limit;

(3) A conditionally exempt small quantity generator may either treat or dispose of his acute 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 reuses, or legitimately recycles or reclaims its waste; or
  - (B) Treats its waste prior to beneficial use or reuse, or legitimate recycling or reclamation.

(g) In order for hazardous waste generated by a conditionally exempt small quantity generator in quantities of less than 100 kilograms of hazardous waste during a calendar month to be excluded from full regulation under this section, the generator must comply with the following requirements:

- (1) Section 262.11 of this chapter;
- (2) The conditionally exempt 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 wastes, all of those accumulated wastes are subject to regulation under the special provisions of Part 262 applicable to generators of between 100 kg and 1000 kg of hazardous waste in a calendar month as well as the requirements of Parts 263 through 266 and Parts 270 and 124 of this chapter, and the applicable notification requirements of section 3010 of RCRA. The time period of § 262.34(d) for accumulation of wastes on-site begins for a conditionally exempt small quantity generator when the accumulated wastes exceed 1000 kilograms;

(3) A conditionally exempt small quantity generator may 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 reuses, or legitimately recycles or reclaims its waste; or

(B) Treats its waste prior to beneficial use or reuse, 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 waste identified in Subpart C.

(i) If any person mixes a solid waste with a hazardous waste that exceeds a quantity exclusion level of this section, the mixture is subject to full regulation.

(j) If a conditionally exempt small quantity generator's wastes are mixed with used oil, the mixture is subject to Subpart E of Part 266 of this chapter if it is destined to be burned for energy recovery. Any material produced from such a mixture by processing, blending, or other treatment is also so regulated if it is destined to be burned for energy recovery.

6. In Section 261.33 the introductory text of paragraph (f) is revised to read as follows:

**§ 261.33 Discarded commercial chemical products, off-specification species, container residues, and spill residues there-  
of**

(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 generator exclusion defined in § 261.5 (a) and (g).

**PART 262—STANDARDS APPLICABLE TO GENERATORS OF HAZARDOUS WASTE**

7. The authority citation for Part 262 continues to read as follows:

**Authority:** Secs. 1006, 2002(a), 3002, 3003, 3004, and 3017 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C. 6906, 6912(a), 6922, 6923, 6924, 6925, and 6937).

8. Section 262.20 is amended by adding new paragraph (e) to read as follows:

**§ 262.20 General requirements.**

(c) The requirements of this Subpart

do not apply to hazardous waste produced by generators of greater than 100 kg but less than 1000 kg in a calendar month where:

(1) The waste is reclaimed under a contractual agreement pursuant to which:

(i) The type of waste and frequency of shipments are specified in the agreement;

(ii) The vehicle used to transport the waste to the recycling facility and to deliver regenerated material back to the generator is owned and operated by the reclaimer of the waste; and

(2) The generator maintains a copy of the reclamation agreement in his files for a period of at least three years after termination or expiration of the agreement.

9. Section 262.34 is amended by revising the introductory text to paragraph (a) and by adding new paragraphs (d), (e), and (f).

**§ 262.34 Accumulation time.**

(a) Except as provided in paragraphs (d), (e), and (f) of this section, a generator may accumulate hazardous waste on-site for 90 days or less without a permit or without having interim status provided that:

(d) A generator who generates greater than 100 kilograms but less than 1000 kilograms of hazardous waste in a calendar month may accumulate hazardous waste on-site for 180 days or less without a permit or without having interim status provided that:

(1) The quantity of waste accumulated on-site never exceeds 6000 kilograms;

(2) The generator complies with the requirements of paragraph (a)(1) except the generator need not comply with § 265.176.

(3) The generator complies with the requirements of paragraphs (a)(2) and (a)(3) of this section and the requirements of Subpart C of Part 265; and

(4) The generator complies with the following requirements:

(i) At all times there must be at least one employee either on the 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 specified in paragraph (d)(3)(iv) of this section. This employee is the emergency coordinator.

(ii) The generator must post the following information next to the telephone:

(A) The name and telephone number of the emergency coordinator;

(B) Location of fire extinguishers and spill control material, and, if present, fire alarm; and

(C) The telephone number of the fire department, unless the facility has a direct alarm.

(iii) The generator must ensure that all employees are thoroughly familiar with proper waste handling and emergency procedures, relevant to their responsibilities during normal facility operations and emergencies;

(iv) The emergency coordinator or his designee must respond to any emergencies that arise. The applicable responses are as follows:

(A) In the event of a fire, call the fire department or attempt to extinguish it using a fire extinguisher;

(B) In the event of a spill, contain the flow of hazardous waste to the extent possible, and as soon as is practicable, clean up the hazardous waste and any contaminated materials or soil;

(C) In the event of a fire, explosion, or other release which could threaten human health outside the facility or when the generator has knowledge that a spill has reached surface water, the generator must immediately notify the National Response Center (using their 24-hour toll free number 800/424-8802). The report must include the following information:

(1) The name, address, and U.S. EPA Identification Number of the generator;

(2) Date, time, and type of incident (*e.g.*, spill or fire);

(3) Quantity and type of hazardous waste involved in the incident;

(4) Extent of injuries, if any; and

(5) Estimated quantity and disposition of recovered materials, if any.

(e) A generator who generates greater than 100 kilograms but less than 1000 kilograms of hazardous waste in a calendar month and who must transport his waste, or offer his waste for transportation, over a distance of 200 miles or more for off-site treatment, storage or disposal may accumulate hazardous waste on-site for 270 days or less without a permit or without having interim status provided that he complies with the requirements of paragraph (d) of this section.

(f) A generator who generates greater than 100 kilograms but less than 1000 kilograms of hazardous waste in a calendar month and who accumulates hazardous waste in quantities exceeding 6000 kg or accumulates hazardous waste for more than 180 days (or for more than 270 days if he must transport his waste, or offer his waste for transportation, over a distance of 200 miles or more) 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 180-day (or 270-day if applicable) period. Such extension may be granted by EPA if hazardous wastes must remain on-site for longer than 180 days (or 270 days if applicable) 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.

10. In Subpart D of Part 262, add the following new § 262.44:

**Subpart D—Recordkeeping and Reporting**

\* \* \* \* \*

**§ 262.44 Special Requirements for Generators of between 100 and 1000 kg/mo.**

A generator who generates greater than 100 kilograms but less than 1000 kilograms of hazardous waste in a calendar month is exempt from the requirements of this subpart, except for the recordkeeping requirements in paragraphs (a), (c), and (d) in § 262.40 and the requirements of § 262.43.

**PART 263—STANDARDS APPLICABLE TO TRANSPORTERS OF HAZARDOUS WASTE**

11. The authority citation for Part 263 continues to read as follows:

Authority: Sections 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(a), 6922, 6923, 6924, and 6925).

12. In § 263.20, paragraph (h) is added to read as follows:

**§ 263.20 The manifest system.**

\* \* \* \* \*

(h) A transporter transporting hazardous waste from a generator who generates greater than 100 kilograms but less than 1000 kilograms of hazardous

waste in a calendar month need not comply with the requirements of this section or those of § 263.22 provided that:

- (1) The waste is being transported pursuant to a reclamation agreement as provided for in § 262.20(e);
- (2) The transporter records, on a log or shipping paper, the following information for each shipment:
  - (i) The name, address, and U.S. EPA Identification Number of the generator of the waste;
  - (ii) The quantity of waste accepted;
  - (iii) All DOT-required shipping information;
  - (iv) The date the waste is accepted; and
- (3) The transporter carries this record when transporting waste to the reclamation facility; and
- (4) The transporter retains these records for a period of at least three years after termination or expiration of the agreement.

**PART 270—EPA ADMINISTERED PERMIT PROGRAMS: THE HAZARDOUS WASTE PERMIT PROGRAM**

13. The authority citation for Part 270 continues to read as follows:

Authority: Secs. 1006, 2002, 3005, 3007, 3019, 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, 6939, and 6974).

14. Section 270.1 is amended by revising paragraph (c)(2)(i) to read as follows:

**§ 270.1 Purpose and scope of these regulations.**

\* \* \* \* \*

- (c) \* \* \*
- (2) \* \* \*

(i) Generators who accumulate hazardous waste on-site for less than the time periods provided in 40 CFR 262.34.

\* \* \* \* \*

15. Section 270.10 is amended by adding paragraph (e)(1)(iii) to read as follows:

**§ 270.10 General application requirements.**

\* \* \* \* \*

- (e) \* \* \*
- (1) \* \* \*

(iii) For generators generating greater than 100 kilograms but less than 1000 kilograms of hazardous waste in a calendar month and treats, stores, or disposes of these wastes on-site, by March 24, 1987.

\* \* \* \* \*

**PART 271—REQUIREMENTS FOR AUTHORIZATION OF STATE HAZARDOUS WASTE PROGRAMS**

16. The authority citation for Part 271 continues to read as follows:

Authority: Secs. 1006, 2002(a), and 3006 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 6926).

17. Section 271.1(j) is amended by adding the following entry to Table 1 in chronological order by date of publication:

**§ 271.1 Purpose and scope.**

\* \* \* \* \*

TABLE 1.—REGULATIONS IMPLEMENTING THE HAZARDOUS AND SOLID WASTE AMENDMENTS OF 1984

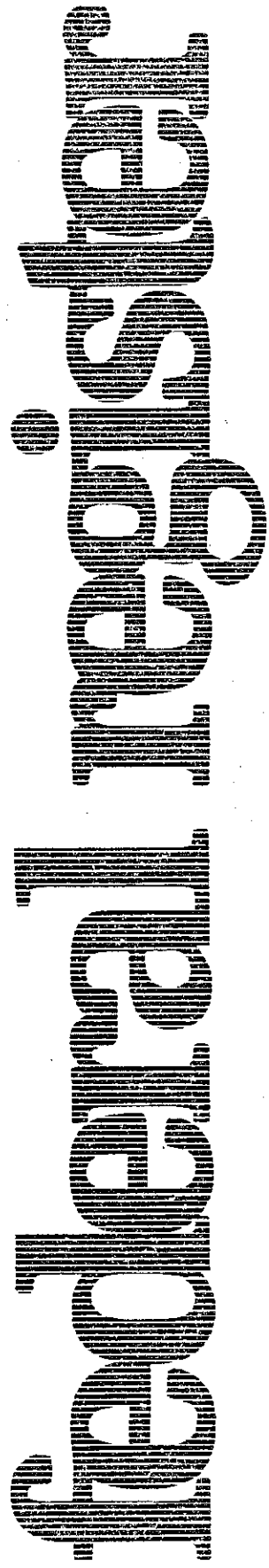
Date	Title of Regulation	Federal Register reference
Mar. 24, 1986	Regulations for Generators of 100-1000 kg/mo of Hazardous Waste.	51 FR [insert page number]

[FR Doc. 86-6224 Filed 3-21-86; 8:45 am]

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Friday  
May 2, 1986



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## Part II

# Environmental Protection Agency

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40 CFR Parts 260, 264, 265, and 270  
Standards Applicable to Owners and  
Operators of Hazardous Waste  
Treatment, Storage, and Disposal  
Facilities; Closure, Post-Closure and  
Financial Responsibility Requirements;  
Final Rule

## ENVIRONMENTAL PROTECTION AGENCY

### 40 CFR Parts 260, 264, 265, and 270

[SWH-FRL 2891-9]

#### Standards Applicable to Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities; Closure/Post-Closure and Financial Responsibility Requirements

**AGENCY:** Environmental Protection Agency.

**ACTION:** Final rule.

**SUMMARY:** On March 19, 1985, the Environmental Protection Agency (EPA) proposed to amend portions of the closure and post-closure care and financial responsibility requirements applicable to owners and operators of hazardous waste treatment, storage, and disposal facilities (TSDFs) (50 FR 11068). EPA is today promulgating the amendments in final form. Many of the amendments conform to a settlement agreement signed by EPA and petitioners in *American Iron and Steel Institute v. U.S. Environmental Protection Agency*, renamed *Atlantic Cement Company Incorporated v. U.S. Environmental Protection Agency* (D.C. Cir., No. 81-1387 and Consolidated Cases). The remainder of the amendments are designed to clarify the regulations and to address issues that have arisen as EPA has implemented the regulations.

**DATES:** These regulations shall become effective on October 29, 1986, except for § 270.14(b)(14), which shall be effective on May 2, 1986.

Wording changes for financial instruments issued before the effective date of these regulations must be made at the same time changes are required under §§ 264.142(b), 264.144(b), 265.142(b), and 265.144(b).

**ADDRESSES:** The public docket for this rulemaking is available for public inspection at Room S-212-E, U.S. EPA, 401 M Street SW., Washington, DC. 20460 from 9:00 a.m. to 4:00 p.m., Monday through Friday, excluding holidays. The docket number is F-86-FCPC. Call (202) 475-9327 to make an appointment with the docket clerk. As provided in 40 CFR Part 2, a reasonable fee may be charged for copying services.

**FOR FURTHER INFORMATION CONTACT:** The RCRA Hotline toll free at (800) 424-9346 or in Washington at (202) 382-3000; or Nancy D. McLaughlin, Office of Solid Waste (WH-582), U.S. Environmental Protection Agency, 401 M Street SW., Washington, D.C. 20460, (202) 475-6677.

**SUPPLEMENTARY INFORMATION:** The contents of today's preamble are listed in the following outline:

#### I. Background

- A. Subtitle C of the Resource Conservation and Recovery Act (RCRA)
- B. Regulations Affected by Today's Amendments
- C. Atlantic Cement Company, Incorporated (ACC) Litigation and Settlement
- D. Subparts G and H Implementation Experience
- E. Hazardous and Solid Waste Amendments of 1984 Codification Rule

#### II. Analysis of Rules

- A. Definitions (Part 260)
  1. Active Life of the Facility (§ 260.10)
  2. Final Closure (§ 260.10)
  3. Hazardous Waste Management Unit (§ 260.10)
  4. Partial Closure (§ 260.10)
- B. Standards for Permitted Facilities (Part 264) and Conforming Changes to Interim Status Standards (Part 265)
  1. Closure and Post-Closure Care (Subpart G)
    - a. Closure performance standard (§§ 265.111 and 265.111)
    - b. Requirement to furnish closure and post-closure plans to the Regional Administrator (§§ 264.112(a), 264.118(c), 265.112(a) and 265.118(b))
    - c. Clarification of contents of closure plan (§§ 264.112(b) and 265.112(b))
    - d. Description of removal or decontamination of facility structures and soils in closure plan (§§ 264.112(b)(4) and 265.112(b)(4))
    - e. Requirements to estimate the expected year of closure (§§ 264.112(b)(7) and 265.112(b)(7))
    - f. Amendments to closure and post-closure plans (§§ 264.112(c), 264.119(d), 265.112(c) and 265.118(d))
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    - l. Survey plat (§§ 264.116 and 265.116)
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  2. Financial Assurance Requirements (Subpart H)
    - a. Cost estimates for closure and post-closure care (§§ 264.142(a), 264.144(a), 265.142(a) and 265.144(a))
    - b. Anniversary date for updating cost estimates for inflation (§§ 264.142(b), 264.144(b), 265.142(b) and 265.144(b))

- c. Revisions to the cost estimates (§§ 264.142(c), 264.144(c), 265.142(c) and 265.144(c))
  - d. Post-closure cost estimate (§§ 264.144(c), and 265.144(c))
  - e. Trust fund pay-in period (§§ 264.143(a)(3) and 265.143(a)(3))
  - f. Reimbursements for closure and post-closure expenditures from trust fund and insurance (§§ 264.143(a)(10), 264.143(e)(5), 264.145(a)(11), 264.145(e)(5), 265.143(a)(10), 265.143(d)(5), 265.145(a)(11), and 265.145(d)(5))
  - g. Final order required (§§ 264.143(b)(4)(ii), 264.145(b)(4)(ii), 265.143(b)(4)(ii) and 265.145(b)(4)(ii))
  - h. Final administrative determination required (§§ 264.143(c)(5) and (d)(8), 264.145(c)(5) and (d)(9), and 265.143(c)(8), 265.145(b)(5) and 265.145(c)(9))
  - i. Cost estimates for owners or operators using the financial test or corporate guarantee must include UIC cost estimates for Class 1 wells (§§ 264.143(f)(1)(i) (B) and (D) and (f)(1)(ii) (B) and (D), 264.145(f)(1)(i) (B) and (D) and (f)(1)(ii) (B) and (D), 265.143(e)(1)(i) (B) and (D) and (c)(1)(ii) (B) and (D), 265.145(e)(1)(i) (B) and (D) and (e)(1)(ii) (B) and (D))
  - j. Cost estimates must account for all facilities covered by the financial test or corporate guarantee (§§ 264.143(f)(2), 264.145(f)(2), 265.143(e)(2) and 265.145(e)(2))
  - k. Release of the owner or operator from the requirements of financial assurance for closure and post-closure care (§§ 264.143(i), 264.145(i), 265.143(h), and 265.145(h))
  - l. Period of liability coverage (§§ 264.147(e) and 265.147(e))
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- C. Interim Status Standards (Part 265)
    1. Applicability of Requirements (§ 265.110)
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- #### III. State Authority
- A. Applicability of Rules in Authorized States
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## V. Paperwork Reduction Act

## VI. Regulatory Flexibility Act

## VII. Supporting Documents

## VIII. Effective Date

## I. Background

*A. Subtitle C of the Resource Conservation and Recovery Act (RCRA)*

Subtitle C of RCRA creates a "cradle-to-grave" management system to ensure that hazardous wastes are transported, treated, stored, and disposed of in a manner that ensures the protection of human health and the environment. Section 3004 of Subtitle C requires the Administrator of EPA to promulgate regulations establishing such performance standards applicable to owners and operators of hazardous waste treatment, storage, or disposal facilities (TSDFs), as may be necessary to protect human health and the environment. Section 3005 requires the Administrator to promulgate regulations requiring each person owning or operating a TSDF to have a permit, and to establish requirements for permit applications.

Under Section 3005(a), on the effective date of the Section 3004 standards, all treatment, storage and disposal of hazardous waste is prohibited except in accordance with a permit that implements the Section 3004 standards. Recognizing, however, that not all permits would be issued within six months of the promulgation of Section 3004 standards, Congress created "interim status" in Section 3005(e) of RCRA. Owners and operators of existing hazardous waste TSDFs who qualify for interim status will be treated as having been issued a permit until EPA takes final administrative action on their permit application. Interim status does not relieve a facility owner or operator of complying with Section 3004 standards. The privilege of carrying on operations in the absence of a permit carries with it the responsibility of complying with appropriate portions of the Section 3004 standards.

*B. Regulations Affected by Today's Amendments*

EPA has issued several sets of regulations to implement the various sections of Subtitle C. Part 260 of 40 CFR, among other provisions, includes definitions that apply to all other parts of the regulations. Part 264 provides standards for owners and operators of TSDFs that have been issued RCRA permits. Part 265 provides interim status standards for owners and operators of TSDFs. Part 270 establishes permitting

procedures for TSDFs. These four parts are amended by today's final rule.

*C. Atlantic Cement Company, Incorporated (ACCI) Litigation and Settlement*

Shortly after EPA promulgated the January 12, 1981 regulations, which, among other requirements, included standards for closure and post-closure care and financial assurance, individual companies and industry trade associations filed 17 separate lawsuits challenging those standards. These cases were consolidated as *American Iron and Steel Institute v. U.S. Environmental Protection Agency* (D.C. Cir., No. 81-1387 and Consolidated Cases). On August 16, 1984, the parties (with the exception of several parties who voluntarily dismissed their lawsuits) filed a settlement agreement with the Court. The American Iron and Steel Institute voluntarily dismissed its lawsuit rather than join in the settlement; the case has been renamed *Atlantic Cement Company Incorporated v. U.S. Environmental Protection Agency* ("ACCI Litigation").

Under the terms of the settlement agreement, EPA agreed to propose and take final action upon certain amendments to the closure and post-closure regulations that were promulgated on January 12, 1981. The rules proposed on March 19, 1985 contained amendments conforming to the ACCI settlement agreement. Among the regulations EPA is promulgating today are amendments to 40 CFR Parts 260, 264, 265, and 270 that are in most cases consistent with the ACCI settlement agreement. In addition, certain of these amendments require conforming amendments to financial responsibility regulations in Subpart H of Parts 264 and 265. Those changes are also being made today.

*D. Subparts G and H Implementation Experience*

Since January 12, 1981, EPA and authorized states have developed considerable experience with the implementation of Subparts G and H. Based on this implementation experience, EPA is today making additional changes to 40 CFR Parts 260, 264, 265, and 270.

*E. Hazardous and Solid Waste Amendments of 1984 Codification Rule*

On July 15, 1985, EPA published in 50 FR 28702 final rules implementing provisions included in the Hazardous and Solid Waste Amendments of 1984 (HSWA) (hereinafter referred to as the "codification rule"). Some of today's final rules have been promulgated to

conform to HSWA and to the requirements of the July 15, 1985 codification rule.

## II. Analysis of Rules

The following sections of this preamble include discussions of the major issues and summaries of the comments received in response to the March 19, 1985 proposed rule, as well as explanations of EPA's rationale for promulgating the final rules. The preamble is arranged in a section-by-section sequence for ease of reference. Because many of the regulatory amendments to Interim Status Standards (Part 265) are parallel to the Standards for Permitted Facilities (Part 264), only those changes to the Part 265 Interim Status Standards that differ from the Part 264 standards are addressed separately.

*A. Definitions (Part 260)*

## 1. Active Life of the Facility (§ 260.10).

In the March 19, 1985 proposed rule, the Agency proposed to redefine "active life" to extend the period from the initial receipt of hazardous wastes until the Regional Administrator receives certification of final closure. Sections 264.112(b) and 265.112(b) previously defined active life of a facility as that period during which wastes are periodically received.

The key concern raised by the commenters was that certain requirements applicable to operating facilities may not be practical or feasible to conduct during the closure period (e.g., inspections, paperwork requirements).

The Agency does not agree that defining the closure period as part of the active life would be burdensome or require activities not otherwise required at the facility. For example, §§ 264.73 and 265.73 now require that the owner or operator maintain the operating record until closure of the facility. The Agency would also expect an owner or operator to conduct inspections as part of a routine closure activities. As discussed in the preamble to the proposed rule, the Agency is primarily concerned with ensuring that all monitoring activities are continued until closure is completed. Therefore, the Agency is promulgating the definition of active life of the facility as proposed.

## 2. Final Closure (§ 260.10)

In order to clarify the distinction between partial closure and final closure, the Agency proposed to define final closure as closure of all hazardous waste management units at a facility not otherwise covered by the provisions of

§ 262.34 (exemptions from Subpart G requirements for facilities accumulating hazardous wastes for less than 90 days), in accordance with Subpart G requirements. Closure of the last unit of the facility would be defined as final closure of the facility. No comments were received on this proposal, and the Agency is promulgating the definition as proposed.

### 3. Hazardous Waste Management Unit (§ 260.10)

The Agency proposed to define a new term—"hazardous waste management unit"—as the smallest area of land on or in which hazardous waste is placed, or the smallest structure on or in which hazardous waste is placed, that isolates hazardous waste within a facility. The proposed definition was designed to be consistent with the preamble to the July 26, 1982 land disposal regulations (47 FR 32289), expanded to include storage and treatment tanks and container storage units. The following were defined as hazardous waste management units in the March 19, 1985 proposed rule: a landfill cell, surface impoundment, waste pile, land treatment area, incinerator, tank system (i.e., individual tank and its associated piping and underlying containment system), and a container storage area (i.e., the containers and the land or pad on which they are placed).

A number of commenters were concerned that the proposed definition was still somewhat ambiguous. In particular, the definition did not adequately distinguish between landfill cells, which were defined in the proposed rule as units, and subcells, which are integral subsections of cells and should not be closed separately from the cell as a whole. Another commenter expressed concern that the term "isolates" in the definition implies that all units necessarily isolate wastes, which may not always be the case (e.g., land treatment area).

The Agency agrees that the proposed definition is somewhat ambiguous and not completely consistent with the definition of unit included in the July 26, 1982 preamble. Moreover, the Agency wishes to make the definition consistent with the codification rule. (See 50 FR 28706 and 28712, July 15, 1985). Therefore, today's rule defines hazardous waste management unit as a contiguous area of land on or in which hazardous waste is placed, or the largest area in which there is a significant likelihood of mixing hazardous waste constituents in the same area. Units include: surface impoundments, waste piles, landfill cells, incinerators, land treatment areas, tanks and their

associated piping and underlying containment systems, and container storage areas (i.e., the container and any underlying pad). As discussed in the preamble to the proposed rule, the Agency does not consider each container to be a unit.

### 4. Partial Closure (§ 260.10).

The March 19, 1985 proposed rule redefined partial closure as closure of a hazardous waste management unit. Partial closures may involve: (1) closing a hazardous waste management unit while another hazardous waste management unit at the facility continues operating (e.g., a surface impoundment or container storage area is closed but a landfill continues to operate), or (2) closing one or more hazardous waste management units while other units associated with the same process remain operational (e.g., one landfill cell of a ten-cell landfill is closed, one tank and its underlying piping is removed from a tank farm). Closure of the last hazardous waste management unit at the facility would be considered a final closure rather than a partial closure.

The Agency received no substantive comments on the proposed definition of partial closure. The definition is being adopted substantially as proposed, with the following change: In the list of examples, "tank system" has been changed to "tank (including its associated piping and underlying containment system)".

### B. Standards for Permitted Facilities (Part 264) and Conforming Changes to Interim Status Standards (Part 265)

#### 1. Closure and Post-Closure Care (Subpart G).

a. *Closure performance standard (§§ 264.111 and 265.111).* The previous sections 264.111 and 265.111 established general closure performance standards applicable to all TSDFs that specified that a facility must be closed in a manner that (1) minimizes the need for further maintenance, and (2) controls, minimizes or eliminates, to the extent necessary to prevent threats to human health and the environment, post-closure escape of hazardous wastes, hazardous waste constituents, leachate, contaminated rainfall, or hazardous waste decomposition products to the ground or surface waters or to the atmosphere. The language in § 265.111 differed slightly and specified that the facility must be closed in a manner "that . . . controls, minimizes or eliminates, to the extent necessary to protect human health and the environment. . . ."

In the March 19, 1985 preamble, the Agency proposed to (1) incorporate into the general standard a reference to the process-specific closure standards included in 40 CFR §§ 264.178, 264.197, 264.228, 264.258, 264.280, 264.310, 264.351, and the parallel interim status provisions; (2) make the language in § 265.111 parallel to that in § 264.111; (3) revise the language to require that hazardous constituents, as well as hazardous waste constituents, be appropriately managed at closure; and (4) make a minor change to the wording of the regulation for purposes of clarification.

The Agency proposed to incorporate reference to the specific technical closure requirements into the performance standard to ensure that owners or operators of TSDFs comply with both the general performance standard and the applicable process-specific standards. No comments were submitted on this proposal. The Agency is promulgating the language of §§ 264.111(c) and 265.111(c) substantially as proposed. The reference to § 265.178 in § 265.111(c) has been dropped because there are no process-specific standards for container storage facilities in interim status; in addition, references to §§ 265.381 and 265.404 which had been inadvertently omitted from the proposed rule, are included in § 265.111(c).

Because the Agency believes that for clarity and consistency the closure performance standard for interim status and permitted facilities should be parallel, the Agency proposed to amend § 265.111(b) to make the language parallel to that in § 264.111(b). One commenter stated that the use of the phrase "prevent threats" could require an owner or operator to conduct closure activities that were not cost-effective and should be replaced by a site-specific risk assessment.

The Agency believes that the environmental goals of closure should be the same for both interim status and permitted facilities. Although the previous language of the closure performance standard in Parts 264 and 265 differed slightly, as discussed in the preamble to the proposed rule, the Agency interpreted them as having the same meaning. As a result, the Agency proposed to amend § 265.111 to be consistent with the Part 264 standards and included the language "to prevent threats".

For the sake of clarity and to be consistent with the statutory language in RCRA mandating EPA to promulgate standards to protect human health and the environment, however, the final rule

amends the language of § 264.111(b) to be consistent with the wording of § 265.111(b). The language in § 264.111(b) now specifies that the facility must be closed in a manner "that . . . controls, minimizes, or eliminates, to the extent necessary to protect human health and the environment" the post-closure escape of hazardous wastes, hazardous constituents, etc.

The Agency also proposed to expand the language in §§ 264.111(b) and 265.111(b) to require that closure must control, minimize or eliminate, to the extent necessary, the post-closure escape of *hazardous constituents* instead of only hazardous waste constituents as the previous regulation required. One commenter opposed the proposal on the grounds that requiring owners and operators to address all Appendix VIII constituents rather than only hazardous waste constituents could have costly implications for closure and post-closure care. Moreover, the commenter argued that the Agency did not provide a rationale for this change in the March 19, 1985 proposed rule.

The Agency believes it is necessary to include hazardous constituents in the closure performance standard to ensure that *all* contamination is adequately addressed at closure. Furthermore, this change is consistent with the HSWA. For example, RCRA Section 3004(u) requires corrective action for all releases of hazardous wastes or *hazardous constituents* from any solid waste management unit. Similarly, Section 3001(f) requires the Agency in evaluating delisting petitions to consider, among other things, constituents other than those for which the waste was listed as hazardous. As a result of these considerations, the Agency is adopting §§ 264.111(b) and 265.111(b) as proposed.

Finally, the Agency proposed to clarify the wording in §§ 264.111(b) and 265.111(b) by replacing the phrase "contaminated rainfall" with "contaminated run-off." No comments were received and this change is being promulgated as proposed. In addition, the phrase "waste decomposition products" was changed to "*hazardous waste decomposition products*." Wastes which are not hazardous are not subject to the closure performance standards.

**b. Requirement to furnish closure and post-closure plans to the Regional Administrator (§§ 264.112(a), 264.118(c), 265.112(a), 265.118(b)).** Sections 264.112(a), 264.118(a), 265.112(a), and 265.118(a) previously required the owner or operator of a TSD facility to keep a copy of the closure and post-closure plan and all revisions at the facility until closure is completed and certified. (In the case of

permitted facilities and interim status facilities with approved plans, the approved plans were to be kept on-site.) Post-closure plans were to be retained at the facility until the post-closure care period began. Petitioners in the *ACCI* litigation argued that a hazardous waste management facility may not be properly equipped to maintain files at the facility and safeguard closure and post-closure plans and that the plans could be kept more efficiently and safely at nearby offices of the owner or operator of the facility. The EPA, however, was concerned that the plans be available on-site to an inspector on the day of inspection.

The Agency proposed to drop the requirement that the closure and post-closure plans be kept at the facility, but to require that they be furnished to the Regional Administrator upon request, including request by mail, and during site inspections, on the day of inspection. This was consistent with the terms of the *ACCI* settlement.

Most of the commenters focused on the applicability of the requirements to permitted facilities, arguing that if the Agency already has a copy of the plan on file, requiring it to be made available on the day of inspection is unnecessary. Another argued that plans should be kept at the facility during the closure period to make them readily available for an unannounced inspection at that time.

The Agency agrees with those commenters who argued that for facilities with approved closure and post-closure plans on file, it is not necessary to make them available on the day of inspection. For interim status facilities, however, the plans may not have been reviewed and it is important that they be available on the day of inspection. Even in the case of unannounced inspections, it should be possible to deliver a copy of the plan to the facility within the same day. Therefore, the Agency is promulgating §§ 264.112(a) and 264.118(c) to require that the plans be furnished only upon request, including request by mail; §§ 265.112(a) and 265.118(b) require that for interim status facilities with *approved* closure and post-closure plans, the plans must be furnished upon request, including request by mail. For facilities without approved plans, the plans must also be provided during site inspections.

Under the requirements of §§ 264.228 and 264.258, an owner or operator of a surface impoundment or waste pile not designed in accordance with the specified liner design standards must prepare a contingent closure and post-closure plan for closure as a landfill. To

ensure that such owners and operators recognize that these contingent plans are subject to the requirements of Part 264 Subpart G, the final rule modifies the proposed rule slightly. The final rule clarifies that if a facility is required to have a contingent closure and post-closure plan under § 264.228 or § 264.258, these plans are also subject to the requirements of §§ 264.112 and 264.118.

In some cases, owners or operators of surface impoundments or waste piles not otherwise required to prepare contingent closure and post-closure plans may be required to close their units or facilities as landfills. To clarify that these facilities also must have post-closure plans, the final rule specifies in §§ 264.118(a) and 265.118(a) that an owner or operator must prepare a post-closure plan within 90 days of the date that the owner or operator or Regional Administrator determines that the facility must be closed as a landfill.

**c. Clarification of contents of closure plan (§§ 264.112(b), 265.112(b)).** The Agency proposed a number of changes to §§ 264.112(a) and 265.112(a) to make explicit the level of detail that must be included in the closure plan to eliminate potential ambiguities in the closure plan requirements. First, the proposed rule clarified that the plan must address explicitly the activities to be conducted at all partial closures as well as final closure. The proposed rule also stated in §§ 264.112(b)(6) and 265.112(b)(6) that a schedule for closure activities must be provided for closure of each unit as well as for final closure. In addition, the proposed rule also elaborated on the types of information that should be included in the plan.

For example, the owner or operator must include in the plan not only an estimate of the maximum inventory over the life of the facility, but also a detailed description of the procedures that will be used to handle the hazardous wastes during partial and final closure (e.g., all proposed methods for removing, transporting, treating, or disposing of hazardous wastes at partial and final closure). The plan must also address all ancillary activities necessary during the partial and final closure periods, such as ground-water monitoring, leachate collection, and run-on and run-off control, as applicable.

The Agency received a number of comments supporting increased level of detail in the plans. Most of these commenters favored including even more specificity in the closure plan regulations (e.g., criteria for "how clean is clean"). A number of commenters however, also disagreed with the



Agency's proposed amendments, arguing that the level of detail proposed in unnecessary and burdensome, especially if the plan must be changed several times to reflect future changes in technology. One commenter expressed concern that the level of detail specified, combined with the permit modification procedures required to make changes to the plan, could lock an owner or operator into an outmoded closure plan.

The Agency believes that it is necessary to require detailed closure and post-closure plans to ensure accurate cost estimates and adequate financial assurance. Implementation experience has shown that poorly detailed plans have been accompanied by inadequate cost estimates. The plans should include sufficient detail to allow a third party to conduct closure or post-closure care in accordance with the plan if the owner or operator fails to do so. Therefore, the Agency is promulgating the final rule as proposed.

The Agency disagrees with those commenters who contend that requiring a greater level of detail will force owners or operators to revise their plans frequently. The types of changes that would require a revision to the closure plan are likely to be the result of a change in facility design or routine operations (e.g., a change in the cover design, off-site vs. on-site management of wastes at closure, closure of a surface impoundment or waste pile as a landfill). These types of changes are unlikely to occur frequently. The Agency does not intend that the owner or operator should revise the plan for insignificant changes (e.g., a change in the particular off-site facility used to handle wastes at closure or the contractor used to install the final cover). The Agency also does not intend this requirement to preclude an owner or operator from revising the plan as appropriate to incorporate technological innovations or to lock owners or operators into outmoded closure plans.

A number of commenters requested that the Agency address "how clean is clean" and include this standard as part of the closure requirements. The Agency is currently developing a policy on this broad issue outside the scope of this rulemaking.

*d. Description of removal or decontamination of facility structures and soils in closure plan (§§ 264.112(b)(4), 265.112(b)(4)).* Sections 264.112(a)(3) and 265.112(a)(3) previously required owners or operators to include a description of the steps needed to decontaminate facility equipment at closure. The proposed amendment expanded this provision to require that the closure plan also must include a

description of steps necessary to decontaminate or remove contaminated facility structures, containment systems, and soils in a manner that satisfies the closure performance standard. The plan must include, but not be limited to, a description of the methods for decontaminating the facility, sampling and testing procedures, and criteria to be used for evaluating contamination levels.

Because responsible owners or operators will clean up drips and spills associated with hazardous waste management activities as they occur (see, e.g., 40 CFR § 264.175), many of the activities described in the closure plan for removing or decontaminating soils should be similar to those conducted during the operating life of the facility as part of routine operations. For some types of units (e.g., tanks or container storage), soil testing may not be a routine operating activity and may not be conducted until closure. For these types of units it is especially important that the plan address how the owner or operator intends to determine the extent of soil contamination at closure. The Agency's intent is that the plan should address cleanup of the maximum extent of contamination (including contaminated soil) resulting from the facility's hazardous waste operations that the owner or operator expects to be on-site anytime over the active life of the facility.

While most commenters agreed with the proposal to address contaminated soils, some suggested clarifications. Some commenters were concerned about the ambiguity of the terms "contaminated" and "containment systems." The language might be construed to require decontamination or removal of leachate collection systems and liners. It was suggested that the regulation identify the equipment and structures subject to the decontamination requirement. Another commenter stated that the preamble to the proposed rule implied that the plan must address soil contamination from production activities, which is outside the scope of RCRA.

The Agency agrees that the plan must address soil contamination *only* from hazardous waste management operations. The Agency also does not intend this rule to require that an owner or operator remove structures otherwise required by process-specific requirements to be maintained and used after closure. For example, if an owner or operator closes a surface impoundment as a landfill, the Agency does not intend that the owner or operator remove the containment system as part of closure

decontamination procedures. (Similarly, the overlying hazardous wastes are not removed when a disposal facility is closed.) The Agency believes that the language of the proposed rule can be interpreted reasonably and it is not necessary to list in the regulation every piece of equipment and facility that must be decontaminated at every type of facility. As a result, the Agency is promulgating the final rule as proposed.

*e. Requirements to estimate the expected year of closure (§§ 264.112(b)(7) and 265.112(b)(7)).* Sections 264.112(a)(4) and 265.112(a)(4) previously required each owner or operator of a TSDF to include in its written closure plan an estimate of the expected year of closure. Petitioners in the ACCI litigation argued that compliance with that provision was unnecessarily burdensome for owners or operators of on-site TSDFs, such as storage and treatment facilities associated with industrial processes. In the case of those facilities, the expected date of closure may not be determined by the hazardous waste management activities but by the primary industrial activity with which the facility is associated, the closure date of which, in many cases, may be difficult to predict.

The Agency was concerned that in the case of owners or operators using trust funds to provide financial assurance, an estimate of the expected year of closure is necessary to enable both the owners or operators and EPA to determine whether appropriate payments have been made into the trust fund. In addition, for interim status facilities without approved closure plans, an estimate of the year of closure is important to allow the Agency the opportunity to conduct facility inspections near the end of the facility's life and ensure that closure will be performed in a manner that will protect human health and the environment. Therefore, the Agency proposed to amend the regulation to require only those owners or operators of permitted facilities who use trust funds to establish financial assurance under § 264.143 and whose facilities are expected to close prior to expiration of their initial permit to estimate the expected year of closure. For owners or operators of interim status facilities, those without approved closure plans or those who use trust funds to demonstrate financial assurance and whose remaining operating life is less than 20 years, would be required to estimate the year of closure.

Most commenters agreed with the Agency's proposed amendment to limit the requirement to owners or operators

using trust funds; some questioned retaining the requirement for all interim status facilities without approved closure plans. Those commenters who opposed the proposal argued that it is difficult to predict closure and a date should not be required. Consistent with the discussion in the March 19, 1985 preamble, the Agency feels that a date of closure is imperative for owners or operators using trust funds and for facilities without approved plans and is promulgating the rule as proposed.

f. *Amendments to closure and post-closure plans (§§ 264.112(c), 264.118(d), 265.112(c) and 265.118(d)).* Sections 264.112(b) and 265.112(b) previously allowed an owner or operator to amend the closure plan at any time during the active life of the facility if there was a change in operating plans or facility design which affected the closure plan or if there was a change in the expected year of closure. The Agency proposed amendments to make this regulation consistent with other proposed regulatory amendments. In addition, the proposed amendments established procedures and deadlines for requesting modifications to closure and post-closure plans.

The definition of active life now includes the closure period. Therefore, the language of the previous regulation would have allowed an owner or operator to request modifications to the closure plans during the operating life of the facility through the closure period. To minimize threats to human health and the environment, the Agency considers it important to avoid undue delays in the completion of closure once activities have begun. Therefore, the Agency proposed §§ 264.112(c) and 265.112(c) allowing an owner or operator to modify the closure plans only *prior* to the notification of partial or final closure, or during closure only if unexpected events occur during the closure period that affect the closure plan (e.g., adverse weather conditions, fire, or more extensive soil contamination than anticipated resulting in the need to close the unit as a disposal unit rather than as a storage unit). Consistent with the proposed amendment to §§ 264.112(b)(7) and 265.112(b)(7), the Agency also proposed that the closure and post-closure plans must be amended if there is a change in the expected year of closure *only* for those facilities required to include an expected year of closure in the plan.

One commenter argued that allowing owners or operators to revise their closure plans during closure only to account for "unexpected events" is too restrictive and would preclude the

owner or operator from changing the plan to reflect optimum closure methods identified after notification of closure. While the Agency wishes to provide flexibility to owners or operators in developing closure plans and implementing closure, it does not want to prolong the closure period unnecessarily once the unit has ceased operating and is prepared to close. Therefore, the Agency believes that changes in the plan that the owner or operator could reasonably have anticipated should be made *prior* to the beginning of closure. For example, owners or operators should have sufficient time prior to the notification of closure to revise the closure plan to reflect optimum closure methods. Therefore, the Agency believes that changes made during the closure period should be limited only to those events that the owner or operator reasonably could not have expected.

Another commenter was concerned that allowing the plan to be modified during closure *only* if *unexpected* events occur during the closure period could preclude owners or operators of surface impoundments or waste piles required to close as landfills but not otherwise required to have contingent closure plans from amending their plans. The Agency does not agree with this interpretation. The Agency believes that if the owner or operator or Regional Administrator determines *prior* to closure that the unit or facility must be closed as a landfill, this determination would qualify as a change in facility operation or design. Therefore, the owner or operator must amend the closure plan as required by §§ 264.112(c)(2)(i) and 265.112(c)(1)(i) to reflect the fact that the facility is now a disposal facility. If the determination was not foreseen prior to the time of partial or final closure, this determination could be considered an "unexpected" event requiring a modification to the closure plan as specified in §§ 264.112(c)(2)(iii) and 265.112(c)(1)(iii).

To clarify this requirement and avoid potential ambiguities, the final rule specifies in §§ 264.112(c)(3), 264.118(d)(3), 265.112(c)(2), and 265.118(d)(2) that an owner or operator of a surface impoundment or waste pile not otherwise required to prepare a contingent closure or post-closure plan, must revise the closure plan and prepare a post-closure plan following a determination that the unit or facility must be closed as a landfill.

Another commenter stated that modifications to the closure plan during the closure period should be required

only if the unexpected event adversely affects human health and the environment. The Agency disagrees on the grounds that the purpose of the closure plan is to describe the activities that will be conducted at closure in the event that a third party is required to conduct closure and to serve as a basis for cost estimates for financial responsibility. In addition, because the purpose of the closure certification is to ensure that closure has been performed in accordance with the approved closure plan, the plan should be modified to reflect the activities that are performed.

In light of the above considerations, the Agency is promulgating today's final rule as proposed to require that plans be modified *prior* to the notification of closure or approval of the plans, whichever is later, or during closure if unexpected events occur during the closure period that affect the plans.

The Agency also proposed a number of procedural changes to the Parts 264 and 265 regulations for modifying closure and post-closure plans. First, the proposed §§ 264.112(c) and 264.118(e) clarified that an owner or operator of a permitted facility must use the permit modification procedures specified in Parts 124 and 270 to amend the closure or post-closure plans. Second, proposed §§ 265.112(c) and 265.118(g) required owners or operators of interim status facilities with approved plans to submit a request to the Regional Administrator to amend the plan. The proposed rule gave the Regional Administrator the discretion to provide the owner or operator and the public, through a newspaper notice, the opportunity to submit written comments and/or to hold a public hearing on the amendment to the plan.

Many commenters were concerned with the procedural requirements proposed for modifying the plans. Several argued that the Part 270 permit modification requirements are too cumbersome for minor changes in the plan. Another was concerned that modifications to interim status plans should be subject to public participation and should not be left to the Regional Administrator's discretion.

The Agency agrees with many of the commenters that the minor modification procedures in Part 270 are too limited in scope. As part of a forthcoming rulemaking on permit modifications, the Agency will expand the provisions of § 270.42 to identify the types of plan amendments that would be considered minor modifications.

The Agency also believes that the modification procedures for interim status facilities with approved closure

and post-closure plans should be consistent with those for permitted facilities. Therefore, the final rule specifies in §§ 265.112(c)(3) and 265.118(d)(3) that the criteria of §§ 270.41 and 270.42 must be used to determine if a change to the approved closure plan is a "major" or "minor" change. Major changes to the plans are subject to the public participation procedures of §§ 265.112(d)(4) and 265.118(f); minor changes to the plans are not subject to public participation, which is consistent with the procedures of § 270.42.

Another commenter suggested that the Agency establish deadlines for acting upon written requests to modify closure and post-closure plans, after which time, if no action had been taken, the modification would be automatically approved (the commenter suggested 60 days from the day of request). The Agency agrees that it should act expeditiously in approving or disapproving amendments to the plan. However, the Agency cannot agree that the amendment should be considered automatically approved if the Regional Administrator fails to make a determination within the allotted time frame. As a result, §§ 264.112(c), 265.112(c), 264.118(d), 265.118(d) and 265.118(g) have been revised to adopt deadlines for reviewing requests for modifications but do not provide for automatic approval of modifications when the Regional Administrator fails to meet a deadline. For permitted facilities, the Regional Administrator must comply with the procedures established in Parts 124 and 270; for interim status facilities, the deadlines of §§ 265.112(d)(4) and 265.118(f) will apply.

The proposed amendments to the Parts 264 and 265 regulations also specified deadlines for requesting closure and post-closure plan modifications, to ensure that all requests are made in a timely fashion and that the level of financial assurance is adjusted, as necessary, to reflect any approved changes. The proposed rule stated that an owner or operator of a permitted facility or an interim status facility with an approved closure or post-closure plan must submit a written request to the Regional Administrator for approval of a closure or post-closure plan modification within 60 days prior to the change in facility design or operation that resulted in a change in the plan, or within 60 days after an unexpected event has occurred that requires a change to the plans. If an unexpected event occurs during partial or final closure that will affect the closure plan, a request to modify the

closure plan must be made within 30 days. As discussed above, requirements applicable to amending plans also apply to owners or operators of surface impoundments or waste piles not otherwise required to prepare contingent plans. Consistent with these requirements, §§ 264.112(c)(3) and 265.112(c)(3) now specify that an owner or operator of a surface impoundment or waste pile not otherwise required to prepare contingent plans must submit a revised closure plan to the Regional Administrator for approval no later than 60 days after the determination is made that the unit or facility must be closed as a landfill. If the determination is made during partial or final closure, the revised plan must be submitted no later than 30 days after the determination is made. For interim status facilities without approved closure plans, owners or operators must prepare a revised closure plan and maintain it at the facility and submit it to the Regional Administrator upon request.

Owners or operators of surface impoundments or waste piles not otherwise required to prepare contingent post-closure plans must submit them to the Regional Administrator for approval no later than 90 days after the determination that the unit or facility must be closed as a landfill. Owners or operators of interim status facilities without approved plans are not required to submit the plan.

The final rule also modifies slightly the language in the proposed rule to make explicit that under § 264.112(c)(3) and 264.118(d), the owner or operator must submit a copy of the revised plan with the written request for a permit application. Similarly, for interim status facilities with approved plans, the revised plan must be submitted to the Regional Administrator for approval.

In analyzing the procedures for modifying the closure and post-closure plans, the Agency also considered whether the Regional Administrator should be given the authority to amend the closure or post-closure plan, especially in circumstances where unexpected events require plan modifications. The Agency believes that the Regional Administrator should be granted the authority to request modifications of the plans. Modifications that are considered "major" under the criteria of §§ 270.41 and 270.42 are subject to Parts 124 and 270 requirements for permitted facilities and to the provisions of §§ 265.112 and 265.118 for interim status facilities.

Consistent with deadlines in §§ 264.112(c)(3), 264.118(d)(3), 265.112(c)(3) and 265.118(d)(3), an owner

or operator must submit the modified plan no later than 60 days after the Regional Administrator's request or 30 days if the request is made during partial or final closure. These provisions are included in today's final rule in §§ 264.112(c)(4), 264.118(d)(4), 265.112(c)(4), and 265.118(d)(4).

g. *Notification of partial closure and final closure* (§§ 264.112(d), 265.112(d)). Sections 264.112(c) and 265.112(c) formerly required owners or operators of TSDFs to notify the Regional Administrator at least 180 days prior to the date they expected to begin closure. The following changes were proposed: (1) clarification that the notification requirements apply to partial closures of hazardous waste disposal units and final closure of all TSDFs; (2) modification of some deadlines for notifying the Regional Administrator of partial and final closures, and (3) definition of the "expected date of closure."

The ACCI petitioners were concerned that subjecting partial closures of non-land disposal facilities to notification requirements would disrupt routine business operations. The Agency wishes to encourage partial closures and at the same time ensure that partial closures are conducted in accordance with an approved plan. The Agency believes that for permitted facilities and interim status facilities with approved closure plans, it should be possible at the time of final closure to evaluate whether previous closures of non-disposal units have been in accordance with the approved plan. In the case of interim status facilities that do not have approved closure plans, the owner or operator will still be responsible for ensuring that all partial closure activities of incinerators, tanks, and container storage areas are consistent with the closure performance standard of § 265.111 and any process-specific closure standards.

Moreover, all previous partial closure activities will be subject to review when the plans are subsequently approved. For example, if at the time of final closure the Agency determines that additional soil decontamination is required at units that were previously partially closed, the owner or operator will be responsible for completing this activity. In light of these requirements, the Agency proposed to limit the notification requirement to partial closures of hazardous waste disposal units and final closure of non-disposal units. This provision is consistent with the provisions of § 265.112(e) discussed below. No comments were submitted on

this proposal and the Agency is promulgating the final rule as proposed.

The proposed rule also amended the deadlines for notification of partial closure for disposal units and final closure, in response to the concerns of petitioners in the *ACCI* litigation. The petitioners argued that the 180-day notice period is unreasonable for many types of facilities and unnecessary for the Agency's purposes (i.e., adequate time to schedule facility inspections). The Agency agreed that for facilities with approved closure plans 180 days prior notice of closure may be unnecessary. The Agency therefore proposed § 264.112(d)(1), which would require the owner or operator to notify the Regional Administrator at least 60 days prior to the date he expects to begin closure of a landfill, land treatment, surface impoundment, or waste pile unit, or final closure of a facility with these types of units. An owner or operator must notify the Regional Administrator at least 45 days prior to the date he expects to begin final closure of a facility with only an incinerator, container storage, or tank units remaining to be closed.

For interim status facilities *without* approved closure plans, the Agency proposed a 180-day notification requirement for partial closure of a landfill, land treatment facility, surface impoundment, or waste pile unit, or final closure of a facility with such units to allow sufficient time to review the plans. For interim status land disposal facilities with approved closure plans (i.e., those that received approval of the entire plan prior to a previous partial closure), the Agency proposed to reduce the notification period to 60 days to be consistent with the deadlines applicable to permitted facilities.

The Agency also proposed, consistent with the interim status deadlines in the *ACCI* settlement agreement, that an owner or operator of an interim status facility without an approved closure plan provide at least 45 days notice prior to the date he expects to begin final closure of a facility with only tanks, incinerators, or container storage areas remaining to be closed.

Several commenters objected to the changes in deadlines, arguing that the same deadlines should apply to all TSDFs. Some argued that a 45-day notice period for tanks, container storage areas, and incinerators does not allow sufficient time for public participation, while others contended that 45 or 90 days is adequate notice for all types of facilities.

The Agency considered these comments and is promulgating the deadlines as proposed. The Agency

believes that review of the plans for interim status land disposal units without approved plans is likely to be complex and a 180-day notification requirement is appropriate. Although the Agency recognizes that it may not always be possible to complete the review process for interim status facilities that include only tanks, container storage, and incinerators within 45 days, the provisions of § 265.112(e) allow the owner or operator to remove all hazardous wastes and decontaminate the equipment prior to the completion of the approval process. However, the owner or operator will not be discharged from all obligations or be released from financial responsibility until the closure plan has been approved and a certification of compliance with the approved plan has been submitted.

The third proposed change clarified the definition of the "expected date of closure." The previous regulation stated in a comment to §§ 264.112(c) and 265.112(c) that the expected date of closure should be interpreted as within 30 days of receipt of the "final volume of wastes." The Agency proposed to require explicitly in §§ 264.112(d)(2) and 265.112(d)(2) that an owner or operator notify the Regional Administrator within 30 days after the date on which a hazardous waste management unit received the known final volume of hazardous waste, or, if it is likely that the unit will receive additional hazardous wastes, within one year of receipt of the most recent volume of hazardous waste. To provide flexibility to long-term storage operations, the Agency also proposed to allow an owner or operator of a tank or container storage facility the opportunity to request an extension to the one-year limit if he can demonstrate that he has the capacity to receive additional hazardous wastes and is taking all steps necessary to protect human health and the environment in the interim, including compliance with all applicable permit conditions or interim status requirements.

Several comments were submitted on the proposed requirement. Although an extension to the one-year deadline was proposed for tank and container storage facilities, some commenters felt the requirement still imposed unnecessary burdens on other types of facilities that infrequently handled hazardous wastes (e.g., a storage facility used for hazardous wastes generated as a result of a spill or for off-specification commercial products). Commenters also questioned the need for owners or operators of facilities otherwise in compliance with all applicable regulations to close if hazardous wastes

have not been accepted within a year. One commenter suggested that tank and container storage units be exempt from the requirements rather than be required to request extensions to the deadlines. Another commenter was concerned that the variance provisions may discourage resource recovery by requiring owners or operators to close their facilities if additional capacity is not available at their facility and technologies are not available within the allotted deadlines.

The Agency agrees that if hazardous waste management units have the capacity to receive additional hazardous wastes and are otherwise in compliance with all operating requirements they should not necessarily be required to close if hazardous wastes have not been received within a year.

If the Agency is concerned that a particular unit or facility may pose a threat to human health and the environment, if it remains open, a number of other authorities exist to allow the Agency to force a facility to close. For example, the Agency may call in the Part B of a facility in interim status, and require that the facility close if it does not satisfy permitting criteria. Moreover, a number of land disposal facilities may be required to close in response to HSWA provisions. In addition, because the owner or operator is required to maintain financial assurance for closure until final closure has been certified, funds will be available if the owner or operator fails to cover the costs when he does close the facility. In light of these considerations, the final rule extends the variance provisions to all hazardous waste management units.

The Agency does not believe, however, that facilities should be *exempt* from the deadline requirements. To ensure that the owner or operator does not use the variance provision as a way to prolong unnecessarily the commencement of closure, the Agency is allowing the variance *only* if the facility has additional capacity available and the owner or operator demonstrates compliance with all applicable regulations. In the case of a storage facility filled to capacity but intending to employ resource recovery that is not yet on-line, the Agency would extend the one-year variance on the closure deadlines if the owner or operator could demonstrate that on-site resource recovery capacity would be available to handle these hazardous wastes. If the wastes were intended to be sent to an off-site facility that was not yet in operation, unless the owner or operator could demonstrate that the off-site services would be available within a

year, he would be required to use alternate technologies to handle the hazardous wastes to avoid prolonging the closure period unnecessarily.

h. *Removal of hazardous wastes and decontamination or dismantling of equipment (§§ 264.112(e) and 265.112(e)).* Sections 264.112 and 265.112 previously did not address whether activities such as removing hazardous waste and decontaminating or dismantling equipment could be undertaken prior to closure. The proposed amendment clarified this issue.

Petitioners in the *ACCI* litigation argued that requiring 180-day notification and, in the case of interim status facilities, requiring the completion of all closure plan approval procedures before any hazardous wastes can be removed or facility equipment can be dismantled, unreasonably interferes with routine business operations. In addition, the petitioners argued that postponing the removal of wastes for 180 days or until the approval of the closure plan, whichever is later, might be environmentally unsound.

Consistent with these two concerns, EPA proposed new subsections §§ 264.112(e) and 265.112(e) providing that nothing in §§ 264.112 or 265.112 shall preclude the owner or operator from removing hazardous wastes and decontaminating or dismantling equipment in accordance with the approved closure plan at any time before or after notification of partial or final closure. Because the approved closure plan is part of the permit conditions, all such activities at permitted facilities, regardless of when they are undertaken, must be in accordance with the approved closure plan. In the case of interim status facilities, the activities must be in accordance with the subsequently approved closure plan.

The Agency received several comments in response to this Section. Many petitioners objected to the requirement that the removal of hazardous wastes and dismantling of equipment at interim status facilities be in accordance with the approved closure plan, arguing that it was contrary to the intent of the *ACCI* settlement agreement. They contended that this requirement either forced an owner or operator of an interim status facility to submit the plan for approval prior to these activities, or subjected him to *post hoc* judgments if the subsequently approved plan differed from the activities previously undertaken. Other commenters opposed allowing owners or operators of interim status facilities to remove hazardous wastes or dismantle equipment without prior

approval on the grounds that the provision could be subject to abuse, resulting in potential environmental threats. Others suggested that, at a minimum, the Agency should be notified of such actions so that an inspection can be scheduled.

The Agency does not agree that requiring the removal of hazardous wastes or decontamination of equipment to be in accordance with the approved closure plan is inconsistent with the provisions of the settlement agreement. The Agency agreed with the petitioners in the *ACCI* litigation that, under the previous rules challenged by the petitioners, the owner or operator is not precluded from removing wastes and decontaminating and/or dismantling equipment at any time without providing notice to EPA and, for interim status facilities, prior to submission of a closure plan. Moreover, the Agency agreed with petitioners that it is environmentally sound to remove hazardous wastes as quickly as possible to minimize threats. As a result, the Agency agreed to make this point explicit in the regulations and proposed §§ 264.112(e) and 265.112(e).

The Agency, however, never intended nor agreed that the Agency should be precluded from ensuring that such activities meet the closure standards. The Agency believes that any such activities, like any other hazardous waste management activities, must be in accordance with the regulatory requirements established under RCRA. The Agency does not believe that this requirement will result in an undue burden on owners or operators, even for interim status facilities without approved closure plans. As long as the removal of hazardous wastes and the dismantling or decontamination of equipment conducted prior to the submission of the closure plan are consistent with the closure requirements set forth in the Part 265 regulations, these activities would be approved in the subsequent closure plan and would not render unacceptable activities previously undertaken. Activities would only be rendered unacceptable if they are inconsistent with the closure regulations.

Moreover, the Agency believes that the types of activities that would be included in removing hazardous wastes or dismantling or decontaminating equipment can easily be handled in an environmentally responsible manner that does not give rise to the need for any second-guessing by a regulatory agency. In the infrequent situations where the adequacy of such an activity may be open to serious question, prior Agency review is appropriate and the

facility is encouraged to submit its closure plan for approval prior to the commencement of the activity to ensure that the activity satisfies the closure performance standard. In any event, the choice is left to the owner or operator whether to seek approval prior to conducting the activity or to proceed without Agency review and approval.

The Agency does not agree with those commenters who criticized the provision on the grounds that it may allow owners or operators undue discretion in conducting closure activities prior to notification. The language in §§ 264.112(e) and 265.112(e) explicitly limits the types of activities that can be undertaken prior to notification of the removal of hazardous wastes and decontamination/dismantling of equipment. It thus precludes the possibility that an owner or operator could conduct other types of activities that must be subject to EPA notice (e.g., cover installation).

The Agency considered whether to require explicitly in §§ 264.112(e) and 265.112(e) that documentation be prepared to support activities conducted prior to notification. The Agency decided that such a requirement is not necessary for a number of reasons. First, for hazardous wastes sent off-site, the owner or operator is required under § 262.40 to maintain copies of the manifests accompanying the shipments. Second, for wastes handled on-site, information on how it was managed must be included in the operating record as specified in §§ 264.73 and 265.73. Finally, because an independent registered professional engineer must certify that the entire facility has been closed in accordance with the approved closure plan, the owner or operator will need to provide the engineer with appropriate documentation demonstrating that all previous activities have been performed in accordance with the approved closure plan. Therefore, this section is promulgated as proposed.

i. *Time allowed for closure (§§ 264.113 and 265.113).* Sections 264.113(a) and 265.113(a) previously required the owner or operator to treat, remove from the site, or dispose of all hazardous wastes in accordance with the approved closure plan within 90 days after receiving the final volume of hazardous wastes. The Regional Administrator was authorized to extend the deadline if the owner or operator demonstrated, among other things, that there was a reasonable likelihood that a person other than the owner or operator would recommence operation of the facility, and the owner or operator had taken and would

continue to take all steps necessary to prevent threats to human health and the environment. Sections 264.113(b) and 265.113(b) required the owner or operator to complete closure activities within 180 days after receiving the final volume of wastes unless the Regional Administrator granted a longer period.

Petitioners in the *ACCI* litigation argued that the deadlines imposed by §§ 264.113 and 265.113 might preclude the *original* owner or operator from temporarily suspending operations as a result of fluctuations in the market or economic conditions. The Agency agreed with these concerns and proposed to amend §§ 264.113(a)(1)(ii)(B), 265.113(a)(1)(ii)(B), 264.113(b)(1)(ii)(B), and 265.113(b)(1)(ii)(B) to allow an owner or operator two one-year extensions to the deadlines for removing hazardous wastes and completing closure. These extensions may be granted if the owner or operator can demonstrate that the partial or final closure will take longer than 90 days (for removal of hazardous wastes) or 180 days (to complete closure) *or*: (1) the facility has the capacity to receive additional hazardous wastes; (2) there is a reasonable likelihood that the owner or operator or another person will recommence operation of the facility; (3) closure would be incompatible with continued operation of the facility; and (4) the necessary steps have been and will be taken to ensure protection of human health and the environment, including compliance with all applicable permit conditions or interim status requirements.

The proposed rule specified that requests for extensions must be made at least 30 days prior to the expiration of the 90-day period established in §§ 264.113(a) and 265.113(a) and the 180-day period established in §§ 264.113(b) and 265.113(b), or within 90 days of the effective date of the regulation, whichever is later. In addition, for interim status facilities the proposed rule stated that extensions must be granted in accordance with the procedures of § 265.112(d).

One commenter correctly noted that the proposed rule was inconsistent with the terms of the *ACCI* settlement. First, in § 265.113(a), the proposal inadvertently omitted the language in the agreement which specified that the 90-day period would be triggered by the approval of the closure plan, if that is later than the final receipt of hazardous wastes. Second, the 180-day period for completing closure was inadvertently shortened to 90 days in § 265.113(b). Third, requiring owners or operators to

follow the elaborate procedures in § 265.112(d) to extend the time for completion of interim status closure activities would be burdensome and contrary to the parties' intent. Fourth, the settlement did not specify the maximum length of the time extension; the proposed rule included a maximum time period of 2½ years for the completion of closure. (A number of commenters also contended that, to avoid imposing unnecessary burdens on owners or operators, no deadlines should be specified.)

The Agency is making a number of changes from the proposal that will result in a final rule that is consistent with the *ACCI* settlement language. First, the final rule includes the language inadvertently omitted from the proposed rule. The specified 90-day period in § 265.113(a) will begin only after the approval of the closure plan, if that is later than the final receipt of hazardous waste. This will ensure that a reasonable compliance period is provided after the closure requirements are fixed in an approved plan. Second, § 265.113(b) retains the previous period of 180 days to complete closure.

The Agency also agrees with some commenters that including the phrase "using the procedures of § 265.112(d)" in § 265.113 (a) and (b) would have required overly elaborate procedures for what is essentially a minor change to the closure activities. Under the provisions of § 270.42, an extension to the closure period is considered a minor modification for permitted facilities. EPA believes the requirements for interim status facilities should be consistent with the Part 264 standards. As a result, an extension of the closure period for interim status facilities is not subject to the detailed procedures of § 265.112(d).

The Agency also agrees that limiting the length of the closure period to a maximum of 2½ years may be inconsistent with the settlement provisions. Moreover, if the unit or facility has additional capacity to receive additional hazardous wastes and the owner or operator is in compliance with all applicable operating requirements, an owner or operator should not be restricted to the 2½ years for completing closure. Consistent with the discussion above for allowing variances to the expected date of closure for all types of hazardous waste management units, the Agency has a number of authorities already available to ensure that a unit or facility does not pose a threat to human health and the environment. Therefore, the final rule states that the Regional Administrator

may approve an extension to the 90- or 180-day periods subject to the conditions of §§ 264.113 and 265.113.

The Agency received a number of other comments applicable to schedules for closing the facility. One commenter noted that a request to extend the closure period should be an option in the permit application. This option, however, is already available to the owner or operator under § 270.32.

Another commenter expressed concern that the requirement to request an extension to the closure period within 90 days of the effective date of the final rule would not provide adequate time to make the required demonstration. In general, the Agency believes that owners and operators should be able to anticipate the likelihood that an extension will be necessary. Moreover, the effective date of today's promulgation is six months from today which should provide more than adequate notice to owners or operators. Because the effective date is six months after promulgation, the final rule drops the provision allowing the owner or operator to request an extension within 90 days of the effective date of the regulation if that is later than the deadlines for removing all hazardous wastes upon completing closure.

In the March 19, 1985 proposed rule, the Agency also proposed to require that closure be completed within 180 days after the final receipt of *hazardous* wastes rather than after the final receipt of wastes. The change makes §§ 264.113(b) and 265.113(b) consistent with §§ 264.113(a) and 265.113(a). Paragraph (a) requires that owners or operators treat, remove from the site, or dispose of on-site, all hazardous wastes in accordance with the approved closure plan within 90 days after receiving the final volume of hazardous wastes. Paragraph (b) requires that the owner or operator complete those activities within 180 days of receiving the final volume of wastes. The Agency was concerned that owners or operators might misinterpret paragraph (b) and delay compliance with the closure performance standards by ceasing to handle hazardous wastes but continuing to manage non-hazardous wastes. The change to §§ 264.113(b) and 265.113(b) is also consistent with the language in §§ 264.112(d)(2) and 265.112(d)(2). These latter sections explain that the date, when the owner or operator expects to begin closure, is no later than 30 days after the date on which a hazardous waste management unit receives the final volume of *hazardous* wastes (or under certain circumstances, one year

after receipt of the most recent volume of hazardous wastes). It is only logical that if the expected date to begin closure is after the receipt of the final volume of hazardous wastes, the date to complete closure would also be after the final receipt of hazardous waste.

One commenter challenged this proposed change, contending that this is inconsistent with the Congressional intent evidenced in the HSWA legislative history regarding closure of surface impoundments. The Agency disagrees with the commenter's reading of HSWA and its legislative history. HSWA contains no provisions addressing the question of whether disposal surface impoundments that cease to accept hazardous waste should be required to close or allowed to stay open to receive non-hazardous waste. HSWA merely addresses retrofitting requirements for surface impoundments by adding Section 3005(j) of RCRA, which requires interim status surface impoundments that receive, store or treat hazardous waste after November 1, 1988 to retrofit to install double liners and leachate collection systems. The legislative history contains a brief discussion that indicates that this provision does not require the closure of an impoundment that ceases to receive hazardous waste but continues to receive non-hazardous wastes, and that requiring such closure would not be proper if the management of the impoundment is protective of human health and the environment.

The legislative history of Section 3005(j) of RCRA merely evidences the fact that Section 3005(j) itself does not mandate closure of interim status surface impoundments that cease to receive hazardous waste. It leaves unimpaired EPA's pre-existing authority to establish by regulation appropriate closure requirements for interim status surface impoundments as necessary to protect human health and the environment. EPA's analysis, set forth below, concludes that the expeditious closure of hazardous waste disposal surface impoundments after they are no longer receiving hazardous waste for disposal would significantly improve protection of human health and the environment. Requiring such closure is thus consistent with Section 3005(j) of RCRA and its legislative history.

The hazardous waste regulations incorporate a two-part "prevention and care" system whose overall goal is to minimize the formation and migration of leachate to the adjacent subsurface soil, ground water, or surface water. The regulatory goal of minimizing the formation and migration of leachate is

achieved through the design and operating standards that require (1) the use of a liner that is designed and installed to prevent any migration of waste out of the unit to the adjacent subsurface soil or ground water or surface water throughout the active life of the unit; (2) the installation of leachate collection and removal systems and run-on controls for waste piles and landfills, and the removal or solidification of hazardous wastes and hazardous waste residues at closure for surface impoundments; and (3) the placement of a final cover (cap) placed on top to minimize the percolation of liquids into the unit. EPA is relying principally on the final cover (cap) rather than the bottom liner to provide post-closure protection of ground water.

While the regulations contain provisions for waivers from the liner and leachate collection and removal requirements, no such waivers were allowed for the closure provisions. In addition to providing ground-water protection, the final cover also: (a) Prevents the "bathtub" effect (i.e., filling with leachate and over-flowing); (b) protects surface water from run-off; and (c) discourages direct access to the hazardous waste.

EPA guidance calls for placing final covers at closure or for landfills, preferably, as filling of the cell ends. The purpose of the cover is to minimize infiltration of rain water and the subsequent formation and migration of leachate from the unit. Because liners are intended to perform during the active life of the unit and are not expected to provide long term protection, final covers play a particularly important role in long-term protection of human health and the environment. In addition, many older units are not lined, so early placement of the final cover may be the only way to reduce leachate generation from the unit.

While some units may have liners and leachate collection systems, the expected life of these systems is limited, leachate collection systems can become clogged, and all liners will eventually leak. Therefore, the cap is critical for the long term control of the unit. In addition, while new surface impoundments are required to have leak detection systems, most existing units do not and, therefore, it is often not known whether the unit is leaking until it is detected by ground-water monitoring. Therefore, the cap should be applied to these as soon as possible to minimize infiltration.

In light of these considerations, the final rule retains the proposed requirements to require that closure be

completed within 180 days of the final receipt of hazardous waste.

In the proposed rule, the Agency requested comments on the desirability of defining a "reasonable likelihood" for purposes of §§ 264.113 (a) and (b) and 265.113 (a) and (b). One commenter was concerned that the proposed language allowed too much discretion on the part of the permitting agency and the permittee, and that a more objective standard, such as a purchase agreement, should be applied. Another commenter stated that the Agency should wait to develop the "reasonable likelihood" standard until it has accumulated experience with the provision. In the absence of additional information, the Agency is not establishing standards for determining what constitutes a "reasonable likelihood."

j. *Disposal or decontamination of equipment, structures, and soils* (§§ 264.114 and 265.114). Sections 264.114 and 265.114 previously required owners and operators to dispose of or decontaminate all facility equipment and structures. The proposed rule required owners or operators to remove all contaminated soils as part of partial and final closure, as needed.

The comments made concerning these proposed changes were similar to those made on §§ 264.112(b) and 265.112(b). One commenter was concerned that the requirements could be interpreted to require that if it was not possible to remove all contaminated soil from a tank facility, the tank would have to be demolished and the facility converted into a landfill. The Agency believes that at most tank facilities it should be possible to remove all the contamination. In those cases where soil contamination is so extensive as to preclude its removal, stringent closure requirements would indeed be appropriate. HSWA clearly contemplates that contamination remaining at closure must be corrected in a manner that protects human health and the environment (e.g., Section 206 of HSWA, 3004(u) of RCRA). Therefore, the Agency is promulgating §§ 264.114 and 265.114 substantially as proposed. The final rule also clarifies that if the owner or operator removes any hazardous wastes or hazardous constituents during partial or final closure, he may become a generator subject to additional regulations.

k. *Certification of closure* (§§ 264.115 and 265.115). Sections 264.115 and 265.115 previously provided that when closure is completed, an owner or operator must submit certifications from himself and from an independent registered professional engineer that the

facility has been closed in accordance with the specifications in the approved closure plan. Petitioners in the ACCI litigation challenged the need for an independent engineer on the grounds that an in-house engineer would be in the best position to observe closure activities. As agreed to in the ACCI settlement, the Agency proposed to drop the requirement that the registered professional engineer be independent.

Some commenters supported the proposal to drop the "independent" requirement while others favored retaining the existing rule. The Agency has reconsidered the issue and is dropping the proposed rule to allow an in-house registered professional engineer to certify closure. Because certification of final closure is the final step in the closure process and triggers the release of the owner or operator from financial responsibility requirements for closure and the third-party liability coverage requirements of §§ 264.147 and 265.147, the Agency believes that the certification should be made by a person who is least subject to conscious or subconscious pressures to certify to the adequacy of a closure that in fact is not in accordance with the approved closure plan. The Agency's position in this regard is consistent with other types of certification programs which require certifications to be made by independent parties. For example, the Securities and Exchange Commission requires that all publicly-traded companies provide independent audits of financial information. Similarly, grants issued under the Clean Water Act must be accompanied by independent audits.

The Agency also proposed a requirement that owners and operators certify partial closures for the closure of each hazardous waste surface impoundment, waste pile, land treatment, and landfill unit; certification of incinerators, tanks, and container storage units could be submitted any time prior to, or at final closure. Deadlines were also proposed for submitting certifications—45 days after the completion of each partial closure, if applicable, and 30 days after final closure. Documentation supporting the certification must be furnished to the Regional Administrator upon request.

The Agency received several comments on the proposed rule to certify, as they are performed, partial closures of all units except tanks, incinerators, and container storage. Most commenters agreed that partial closures should be certified. Some supported the proposal that certification of tanks, containers, and incinerators

should not be required until final closure on the grounds that this is consistent with the provisions of §§ 264.112(e) and 265.112(e), which allows an owner or operator to remove wastes or decontaminate equipment without prior notification. Moreover, unlike land disposal units, it should be easy to certify these types of units at final closure. Others, however, argued that all partial closures must be certified as soon as they are performed to ensure protection of human health and the environment. The Agency does not consider it necessary to certify these types of units as they are closed and, consistent with the provisions of §§ 264.112(d) and (e) and 265.112(d) and (e), the final rule does not require certification of tanks, container storage, and incinerators until final closure.

A number of commenters disagreed with the proposed deadlines for submitting certifications, arguing that no distinctions should be made between partial and final closure, and that 45 days may be too short. The Agency agrees and is amending the final rule to require certifications for partial and final closures to be submitted within 60 days of the completion of partial or final closure, as applicable.

One commenter also was concerned about the lack of a deadline for maintaining documentation supporting the independent registered professional engineer's certification. The Agency agrees and is requiring that documentation be furnished upon request to the Regional Administrator until the owner or operator is released from financial assurance requirements under §§ 264.143(i) and 265.143(h).

In the proposed rule, the Agency requested comments on three issues relating to closure certification: (1) should the regulations specify the qualifications of engineers who may certify closure; (2) what types of supporting documentation should be required for certification and should they be submitted to the Agency; and (3) should the Regional Administrator formally approve the certification.

A number of comments were submitted on these issues. Most commenters opposed specifying the type of engineer that would be qualified to certify closure, although one commenter suggested that the language in the certification should state explicitly that the engineer has the appropriate qualifications to certify closure. The Agency generally agrees with these commenters and is not specifying qualifications for engineers.

In response to the Agency's request for comments on the appropriateness of

requiring that supporting documentation be submitted with the closure certification, one commenter argued that the submission of documentation was unnecessary, while another was concerned that unless the documentation was submitted, it would not be available for public review.

The Agency recognizes the concern of the commenter for ensuring that the documentation be readily available to the public for review. However, rather than requiring that all documentation be submitted, the Regional Administrator may request submission of the documentation if there is a request from the public for review or if the Regional Administrator determines that there is a need for the Agency to review it. Therefore, all interested parties will have access to documentation upon request. In addition, the Regional Administrator may request that documentation be submitted at any other time under the provisions of §§ 264.74 and 265.74.

The Agency received one comment supporting Agency approval of the certification. The Agency has considered this issue further and, in light of the burdens and costs associated with developing criteria and procedures for formally approving the certification, the Agency is not promulgating such procedures at this time. However, the Regional Administrator has the discretion under the authority of §§ 264.143(i) and 265.143(h) not to release the owner or operator from financial responsibility requirements if he has reason to believe that partial or final closure has not been in accordance with the approved closure plan.

1. *Survey plat (§§ 264.116 and 265.116).* Sections 264.119 and 265.119 required the owner or operator of a disposal facility to submit to the local zoning authority, or the authority with jurisdiction over local land use, within 90 days after closure is completed, a survey plat indicating the location and dimensions of landfill cells or other disposal areas with respect to permanently surveyed benchmarks. Because the survey plat must note the location and dimensions of each disposal area, it must be prepared prior to the completion of closure of that unit. Therefore, the Agency proposed to require that the survey plat be submitted to the appropriate local land use authority no later than the certification of closure of each hazardous waste disposal unit. The Agency also added a requirement that the plat must be prepared and certified by a professional land surveyor, to ensure that the surveyor is licensed by a State and can



be held legally responsible for the survey work.

One commenter questioned the applicability of the survey plat requirement to injection wells. Another challenged the need to submit a plat after each partial closure, arguing that as long as the plat is submitted prior to final closure, adequate protection will be provided. Another commenter was concerned that the deadline for filing the plat was inadequate.

The Agency agrees that the survey plat requirement is not applicable to injection wells. Injection wells are not subject to the requirements of Subparts G and H and therefore are not required to comply with the survey plat provisions (see §§ 264.1(d) and 265.430(a)).

The Agency disagrees with the argument that the plat need not be filed until final closure. First, the Agency is concerned that the local land authority should have information on closed units in a timely fashion in the event that a closed portion of a facility is sold prior to final closure. Second, since the plat must be prepared prior to the completion of the partial closure, the Agency does not consider it burdensome to require it to be submitted at that time. Therefore, the Agency is promulgating §§ 264.116 and 265.116 to require that the survey plat be filed after closure of each hazardous waste disposal unit.

The Agency agrees that the proposed 45-day deadline may not always be adequate. The proposed regulation used the certification date as the deadline for submission of the survey plat. Since the certification date has been extended from 45 days to 60 days, the deadline for filing the survey plat is now within 60 days after completion of partial or final closure. No changes were required to the proposed language of §§ 264.116 and 265.116.

*m. Post-closure care and use of property (§§ 264.117 and 265.117).* Sections 264.117(a) and 265.117(a) previously required post-closure care to continue for 30 years after the date of completing closure. In addition, the regulation allowed requests to reduce or extend the period based on cause to be submitted during the post-closure care period. The previous regulations did not specify whether the period began with closure of a single unit or of the entire facility. Because of the importance of beginning post-closure monitoring and maintenance activities as soon as a hazardous waste management unit has been closed, the Agency proposed to require that the post-closure care period for each hazardous waste management unit subject to post-closure care

requirements begin after the closure of each unit.

In determining when the 30-year post-closure care period should begin, the Agency proposed that the 30-year care period apply to each unit (i.e., partial closure) rather than to the entire facility to reduce the burden on an owner or operator who partially closes units prior to closure. The Regional Administrator, however, still retained the authority under the proposed §§ 264.117 and 265.117 to extend the length of the post-closure care period as necessary to protect human health and the environment. Moreover, if the Regional Administrator extended the post-closure care period for any unit during the active life of the facility (i.e., prior to receipt of certification of final closure), the post-closure cost estimate and level of financial assurance must also be adjusted.

The Agency did not receive many comments on the proposal to trigger the beginning of the 30-year post-closure care period with partial closure. Two commenters were concerned that it would be difficult to correlate monitoring results with specific units and, as a result, the 30-year period should be triggered at final closure of the facility. The Agency agrees that at some facilities it may be difficult or impossible to differentiate monitoring results for different units. Therefore, unless the owner or operator can demonstrate that separate monitoring systems are established for each unit, the Regional Administrator may decide to extend the post-closure period for that unit to be consistent with the post-closure care period for the remainder of the units. In developing the final rule, the Agency reconsidered the provisions for requesting reductions or extensions of the post-closure period. Although the Agency believes that in many cases, sufficient data may not be available prior to the beginning of the post-closure care period to support a petition to reduce or extend the period, the Agency does not wish to impose unnecessary requirements. Therefore, §§ 264.117(a)(2), 265.117(a)(2) and 264.118(g) of the final rule allow the Regional Administrator to reduce or extend the post-closure care period based on cause at any time.

*n. Post-closure plans (§§ 264.118, and 265.118).* Sections 264.118(a) and 265.118(a) required owners or operators of hazardous waste disposal facilities to have post-closure plans. In addition, under §§ 264.228(c) and 264.258(c), storage and treatment surface impoundments and waste piles that do not meet the liner design standards are required to prepare contingent closure

and post-closure plans in the event that they are closed as landfill facilities.

Because the Agency was concerned that interim status impoundments and waste piles and permitted impoundments and waste piles that meet the design standard may still be required to close as landfills, the Agency proposed in §§ 264.118(b) and 265.118(a) that *these* facilities must prepare post-closure plans if they become subject to post-closure care.

One commenter noted that for interim status surface impoundments and waste piles that do not meet the liner design standard, owners or operators should be able to anticipate prior to the time of closure that they will be unable to remove all contaminated soils, and will be required to close their facilities as landfills. Under the proposed rule, such owners or operators would not be required to prepare revised closure plans or post-closure plans until the time of closure, thus delaying the closure process. This commenter suggested that the regulations require owners and operators of interim status surface impoundments and waste piles that do not meet the design standard of §§ 264.228 and 264.258 to prepare contingent closure and post-closure plans. This would be consistent with the requirements of §§ 264.228 and 264.258 applicable to permitted facilities.

The Agency agrees that it may not be possible to remove *all* contamination at interim status surface impoundments and waste piles not designed in accordance with the liner design standards of §§ 264.228 or 264.258. Requiring that such facilities revise closure plans and prepare post-closure plans would ensure that the owners or operators have adequately planned for closure of the facility as a landfill.

However, owners and operators of interim status facilities with surface impoundments or waste piles were required to make certain certifications and submissions as specified in Section 213 of the Hazardous and Solid Waste Amendments (HSWA, the "Loss of Interim Status" provision), or the facility's interim status would be terminated. Approximately two-thirds of such facilities failed to meet those requirements, and thus had their interim status terminated. Consequently, those owners and operators were required to submit their closure plans by November 23, 1985 and begin closure. The Agency expects that most of the remaining third of these land-based facilities will continue to operate and become subject to the Part 264 standards through the permitting process.

Today's final rule specifies in §§ 265.118(a) and 264.118(a) that an owner or operator of an interim status facility with a surface impoundment or waste pile or a permitted facility with a surface impoundment or waste pile which is *not* required to prepare a contingent plan must submit a post-closure plan to the Regional Administrator for approval within 90 days of the determination that the unit must be closed as a landfill. This is consistent with the proposed rule. In addition, these facilities must submit revised closure plans in accordance with the requirements of §§ 264.112(c) and 265.112(c).

The Agency is also now clarifying in §§ 264.118(a) and 265.118(d) that owners or operators of permitted facilities must comply with all Parts 124 and 270 procedures applicable to modifying the conditions of their permit. Owners or operators of interim status facilities must submit their post-closure plans in accordance with the provisions of § 265.118(d).

The Agency also has clarified in the final rule in §§ 264.118(b) and 265.118(c) that the post-closure plan must explicitly address the post-closure care activities and the frequency of these activities applicable to each disposal unit.

*b. Post-closure notices (§§ 264.119 and 265.119).* Sections 264.119 and 265.119 previously required the owner or operator of a facility subject to post-closure care to submit to the local zoning authority, or the authority with jurisdiction over local land use, and to the Regional Administrator a record of the wastes disposed of within each cell or area of a land disposal facility within 90 days after final closure. Sections 264.120 and 265.120 required that a notation be filed on the deed to the property indicating its use as a disposal facility and indicating that the plat and record of wastes had been filed with the appropriate local land use authority.

The Agency proposed to (1) extend the requirements to partial closure activities; and (2) require owners or operators to request permission from the Regional Administrator if they wish to remove hazardous wastes during the post-closure care period and to remove the notice from the deed.

The Agency considers the deed notation to be an important means of ensuring that prospective and subsequent owners of the property are informed of the presence of hazardous wastes, the existence of federal restrictions on land use, and the availability of the survey plat and waste record from the local land use authority. Therefore, the Agency proposed to require that no later than 60 days after

the certification of closure of each hazardous waste disposal unit, the owner or operator record the notation on the deed and submit to the Regional Administrator both the certification stating that the notation has been recorded and a copy of the recorded document. Consistent with this requirement, the Agency proposed that the record of waste also be filed with the local land authority and the Regional Administrator within 60 days after closure of each hazardous waste disposal unit.

A number of comments were received on the deadlines for submitting the record of waste to the local land authority and for filing the notices in the deed. Suggestions included: submitting notices and the record of wastes to the local land authority at final closure only; filing the notice in the deed after the first partial closure and verifying its accuracy at final closure; and filing a notice in the deed prior to transfer of ownership. One commenter expressed concern, that, in many jurisdictions, filing a notice in the deed after each partial closure may be especially burdensome because of the need to transact a dummy "sale" as a condition of filing a deed notation.

The Agency disagrees that submitting the record of hazardous waste to the local land authority and Regional Administrator within 60 days after each partial closure of a hazardous waste disposal unit would be burdensome. Under §§ 264.73 and 265.73, an owner or operator must record, as it becomes available, and maintain in the facility operating record information on the types and quantities of hazardous wastes handled at the facility and the location of hazardous waste within each disposal area. Therefore, the owner or operator would simply be required to submit a copy of readily available records to the local land authority and the Regional Administrator. In light of these considerations, the final rule retains the requirement that within 60 days after the certification of closure of each hazardous waste disposal unit 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 that disposal cell or unit.

The Agency agrees with those commenters who argued that filing a notice in the deed after closure of each hazardous waste disposal unit could impose significant burdens, especially if "dummy" sales were required, and would not be necessary to ensure that future purchasers of the land were

aware of the land's prior uses. Filing a notice after the first partial closure of a hazardous waste disposal unit and verification of the accuracy of the notice after closure of the last disposal unit should adequately alert all future owners of the land's prior use. Therefore §§ 264.119(b) and 265.119(b) are revised to require that the notice in the deed, as well as the certification to Regional Administrator that the notice has been filed, be filed within 60 days after certification of closure of the first hazardous waste disposal unit. Sixty days after closure of the last disposal unit, the deed and notice to the local land authority must be amended, as necessary. It should be noted that these post-closure notice requirements do not affect the partial closure certification requirements of §§ 264.115 and 265.115; all partial closures of hazardous waste disposal units must be certified as they are performed.

Section 264.120(b) previously provided that if the owner or operator of a hazardous waste facility subsequently removed all hazardous wastes and waste residues, the liner (if any), and all contaminated underlying and surrounding soils, he could either remove the deed notation required by § 264.120(a), or add a notation indicating that the hazardous wastes have been removed. No similar provisions were allowed for interim status facilities.

The Agency proposed in § 264.119(c) that an owner or operator of a permitted facility must request a modification to the post-closure permit in accordance with Part 270 requirements prior to removing hazardous wastes. For interim status facilities, the proposed language of § 265.119(c) specified that if an owner or operator wishes to remove hazardous wastes, he must request the approval of the Regional Administrator prior to the removal of the hazardous wastes to amend the approved post-closure plan. In addition, the owner or operator must demonstrate compliance with the criteria in §§ 264.117(c) and 265.117(c) for post-closure use of property. Moreover, because the owner or operator would be conducting hazardous waste management activities, he must comply with all applicable generator requirements and with all post-closure permit conditions, if applicable.

One commenter suggested that a subsequent owner or operator who wishes to remove hazardous wastes should notify the previous owner or operator as well as the generators of the wastes in order to alert them of activities of the facility which could subsequently result in future Superfund

liabilities. The Agency has refrained from adopting this approach because it is not relevant to the standards in Section 3004 of RCRA of protecting human health and the environment.

Finally, the proposed rule required the owner or operator to seek Regional Administrator approval before deleting the deed notation or placing a new notation in the deed regarding removal of the wastes. One commenter argued that this requirement could delay future sales of TSDFs. Because the Agency wishes to ensure that all hazardous wastes have been adequately removed prior to removal of the notice to the deed, the Agency is promulgating the rule as proposed.

In the preamble to the proposed rule, the Agency requested comments on notifying parties with rights-of-way on property used to dispose of hazardous wastes of its prior use. One commenter suggested that TSDF owners or operators should be responsible for notifying such parties, including parties with subsurface rights. While the Agency agrees that it is important to ensure that all interested parties are aware of the prior uses of land used to dispose of hazardous wastes, it does not want to impose unnecessary burdens on owners or operators. The Agency therefore investigated whether state laws currently requires notice to the holders of rights-of-way, easements, or subsurface rights of changes to the land by the owner that could affect their interests or safety.

It appears that in most States there is no duty to inform, but there is a duty not to take actions that render the exercise of the right unreasonable or burdensome. Private rules of property and tort, however, will vary concerning notice. In addition, it is likely that the facility will be subject to security measures as specified by §§ 264.117(b) and §§ 265.117(b) and that these security measures will provide notice to parties who have rights-of-way on land used to dispose of hazardous wastes or subsurface rights on the land. Therefore, the Agency is continuing to analyze options for ensuring that all parties are provided adequate notice of hazardous waste disposal activities. This does not, however, relieve the owner or operator of potential liabilities with respect to such parties.

*p. Certification of completion of post-closure care (§§ 264.120 and 265.120).* The previous regulations did not require that the owner or operator certify that post-closure care activities have been conducted in accordance with the approved post-closure plan. Because of the importance of ensuring that post-closure care has been conducted

properly prior to releasing the owner or operator from these obligations (including post-closure care financial responsibility), the Agency proposed that an owner or operator submit to the Regional Administrator within 30 days after completing the established post-closure care period for each disposal unit, a certification signed by him stating that all post-closure care activities have been conducted in accordance with the approved post-closure plan. The Agency also requested comments on the desirability of requiring post-closure certifications on an annual or periodic basis (e.g., every five years) rather than only at the end of the 30-year post-closure care period.

Some commenters questioned the need for any post-closure care certification, arguing that the information provided would duplicate data already available to the Agency (e.g., monitoring results Agency inspection reports). Most of the commenters focused on the appropriate frequency of these certifications. Suggestions included: once at the end of the post-closure care period associated with each unit; every five years; and annually. One commenter requested that an extension to the 30-day period for submitting certifications be provided. Finally, it was suggested that the certification be performed by an independent registered professional engineer consistent with the closure certification.

The Agency remains convinced that certification of post-closure care is necessary both to ensure that the post-closure care activities are conducted in accordance with the approved plan, and to trigger the release of the owner or operator from financial assurance obligations under §§ 264.145(i) and 265.145(h). The Agency agrees with some commenters that annual or periodic certifications may not be necessary and thus is requiring that the certification be submitted at the end of the post-closure care period of each unit. The Agency is also extending the deadline for submitting the certification to 60 days after the completion of the established post-closure care period for each unit. In developing the final rule, the Agency made two other changes to the proposed rule. First, the Agency added a requirement that the certification be submitted by registered mail, to ensure that a dated record of the submission is available. This requirement is consistent with the closure certification which must be submitted by registered mail. Second, the Agency is convinced that an independent registered professional engineer should also certify the

completion of the post-closure care period. This requirement would parallel the closure certification requirement in §§ 264.115 and 265.115. Therefore, §§ 264.120 and 265.120 require that an owner or operator submit a certification prepared by himself and an independent professional engineer stating that the post-closure care activities have been conducted in accordance with the approved post-closure plan.

## 2. Financial Assurance Requirements (Subpart H)

*a. Cost estimates for closure and post-closure care (§§ 264.142(a), 264.144(a), 265.142(a) and 265.144(a)).* The previous provisions in §§ 264.142(a), 264.144(a), 265.142(a) and 265.144(a) required owners or operators to prepare written estimates of the costs of closure and post-closure care. The previous regulations did not specify the level of detail and did not indicate whether cost estimates should be based on the cost to the owner or operator of supplying his own labor and equipment (first-party costs) or the cost of hiring contractor labor and renting equipment (third-party costs). The previous regulations also did not address whether credit for salvage value from hazardous waste equipment and the like would be credited toward the cost estimate.

In developing the final rules, the Agency has been made aware of confusion over the level of detail required in the cost estimates. The previous regulations stated that the owner or operator must prepare a written cost estimate but did not specify the level of detail. As a result, some have argued that a bottom line estimate should be sufficient. Because the cost estimates are based directly upon the closure and post-closure plans and serve as the basis for financial assurance, the cost estimates must contain sufficient detail to allow them to be evaluated. The Agency expects the detailed cost estimates to support the detailed activities described in the closure and post-closure plans. The Agency is today amending §§ 264.142(a), 265.142(a), 264.144(a), and 265.144(a) to clarify that a detailed cost estimate is required.

In the March 19, 1985 proposed rule, the Agency specified that closure and post-closure cost estimates be based on the costs to the owner or operator of hiring a third party to perform closure or post-closure care activities. The Agency reasoned that use of third-party costs would ensure that if an owner or operator failed to conduct closure or post-closure care, adequate funds would be available to hire a third party to do so. The Agency also proposed to specify explicitly that salvage value may not be

incorporated into the closure cost estimate.

A number of commenters supported the Agency's proposal to require third-party costs. Other commenters opposed the proposed change on three separate grounds: use of third-party costs will increase the cost estimates considerably; cost estimates generated by a third party will not be as accurate as estimates prepared by the owner or operator; and third-party costs will be difficult to generate due to the limited number of contractors available. It also was argued that parties using the financial test should not be required to use third-party costs.

The Agency firmly believes that the cost estimates must be based on third-party costs to ensure that adequate funds are available to cover the costs of closure and post-closure care in the event that the owner or operator fails to cover the costs. The Agency recognizes, however, that in some cases, using third-party costs could increase the size of the estimate. This is especially likely with respect to the costs of on-site vs. off-site disposal of hazardous wastes. Because the objective is to ensure that sufficient funds are available to cover the costs of closure if the owner or operator fails to do so, the Agency will allow the cost estimate to incorporate the costs of on-site disposal of hazardous wastes by a third party if the owner or operator can demonstrate that on-site capacity will always be available over the life of the facility. This will minimize the additional costs of a third-party requirement. Aside from these on-site vs. off-site disposal costs, basing the cost estimate on first or third-party costs will not make much difference for land disposal units. The cost estimates will be similar because many of the activities required for closure will be done by a third party whether or not the cost estimate is first or third-party based. For example, firms may not have the expertise to place a final cover on a landfill themselves or they may not wish to do so because the company selling the materials for the cover normally will not guarantee its impermeability unless it (or its authorized representative) installs it. Certification costs will also be similar whether the cost estimate is based on first or third-party costs as EPA requires that an independent registered professional engineer must certify closure.

The Agency does not agree with commenters who argued that contractor estimates will not be as accurate as estimates made by the owner or operator or that it will be difficult to develop third-party cost estimates

because of a lack of contractors. The proposed rule did not require that the cost estimate be prepared by a contractor, but rather required that the cost estimate incorporate the costs incurred if a contractor performed the work. Therefore, the owner or operator may develop the cost estimate using costs estimating manuals or personal experience (e.g., prices charged for off-site management of hazardous wastes). Furthermore, the Agency has found, in developing cost estimates for closure and post-closure care, that standard cost estimating manuals as well as information from contractors are readily available to develop third-party estimates. The Agency believes, therefore, that cost estimates based on third-party costs will be *more* accurate as general information exists on contractor costs which does not exist for first-party costs.

The Agency also remains convinced that eligibility to use the financial test as demonstration of financial assurance should be based on third-party costs. First, the third-party cost estimates are likely to be more accurate than those based on first-party costs. Second, the financial test is intended to ensure that an owner or operator who passes the test has the financial capability to establish one of the alternative forms of assurance should he later fail the test. The criteria of the test that are dependent on the size of the cost estimates are intended to provide an adequate margin of safety so that the alternative mechanisms can be established before any potential insolvency occurs. Because the other forms of financial assurance will be based on third-party costs, the multiples must also be based on third-party costs.

In light of these considerations, the Agency is promulgating a third-party cost estimate requirement in today's final rule. The final rule specifies explicitly that the cost estimate may incorporate the costs of on-site disposal of hazardous wastes by a third party if the owner or operator can demonstrate that capacity will always be available over the life of the facility.

The final rule adds a definition of a third party to Subpart H. For purposes of Subpart H, §§ 264.142(a)(2), 264.144(a)(1), 265.142(a)(2) and 265.144(a)(1) state that a third party is a party who is neither a parent nor a subsidiary of the owner or operator.

On the issue of salvage value, the Agency proposed to disallow salvage value as a credit when calculating cost estimates on the grounds that the Agency cannot be assured that the hazardous wastes will be saleable or

that a third party will take them at no charge at closure. One commenter supported the proposal while one argued that salvage value should be allowed if brokers or dealers for used equipment can be identified. The Agency still is convinced that allowing salvage value to be credited towards the cost estimate is inconsistent with the goal of ensuring that adequate funds are available in the event that the owner or operator fails to cover the costs. As a result, in the final rule, §§ 264.142(a)(3) and 265.142(a)(3) prohibit the incorporation of salvage value in the closure cost estimates.

In addition to disallowing a credit for salvage value for hazardous wastes, the Agency also is specifying explicitly in the final rule that an owner or operator cannot assume that at closure a third party will take hazardous wastes at no charge. Consistent with the arguments above, the Agency cannot be assured that if an owner or operator fails to close the facility, a third-party would take the hazardous waste at no charge. To avoid potential ambiguities in the regulatory language, the Agency is explicitly stating in §§ 264.142(a)(4) and 265.142(a)(4) that an owner or operator may not incorporate in the closure cost estimate a zero cost for handling hazardous wastes with potential value.

b. *Anniversary date for updating cost estimates for inflation* (§§ 264.142(b), 264.144(b), 265.142(b) and 265.144(b)). The previous regulations required owners or operators to update their closure and post-closure cost estimates for inflation within 30 days after the anniversary of the date that the first cost estimates were prepared. To ensure that the financial assurance instrument accounts for the most recent cost estimate (including updates to inflation), the Agency proposed to require owners or operators to revise their cost estimates within 60 days *prior* to the anniversary date of the establishment of their financial assurance instrument. For firms using the financial test, the cost estimate should be updated within 30 days of the end of the firm's fiscal year and before submission of updated information to the Regional Administrator as specified in §§ 264.143(f)(3) and 265.143(e)(3).

Most commenters supported the proposal to update the cost estimates prior to the anniversary date of the establishment of the financial instrument and, as a result, the Agency is promulgating the rule as proposed.

The Agency also proposed in the March 19, 1985 promulgation to allow owners or operators the option of recalculating the cost estimates based on current costs as an alternative to

using the Implicit Price Deflator for GNP published in the *Survey of Current Business*. In addition, the Agency proposed to require that owners or operators use the most recently published annual Implicit Price Deflator in order to reflect the most recent inflation.

One commenter suggested that owners or operators be *required* to recalculate annually the cost estimate based on current costs on the grounds that the Implicit Price Deflator will not account for increases in costs due to reasons other than inflation (e.g., increases in costs of landfilling). While the Agency agrees that requiring owners or operators to recalculate the cost estimate annually based on current costs may result in the most accurate estimate, the Agency recognizes that this could impose a significant burden on owners or operators and would not always be necessary. Therefore, the Agency is promulgating the rule as proposed.

*c. Revisions to the cost estimates (§§ 264.142(c), 264.144(c), 265.142(c) and 265.144(c)).* The previous regulations required the owner or operator to revise the closure and post-closure cost estimates during the operating life of the facility whenever a change in the plans increases the costs of closure or post-closure care. No deadlines were imposed for revising the estimates.

The Agency proposed to require that owners or operators with approved plans adjust their cost estimates within 30 days after the Regional Administrator has approved the modification if the change increases the costs of closure or post-closure care. For interim status facilities without approved closure or post-closure plans, the adjustment must be made within 30 days of the change in the plans if the change increases the cost estimates. Section 264.142(c) of the proposed regulations inadvertently required that the revision be made if the change in the closure plan *affects* the cost of closure. The final rule has been revised to correct this inconsistency. It now reads as it did originally, that the revision is required if the change in the closure plan *increases* the cost of closure.

*d. Post-closure cost estimates (§§ 264.144(c) and 265.144(c)).* Sections 264.144(c) and 265.144(c) previously required the owner or operator to revise the post-closure cost estimates during the operating life of the facility whenever a change in the post-closure plan increased the cost of post-closure care. The previous rules did not define operating life.

The Agency intended that post-closure financial assurance be adjusted

as necessary until the facility was closed. Consistent with the new definition of active life, the Agency proposed to require that the post-closure cost estimate be revised as necessary during the active life of the facility. The Agency received no comments to this proposed change and is promulgating §§ 264.144(c) and 265.144(c) as proposed.

*e. Trust fund pay-in period (§§ 264.143(a)(3) and 265.143(a)(3)).* The existing language of § 264.143(a)(3) requires the payments to the trust fund to be made over the term of the initial permit or over the remaining life of the facility, whichever is shorter. For interim status facilities, the pay-in period is 20 years or the remaining operating life of the facility, whichever is shorter. Although the trust fund may cover a number of units with different operating lives, the current regulation ties the pay-in period to the life of the facility rather than to particular units. In the March 19, 1985 proposal, the Agency requested comments on approaches to handling the trust fund pay-in period for multiple process facilities.

Some commenters argued that the pay-in period should be based on the shortest operating life of any unit at a multiple process facility; others suggested retaining the existing requirements. One commenter recommended that, within three years, the trust fund should contain enough funds to close the unit likely to incur the highest closure costs.

As discussed in the preamble to the January 12, 1981 Subpart H regulations, the Agency allowed a 20-year pay-in period to minimize the potential adverse economic impacts on smaller firms most likely to be using trust funds (See 46 FR 2823). The Agency is concerned that if the trust fund pay-in period is based on the shortest operating life of a unit of the facility, owners or operators intending to partially close facilities in the near future would face very high costs. For example, if an owner or operator closed a landfill cell after one year rather than at the end of the facility's operating life, he would be required to fully fund the trust fund much earlier than originally intended. Moreover, the Agency is concerned that such an accelerated pay-in period could discourage owners or operators from partially closing their facilities. Therefore, the Agency intends to examine further such questions as the cost effects and enforcement implications of changing the trust fund pay-in period for such facilities before proposing any changes to the current requirements.

*f. Reimbursement for closure and post-closure expenditures from trust fund and insurance (§§ 264.143(a)(10),*

*264.143(e)(5), 264.145(a)(11), 264.145(e)(5), 265.143(a)(10), 265.143(d)(5), 265.145(a)(11) and 265.145(d)(5)).* The previous closure/post-closure trust fund and insurance provisions allowed an owner or operator, or any other person authorized to conduct closure or post-closure care, to request reimbursement for expenditures from the trust fund or insurance policy by submitting itemized bills to the Regional Administrator. Within 60 days, the Regional Administrator would instruct the trustee or insurer to make reimbursements, if he determined that the activities were in accordance with the approved plans or were otherwise justified. The Regional Administrator could withhold reimbursements if he determined that the total costs of closure would exceed the value of the trust or insurance policy.

In response to a concern from the ACCI petitioners that a decision to withhold reimbursements should be supported by a written explanation that can serve as a record for review, the proposed rule required the Regional Administrator to provide a detailed written statement of reasons to the owner or operator if he does not instruct the trustee or insurer to make requested reimbursements. The proposed rule also specified provisions for handling reimbursements for partial closure activities. Under the proposed rule, an owner or operator could be reimbursed for partial closure activities if the partial closure reduced the maximum extent of operation of the facility and the Regional Administrator found that the activities had been in accordance with the approved plan or were otherwise justified.

Commenters generally supported the proposal to require a detailed written statement of reasons why the Regional Administrator was withholding reimbursement. A few commenters were concerned that the Regional Administrator should not be allowed to withhold reimbursements for minor violations of the closure or post-closure plan and/or permit requirements. Other commenters argued that the Regional Administrator should not be allowed to withhold more than 20 percent of the funds, and that reimbursements should be automatic unless, within a specified time, the Regional Administrator provides a statement of reasons for refusing the reimbursements.

It was also suggested that reimbursements for partial closures should be allowed if there are adequate funds remaining in the trust fund or insurance policy to cover the maximum

costs of closing the facility over its remaining life.

The Agency agrees with commenters that the regulations should not preclude reimbursements for minor paperwork violations. The Agency believes, however, that the proposed regulatory language provides the necessary flexibility to the Regional Administrator by allowing reimbursements if the activities are in accordance with the approved plan, or if the activities are otherwise justified. Therefore, the final rule specifies that an owner or operator is eligible for reimbursements if the activities have been performed in accordance with the approved plans or are otherwise justified. As discussed below, reimbursements will be made only if sufficient funds are remaining in the trust fund or insurance policy.

The Agency does not agree that the Regional Administrator should be allowed to withhold only up to 20 percent of the value of the trust fund or insurance policy. As discussed in the preamble to the April 7, 1982 rules, (See 47 FR 15040), the Agency is concerned that in some instances where the cost estimate is found to be seriously inadequate, more than 20 percent should be held in reserve. The Agency also disagrees with the suggestion that reimbursements should be made automatically if the Regional Administrator does not act upon the request within a specified length of time. Because of the complexity of certain closure activities and the importance of ensuring that the activities protect human health and the environment, the Agency considers it inappropriate to establish such deadlines. Therefore, the Agency is promulgating the rule substantially as proposed.

The Agency is making a clarifying change to the language in the final rule. The proposed rule allowed reimbursements if partial closure reduced the maximum extent of operation. In developing the final rule for reimbursement provisions, the Agency considered it more appropriate to examine the amount of funds remaining in the fund than the maximum extent of operation. As a result, the final rule specifies that an owner or operator may request reimbursements only if sufficient funds, exclusive of future inflation adjustments, are remaining in the trust fund or insurance policy to cover the maximum costs of closing the facility at any time over its remaining life.

g. *Final administrative order required* (§§ 264.143(b)(4)(ii), 264.145(b)(4)(ii), 265.143(b)(4)(ii) and 265.145(b)(4)(ii)). The previous regulations provided that an owner or operator may satisfy the

financial assurance requirements for closure and/or post-closure care by obtaining a financial guarantee surety bond. The bond provides that if the owner or operator fails to fund a standby trust fund in an amount equal to the penal sum of the bond within 15 days after an order to begin closure or post-closure care is issued by the Regional Administrator or by a court, the surety will become liable. In response to the ACCI petitioners, the Agency proposed to provide additional procedural protections to owners or operators by requiring that a final administrative order is necessary before action can be required by the surety. EPA wishes to emphasize that only final administrative action, not judicial review, is required in all these cases.

No comments were received concerning this amendment, and the Agency is promulgating the rule as proposed.

h. *Final administrative determination required* (§§ 264.143(c)(5) and (d)(8), 264.145(c)(5) and (d)(9), 265.143(c)(8), 265.145(b)(5) and 265.145(c)(9)). The Part 264 regulations provide that an owner or operator may demonstrate financial assurance for closure and/or post-closure care by obtaining a surety bond guaranteeing performance. Under Parts 264 and 265, an owner or operator also could satisfy the financial assurance requirements by obtaining a letter of credit. Under the terms of the performance bond and letter of credit, the surety or bank issuing the letter of credit would become liable on the bond or letter of credit obligation when the owner or operator fails to perform closure or post-closure care as guaranteed by the bond or letter of credit. The previous regulations provided that such a failure was indicated by a determination made pursuant to Section 3008 of RCRA that the owner or operator has failed to perform final closure or post-closure care in accordance with the closure or post-closure plan and other applicable requirements. In response to concerns of the ACCI petitioners, the Agency proposed to require that a "final" administrative determination under Section 3008 of RCRA be required before the surety must perform closure or post-closure care or deposit the penal sum of the bond into a trust fund or the Regional Administrator may draw on a letter of credit.

No comments were received concerning this amendment. However, as explained above, the final rule specifies that the determination must be a final determination.

i. *Cost estimates for owners or operators using the financial test or*

*corporate guarantee must include UIC cost estimates for Class I wells* (§§ 264.143(f)(1)(i) (B) and (D) and (f)(1)(ii) (B) and (D), 264.145(f)(1)(i) (B) and (D) and (f)(1)(ii) (B) and (D), 265.143(e)(1)(i) (B) and (D) and (e)(1)(ii) (B) and (D), 265.145(e)(1)(i) (B) and (D), and 265.145(e)(1)(ii) (B) and (D)). On March 19, 1985, the Agency proposed a requirement that an owner or operator seeking to use the financial test to demonstrate financial responsibility must include the most current cost estimates of the plugging and abandonment costs of Class I underground injection control (UIC) facilities, if applicable, when calculating the sum of closure and post-closure cost estimates for the financial test. EPA has established in 40 CFR Part 144 financial responsibility requirements for the owners or operators of Class I UIC facilities paralleling those established in 40 CFR Parts 264 and 265, including the same set of criteria for passing the financial test. Neither the UIC financial test nor the RCRA financial test, however, currently requires inclusion of the most current cost estimates for the other program. EPA was concerned that a firm able to pass the UIC and RCRA financial tests separately might not have the financial strength to take the required actions if UIC plugging and abandonment and RCRA closure and/or post-closure care activities were required simultaneously. Therefore, the Agency proposed that the most current cost estimates prepared as part of the Part 144 requirements be included in the total cost estimate required under 40 CFR Subpart H to evaluate whether a firm is able to pass the financial test.

Commenters generally favored the inclusion of UIC plugging and abandonment cost estimates in the Subpart H financial test requirements, and the Agency is promulgating the rule as proposed. In addition, the Agency is promulgating the proposed language in §§ 264.141 and 265.141 which defines the "current plugging and abandonment cost estimate" as the most recent cost estimates prepared under § 144.62.

j. *Cost estimates must account for all facilities covered by the financial test and corporate guarantee* (§§ 264.143(f)(2), 264.145(f)(2), 265.143(e)(2) and 265.145(e)(2)). The previous regulations specified that the phrase "current closure and post-closure cost estimates" as used in paragraph (f)(1) of §§ 264.143 and 264.145, and paragraph (e)(1) of §§ 265.143 and 265.145, 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 (See

§ 264.151(f)). The Agency proposed a minor change to include by reference the UIC cost estimates.

No comments were received concerning this proposal, and the Agency is adopting the rule as proposed.

*K. Release of the owner or operator from the requirements of financial assurance for closure and post-closure care (§§ 265.143(i), 264.145(i), 265.143(h) and 265.145(h)).* Previously, §§ 265.143(i) and 265.143(h) required the owner or operator to submit certification to the Regional Administrator from himself and from an independent registered professional engineer that closure had been accomplished in accordance with the closure plan. Within 60 days after receiving the certifications, unless the Regional Administrator had reason to believe that closure was not in accordance with the plan, the Regional Administrator was required to notify the owner or operator that he is no longer required to maintain financial assurance for closure. Sections 264.145(i) and 265.145(h) specified that the owner or operator was relieved of his post-closure financial assurance obligations when the owner or operator has completed, to the satisfaction of the Regional Administrator, all post-closure care requirements.

The Agency proposed to drop the reference to the "independent" registered professional engineer in §§ 264.143(i) and 265.143(h) to be consistent with the proposed changes to §§ 264.115 and 265.115. The proposed rule also added a requirement to §§ 264.143(i), 264.145(i), 265.143(h), and 265.145(h) that the Regional Administrator must provide the owner or operator with a detailed written statement of any reasons to believe that closure or post-closure care has not been in accordance with the approved plans.

For the same reasons that the final rule is retaining the independent registered professional engineer certification requirement, the final rule also retains the reference to the independent registered professional engineer in §§ 264.143(i) and 265.143(h). Similarly, because the final rule requires in §§ 264.120 and 265.120 that an owner or operator must submit a certification from himself and an independent registered professional engineer that post-closure care has been completed in accordance with the approved post-closure plan, §§ 264.145(i) and §§ 265.145(h) are revised to specify that within 60 days after receiving the required post-closure care certifications the Regional Administrator will notify the owner or operator in writing that he is no longer required to maintain

financial assurance for post-closure care for that unit (or facility). Today's rule promulgates as proposed the requirement that the Regional Administrator must provide the owner or operator with a detailed written statement of any reasons to believe that closure or post-closure care has not been in accordance with the approved plans.

*l. Period of liability coverage (§§ 264.147(e) and 265.147(e)).* The regulations previously required owners or operators to provide sudden accidental and, if applicable, nonsudden accidental liability coverage until certifications of closure have been received by the Regional Administrator. Because the Agency proposed to require that partial closures of disposal units be certified, units within a facility may be closed and certified while other units continue to operate. The Agency does not consider it appropriate to alter the amount of financial assurance required for sudden or nonsudden liability coverage as a result of such partial closures. Therefore, the proposed rule clarified that an owner or operator must provide liability coverage continuously as required until the certification of final closure is received by the Regional Administrator.

The Agency also believes that release from liability coverage requirements should be consistent with the procedures for releasing the owner or operator from closure financial responsibility requirements under §§ 264.143(i) and 265.143(h). Therefore, today's final rule states that owners or operators must maintain liability coverage until the Regional Administrator notifies the owner or operator in writing that he is released from this obligation.

*m. Wording of instruments (§ 264.151).* On March 19, 1985 the Agency proposed two changes to the wording of the instruments allowed under §§ 264.143, 264.145, 265.143, and 265.145. These changes, intended to ensure consistency with the other amendments in the proposal, modified § 264.151(b) to provide that the surety is responsible for funding the standby trust fund within 15 days after a "final" order to begin closure has been issued, and modified § 264.151(f) by adding an additional paragraph requiring owners and operators using the financial test to list the most current cost estimates associated with their Class I UIC facilities under the Part 144 financial responsibility requirements.

Because some owners or operators may use the financial test to cover closure and post-closure costs as well as liability coverage, the final rule adds a

parallel paragraph to § 264.151(f), new paragraph (g), to require these owners or operators to list cost estimates associated with their Class I UIC facilities under the Part 144 final responsibility requirements.

Those firms with surety bonds or letters from the chief financial officer issued before the effective date of these regulations must change those instruments to reflect these wording changes as §§ 264.143, 265.143, 264.145 and 265.145 require that the wording of these instruments be identical to the applicable wording in § 264.151. For owners or operators using surety bonds, the wording changes must be made within 60 days prior to the anniversary date of the establishment of the financial instrument(s), as per §§ 264.142(b), 265.142(b), 264.144(b) and 265.144(b). For owners or operators using the financial test or corporate guarantee, the changes must be made within 30 days after the close of the firm's fiscal year and before submission of updated information to the Regional Administrator, as specified in §§ 264.142(f), 265.142(e), 264.145(f), and 265.145(e).

#### *C. Interim Status Standards (Part 265)*

##### **1. Applicability of Requirements (§ 265.110(b))**

Section 265.110(b) specified that the post-closure care regulations apply to all hazardous waste disposal facilities. Surface impoundments and waste piles that are unable to remove all hazardous wastes are required under §§ 265.228 and 265.258 to be closed as landfills and must comply with the post-closure care requirements. Therefore, in order to clarify the applicability of §§ 265.117-265.120, the Agency proposed in § 265.110(b) that the post-closure care requirements apply to the owners or operators of all hazardous waste disposal facilities and piles and surface impoundments for which the owner or operator intends to remove the wastes at closure but is required to close the facility as a landfill.

The Agency received no comments on this clarification and is promulgating the final rule as proposed.

##### **2. Waste Pile Closure Requirements Included by Reference in the Closure Performance Standard (§ 265.111(c))**

Section 265.112(a)(1) previously required the closure plan to include a description of how and when the facility will be partially closed, if applicable, and finally closed. The description must specify how the applicable requirements of the closure performance standard

specified in § 265.111 and the process-specific standards in Subparts J through Q will be met. The Agency proposed to incorporate the technical standards in the process-specific regulations into the closure performance standard in § 265.111 and to revise § 265.111 to include a reference to § 265.258, which establishes closure requirements for waste piles. Closure requirements specific to waste pile facilities had not been promulgated prior to the promulgation of the Subpart G regulations, and thus were not previously referenced.

No comments were received concerning this proposal, and the Agency is adopting the rule as proposed.

### 3. Submission of Interim Status Closure and Post-Closure Plans (§§ 265.112(d), 265.118(e))

Sections 265.112(c) and 265.118(c) required owners or operators to submit their closure and post-closure plans 180 days prior to final closure. The proposed amendment specified that owners or operators of facilities with a landfill, surface impoundment, waste pile, or land treatment unit must submit their closure and post-closure plans for review and approval 180 days prior to the first partial closure. Facilities with only container storage, storage or treatment tanks, or incinerators must submit the closure plan 45 days prior to final closure. After the closure plan has been approved, the owner or operator is required to notify the Regional Administrator prior to all partial closures of landfills, surface impoundments, waste piles, and land treatment units and prior to final closure. Unless changes are made to the approved closure plan, however, the proposed rule did not require the owner or operator to seek reapproval of the closure plan for each subsequent partial closure or final closure.

Some commenters suggested that owners or operators be required to submit only that portion of the closure plan applicable to the unit being closed. The Agency disagrees with this suggestion. All owners or operators of interim status facilities were required to have their plans available on-site by May 19, 1981. Therefore, no additional burden is imposed on the owner or operator by requiring that the entire plan be submitted.

The Agency believes that it is necessary that the entire plan be submitted to ensure that the plans adequately address the activities required at the entire facility. Especially if the owner or operator intends to handle some of the hazardous wastes on-site, it is essential to ensure that the

facility has incorporated these requirements into the closure plan. If necessary to ensure protection of human health and the environment, the Regional Administrator may approve only that portion of the plan applicable to the partial closure.

### 4. Written Statements by Regional Administrator of Reasons for Refusing to Approve or Reasons for Modifying Closure or Post-Closure Plan (§§ 265.112(d)(4), 265.118(f))

Sections 265.112(d) and 265.118(d) previously specified that the Regional Administrator would approve, modify, or disapprove the closure plan and, if applicable, post-closure plan within 90 days of their receipt from the owner or operator. If the Regional Administrator did not approve the plan, the owner or operator was required to modify the plan or submit a new plan for approval within 60 days. If the Regional Administrator modified the plan, this modified plan became the approved closure and post-closure plan.

In response to the contention of the ACCI petitioners that this provision provided the Regional Administrator with undue discretion, the Agency proposed in §§ 265.112(d) and 265.118(f) to require the Regional Administrator to provide a detailed written statement of reasons for refusing to approve or reasons for modifying a closure or post-closure plan. In addition, to be consistent with the provisions of § 265.112(d) applicable to approving the closure plan, the Agency also proposed in § 265.118(f) that the Regional Administrator will hold a public hearing on approving the post-closure plan whenever such a hearing would clarify the issues.

The commenters generally favored these proposed changes and the Agency is promulgating the rule as proposed.

### D. Typographical Errors

The final rule corrects a number of typographical errors included in the proposed rule.

### E. Permitting Standards (Part 270)

#### 1. Contents of Part B: General Requirements (§§ 270.14(b) (14), (15), and (16))

Section 270.14(b)(14) specified that the Part B application must include documentation that the notice in the deed required under § 264.120 has been filed. Because many Part B applications will be filed prior to closure of a hazardous waste disposal unit, it will not be possible to include documentation indicating that the

notices have been filed. Therefore, the Agency proposed to amend § 270.14(b)(14) to require documentation to be included in the Part B application only for facilities with hazardous waste disposal units closed prior to the submission of the application. In addition, because the notice in the deed requirement is now included in § 264.119, the reference in § 270.14(b)(14) to § 264.120 has also been amended.

Section 270.14(b) (15) and (16) previously specified that the Part B application must include a copy of the most recent closure and post-closure cost estimates as required by §§ 264.142 and 264.144 and documentation required to demonstrate closure and post-closure financial assurance in accordance with the requirements of §§ 264.143 and 264.145, if applicable. Sections 264.143 and 264.145 require that for new facilities, demonstration of financial assurance must be made at least 60 days prior to the initial receipt of hazardous wastes. Because an owner or operator of a new facility may submit the Part B application more than 60 days prior to the initial receipt of hazardous wastes, the Agency also proposed to amend §§ 270.14(b) (15) and (16) to specify that a copy of the demonstration of financial assurance must be included with the submission of the Part B application, or at least 60 days prior to the initial receipt of hazardous wastes, whichever is later.

The Agency received no comments on any of these proposed changes and is promulgating them as proposed.

#### 2. Minor Modifications of Permits (§ 270.42(d))

Section 270.42(d) previously stated that a change in ownership or operational control of a facility may be considered a minor permit modification provided that the Director determines that no other change is necessary in the permit and that a written agreement has been submitted to the Director which specifies the date for transfer of permit responsibility, coverage, and liability between the current and new permittees. The Agency wishes to ensure that facilities are transferred to financially viable firms and thus proposed to require that the new owner demonstrate compliance with the Subpart H regulations within three months of the transfer of ownership. The preamble inadvertently stated that the proposed rule allowed for a six-month deadline for demonstrating financial assurance although the proposed rule referred to the requirements of § 270.72 which proposed a three-month deadline.



Some commenters argued that a six-month time limit was too short while others argued that it was too long. Another commenter was concerned that the regulation did not state whether the old owner or operator remains responsible if the new owner or operator fails to demonstrate financial assurance within the allotted time period. Finally, one commenter noted that the reference to the deadlines in § 270.72, which address requirements for interim status facilities, is confusing for permitted facilities.

The Agency disagrees with those commenters who argued that six months is insufficient time to demonstrate financial assurance. The Agency is extending the three-month period allowed in the proposed rule to six months. EPA is also clarifying the Agency's intent that the old owner or operator is responsible for financial assurance obligations if the new owner or operator fails to meet his obligations. Finally, the final rule clarifies the language of § 270.42. The proposal included a reference in § 270.42 to the deadlines of § 270.72. Because § 270.72 refers to interim status facilities, the Agency was concerned that owners or operators may not recognize that the deadlines in § 270.72 also applied to permitted facilities under § 270.42. To avoid potential ambiguities, the final rule states explicitly in § 270.42(d) that the new owner or operator must demonstrate financial assurance within six months of the transfer of ownership.

### 3. Changes During Interim Status (§ 270.72(d))

Section 270.72(d) stated that when there is a transfer of ownership or operational control of an interim status facility, the old owner or operator is responsible for complying with the Subpart H requirements until the new owner or operator demonstrates compliance with the financial responsibility requirements. Consistent with the proposed changes to § 270.42(d) for permitted facilities, the Agency proposed to require that the new owner or operator demonstrate financial assurance within three months of the transfer of ownership.

For the reasons discussed above, the Agency is allowing the new owner or operator six months to demonstrate financial assurance. The old owner or operator is responsible for financial assurance until the new owner or operator fulfills his obligations under Subpart H.

## III. State Authority

### A. Applicability of Rules in Authorized States

Under Section 3006 of RCRA, EPA may authorize qualified States to administer and enforce the RCRA program within the State. (See 40 CFR Part 271 for the standards and requirements for authorization.) Following authorization, EPA retains enforcement authority under Sections 3008, 7003 and 3013 of RCRA, although authorized States have primary enforcement responsibility.

Prior to HSWA amending RCRA, a State with final authorization administered its hazardous waste program entirely in lieu of the Federal program. The Federal requirements no longer applied in the authorized State, and EPA could not issue permits for any facilities in a State where the State was authorized to permit. When new, more stringent Federal requirements were promulgated or enacted, the State was obligated to enact equivalent authority within specified time frames. New Federal requirements did not take effect in an authorized State until the State adopted the requirements as State law.

In contrast, under newly enacted Section 3006(g) of RCRA, 42 U.S.C. 6926(g), new requirements and prohibitions imposed by the HSWA take effect in authorized States at the same time that they take effect in nonauthorized States. EPA is directed to carry out those requirements and prohibitions in authorized States, including the issuance of permits, until the State is granted authorization to do so. While States must still adopt HSWA-related provisions as State law to retain final authorization, the HSWA are applied in authorized States in the interim.

### B. Effect on State Authorizations

Today's announcement promulgates standards that will not be effective in authorized States since the requirements will not be imposed pursuant to the HSWA. Thus, the requirements will be applicable only in those States that do not have final authorization. In authorized States, the requirements will not be applicable until the State revises its program to adopt equivalent requirements under State law.

40 CFR 271.21(e)(2) requires that States that have final authorization must revise their programs to include equivalent standards within a year of promulgation of these standards if only regulatory changes are necessary, or within two years of promulgation if statutory changes are necessary. These deadlines can be extended in

exceptional cases (40 CFR 271.21(e)(3)). Once EPA approves the revision, the State requirements become Subtitle C RCRA requirements.

States with authorized RCRA programs may already have requirements similar to those in today's rule. These State requirements have not been assessed against the Federal regulations being promulgated today to determine whether they meet the tests for authorization. Thus, a State is not authorized to carry out these requirements in lieu of EPA until the State requirements are approved. Of course, States with existing standards may continue to administer and enforce their standards as a matter of State law.

States that submit official applications for final authorization less than 12 months after promulgation of these standards may be approved without including equivalent standards. However, once authorized, a State must revise its program to include equivalent standards within the time period discussed above. The process and schedule for revision of State programs is described in 40 CFR § 271.21.

It should be noted that authorized States are only required to revise their programs when EPA promulgates standards more stringent than the existing standards. Under Section 3009 of RCRA, States are allowed to impose standards which are more stringent than those in Federal program. Some of the standards promulgated today are considered to be less stringent than or reduce the scope of the previous Federal requirements. Those provisions appear in Sections: 264.112(a), 264.118(a), 265.112(a), 265.118(a), 264.112(b)(7), 264.112(e), 265.112(e), 264.113, 265.113, 264.115, 265.115, 264.143(a)(10), 264.143(e)(5), 264.145(a)(11), 264.145(e)(5), 265.143(a)(10), 265.143(d)(5), 265.145(a)(11), 265.145(d)(5), 264.143(b)(4)(ii), 264.145(b)(4)(ii), 265.143(b)(4)(ii), 265.145(b)(4)(ii), 264.143(c)(5), 264.143(d)(8), 264.145(c)(5), 264.145(d)(9), 265.143(c)(8), 265.145(c)(9), 265.112(b)(7), 264.112(d), 265.112(d), 265.118(e), and 265.118(f). Authorized States will not be required to revise their programs to adopt requirements equivalent or substantially equivalent to the provisions identified above.

## IV. Executive Order 12291

This regulation was submitted to the Office of Management and Budget for review as required by Executive Order 12291. The regulatory amendments being promulgated today to Subparts G and H are not "major rules." Some of the amendments are technical corrections

designed to clarify the intent of the regulations issued January 12, 1981. The changes are not likely to result in a significant increase in costs and thus are not a major rule. No Regulatory Impact analysis has been prepared.

#### V. Paperwork Reduction Act

The information collection requirements contained in this rule have been approved by the Office of Management and Budget (OMB) under the provisions of the Paperwork Reduction Act of 1980, 44 U.S.C. 3501 *et seq.* and have been assigned OMB control number 2050-0008.

#### VI. Regulatory Flexibility Act

Under the Regulatory Flexibility Act of 1980 (5 U.S.C. 801 *et seq.*), Federal agencies must, in developing regulations, analyze their impact on small entities (small businesses, small government jurisdictions, and small organizations). Many of the changes promulgated today clarify the existing regulations and thus result in no additional costs. For those amendments that will result in an increase in costs, the costs are not significant enough to impact adversely the viability of small entities.

Accordingly, I certify that this regulation will not have a significant impact on a substantial number of small entities.

#### VII. Supporting Documents

A background document was prepared for the Subpart G closure and post-closure care regulations and for the financial assurance regulations promulgated on January 12, 1981. In addition, background documents were prepared for the financial assurance regulations published on April 7, 1982. Supporting materials, including a background document, discussing the most significant issues raised by the amendments promulgated today have been prepared and are included in the docket for these regulations.

The supporting materials are available for review in the public docket, Room S-212-E U.S. EPA, 401 M Street, SW., Washington, D.C. 20460 from 9:00 a.m. to 4:00 p.m., Monday through Friday, excluding holidays.

EPA will prepare guidance manuals to assist owners or operators and regulatory officials and will make them available from EPA Headquarters and the Regional Offices.

#### VIII. Effective Date

Section 3010(b) of RCRA provides that EPA's hazardous waste regulations and revisions thereto take effect six months after their promulgation. The purpose of

this requirement is to allow sufficient lead time for the regulated community to prepare to comply with major new regulatory requirements. Section 553(d) of the Administrative Procedures Act prohibits "publication of service of a substantive rule . . . less than 30 days before its effective date except for good cause." For the amendment to § 270.14(b)(14) promulgated today, however, the Agency believes that an effective date six months or 30 days after promulgation would cause substantial and unnecessary disruption in the implementation of the regulations and would be contrary to the interest of the regulated community and the public.

Today's amendment to § 270.14(b)(14) requires that an owner or operator seeking a permit submit documentation that notices required under § 264.119 have been filed only for hazardous waste disposal units that have been closed. The previous regulations required that documentation of such notices be submitted for the entire facility, whether or not units have been closed at the time the permit application is submitted.

The Agency believes it makes little sense that the intended relief from this requirement be delayed for six months. This is especially true in light of the requirement that owners or operators of land disposal facilities submit their permit applications by November 8, 1985 (see HSWA § 213). Consequently, the Agency is setting an effective date of May 2, 1986, for the amendment to § 270.14(b)(14) promulgated in this rulemaking action.

Dated: March 8, 1986.

Approved:

Lee M. Thomas,  
Administrator.

For the reasons set out in the preamble, Title 40 of the Code of Federal Regulations is to be amended as follows:

#### PART 260—HAZARDOUS WASTE MANAGEMENT SYSTEM: GENERAL

40 CFR Part 260 is amended as follows:

1. The authority citation for Part 260 continues to read as follows:

Authority: Secs. 1006, 2002(a), 3001 through 3007, 3010, 3014, 3015, 3017, 3018, 3019, 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, 6934, 6935, 6937, 6938, 6939 and 6974).

#### Subpart B—Definitions

2. In 40 CFR Part 260 Subpart B, § 260.10 is amended by adding the

following terms alphabetically to the existing list of terms:

#### § 260.10 Definitions.

\* \* \* \* \*

"Active life" of a facility means the period from the initial receipt of hazardous waste at the facility until the Regional Administrator receives certification of final closure.

"Final closure" means the closure of all hazardous waste management units at the facility in accordance with all applicable closure requirements so that hazardous waste management activities under Parts 264 and 265 of this Chapter are no longer conducted at the facility unless subject to the provisions in § 262.34.

"Hazardous waste management unit" is a contiguous area of land on or in which hazardous waste is placed, or the largest area in which there is significant likelihood of mixing hazardous waste constituents in the same area. Examples of hazardous waste management units include a surface impoundment, a waste pile, a land treatment area, a landfill cell, an incinerator, a tank and its associated piping and underlying containment system and a container storage area. A container alone does not constitute a unit; the unit includes containers and the land or pad upon which they are placed.

"Partial closure" means the closure of a hazardous waste management unit in accordance with the applicable closure requirements of Parts 264 and 265 of this Chapter at a facility that contains other active hazardous waste management units. For example, partial closure may include the closure of a tank (including its associated piping and underlying containment systems), landfill cell, surface impoundment, waste pile, or other hazardous waste management unit, while other units of the same facility continue to operate.

\* \* \* \* \*

#### PART 264—STANDARDS FOR OWNERS AND OPERATORS OF HAZARDOUS WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITIES

40 CFR Part 264 is amended as follows:

1. The authority citation for Part 264 continues to read 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).

2. 40 CFR Part 264 Subpart G, §§ 264.110–264.120 are revised to read as follows:

**Subpart G—Closure and Post-Closure**

Sec.

- 264.110 Applicability.
- 264.111 Closure performance standard.
- 264.112 Closure plan; amendment of plan.
- 264.113 Closure; time allowed for closure.
- 264.114 Disposal or decontamination of equipment, structures and soils.
- 264.115 Certification of closure.
- 264.116 Survey plat.
- 264.117 Post-closure care and use of property.
- 264.118 Post-closure plan; amendment of plan.
- 264.119 Post-closure notices.
- 264.120 Certification of completion of post-closure care.

**Subpart G—Closure and Post-Closure**

**§ 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 264.116–264.120 (which concern post-closure care) apply to the owners and operators of:

(1) All hazardous waste disposal facilities; and

(2) Waste 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 or 264.258.

**§ 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 protect human health and the environment, post-closure escape of hazardous waste, hazardous constituents, leachate, contaminated run-off, or hazardous waste decomposition products to the ground or surface waters or to the atmosphere; and

(c) Complies with the closure requirements of this Subpart including, but not limited to, the requirements of §§ 264.178, 264.197, 264.228, 264.258, 264.280, 264.310 and 264.351.

**§ 264.112 Closure plan; amendment of plan.**

(a) *Written plan.* (1) The owner or operator of a hazardous waste management facility must have a written closure plan. In addition, certain surface impoundments and waste piles from which the owner or operator intends to remove or decontaminate the

hazardous waste at partial or final closure are required by §§ 264.228(c)(1)(i) and 264.258(c)(1)(i) to have contingent closure plans. 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 procedures under Part 124 of this Chapter. In accordance with § 270.32 of this Chapter, the approved closure plan will become a condition of any RCRA permit.

(2) The Regional Administrator's approval of the plan must ensure that the approved closure plan is consistent with §§ 264.111–264.115 and the applicable requirements of §§ 264.90 *et seq.*, 264.178, 264.197, 264.228, 264.258, 264.280, 264.310, and 264.351. Until final closure is completed and certified in accordance with § 264.115, a copy of the approved plan and all approved revisions must be furnished to the Regional Administrator upon request, including request by mail.

(b) *Content of plan.* The plan must identify steps necessary to perform partial and/or final closure of the facility at any point during its active life. The closure plan must include, at least:

(1) A description of how each hazardous waste management unit at the facility will be closed in accordance with § 264.111;

(2) A description of how final closure of the facility will be conducted in accordance with § 264.111. The description must identify the maximum extent of the operations which will be unclosed during the active life of the facility; and

(3) An estimate of the maximum inventory of hazardous wastes ever on-site over the active life of the facility and a detailed description of the methods to be used during partial closures and final closure, including, but not limited to, methods for removing, transporting, treating, storing, or disposing of all hazardous wastes, and identification of the type(s) of the off-site hazardous waste management units to be used, if applicable; and

(4) A detailed description of the steps needed to remove or decontaminate all hazardous waste residues and contaminated containment system components, equipment, structures, and soils during partial and final closure, including, but not limited to, procedures for cleaning equipment and removing contaminated soils, methods for sampling and testing surrounding soils, and criteria for determining the extent of decontamination required to satisfy the closure performance standard; and

(5) A detailed description of other activities necessary during the closure period to ensure that all partial closures and final closure satisfy the closure performance standards, including, but not limited to, ground-water monitoring, leachate collection, and run-on and run-off control; and

(6) A schedule for closure of each hazardous waste management unit and for final closure of the facility. The schedule must include, at a minimum, the total time required to close each hazardous waste management unit and the time required for intervening closure activities which will allow tracking of the progress of partial and final closure. (For example, in the case of a landfill unit, estimates of the time required to treat or dispose of all hazardous waste inventory and of the time required to place a final cover must be included.)

(7) For facilities that use trust funds to establish financial assurance under §§ 264.143 or 264.145 and that are expected to close prior to the expiration of the permit, an estimate of the expected year of final closure.

(c) *Amendment of plan.* The owner or operator must submit a written request for a permit modification to authorize a change in operating plans, facility design, or the approved closure plan in accordance with the procedures in Parts 124 and 270. The written request must include a copy of the amended closure plan for approval by the Regional Administrator.

(1) The owner or operator may submit a written request to the Regional Administrator for a permit modification to amend the closure plan at any time prior to the notification of partial or final closure of the facility.

(2) The owner or operator must submit a written request for a permit modification to authorize a change in the approved closure plan whenever:

- (i) Changes in operating plans or facility design affect the closure plan, or
- (ii) There is a change in the expected year of closure, if applicable, or
- (iii) In conducting partial or final closure activities, unexpected events require a modification of the approved closure plan.

(3) The owner or operator must submit a written request for a permit modification including a copy of the amended closure plan for approval at least 60 days prior to the proposed change in facility design or operation, or no later than 60 days after an unexpected event has occurred which has affected the closure plan. If an unexpected event occurs during the partial or final closure period, the owner or operator must request a permit

modification no later than 30 days after the unexpected event. An owner or operator of a surface impoundment or waste pile that intends to remove all hazardous waste at closure and is not otherwise required to prepare a contingent closure plan under §§ 264.228(c)(1)(i) or 264.258(c)(1)(i), must submit an amended closure plan to the Regional Administrator no later than 60 days from the date that the owner or operator or Regional Administrator determines that the hazardous waste management unit must be closed as a landfill, subject to the requirements of § 264.310, or no later than 30 days from that date if the determination is made during partial or final closure. The Regional Administrator will approve, disapprove, or modify this amended plan in accordance with the procedures in Parts 124 and 270. In accordance with § 270.32 of this Chapter, the approved closure plan will become a condition of any RCRA permit issued.

(4) The Regional Administrator may request modifications to the plan under the conditions described in § 264.112(c)(2). The owner or operator must submit the modified plan within 60 days of the Regional Administrator's request, or within 30 days if the change in facility conditions occurs during partial or final closure. Any modifications requested by the Regional Administrator will be approved in accordance with the procedures in Parts 124 and 270.

(d) *Notification of partial closure and final closure.*

(1) The owner or operator must notify the Regional Administrator in writing at least 60 days prior to the date on which he expects to begin closure of a surface impoundment, waste pile, land treatment or landfill unit, or final closure of a facility with such a unit. The owner or operator must notify the Regional Administrator in writing at least 45 days prior to the date on which he expects to begin final closure of a facility with only treatment or storage tanks, container storage, or incinerator units to be closed.

(2) The date when he "expects to begin closure" must be either no later than 30 days after the date on which any hazardous waste management unit receives the known final volume of hazardous wastes or, if there is a reasonable possibility that the hazardous waste management unit will receive additional hazardous wastes, no later than one year after the date on which the unit received the most recent volume of hazardous waste. If the owner or operator of a hazardous waste management unit can demonstrate to the Regional Administrator that the hazardous waste management unit or

facility has the capacity to receive additional hazardous wastes and he has taken, and will continue to take, all steps to prevent threats to human health and the environment, including compliance with all applicable permit requirements, the Regional Administrator may approve an extension to this one-year limit.

(3) If the facility's permit is terminated, or if the facility is otherwise ordered, by judicial decree or final order under Section 3008 of RCRA, to cease receiving hazardous wastes or to close, then the requirements of this paragraph do not apply. However, the owner or operator must close the facility in accordance with the deadlines established in § 264.113.

(e) *Removal of wastes and decontamination or dismantling of equipment.* Nothing in this Section shall preclude the owner or operator from removing hazardous wastes and decontaminating or dismantling equipment in accordance with the approved partial or final closure plan at any time before or after notification of partial or final closure.

**§ 264.113 Closure; time allowed for closure.**

(a) Within 90 days after receiving the final volume of hazardous wastes at a hazardous waste management unit or facility, the owner or operator must treat, remove from the unit or facility, 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 complies with all applicable requirements for requesting a modification to the permit and 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 hazardous waste management unit or facility has the capacity to receive additional hazardous wastes; and

(B) There is a reasonable likelihood that he or another person will recommence operation of the hazardous waste management unit or the facility within one year; and

(C) Closure of the hazardous waste management unit or 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, including compliance with all applicable permit requirements.

(b) The owner or operator must complete partial and final closure activities in accordance with the

approved closure plan and within 180 days after receiving the final volume of hazardous wastes at the hazardous waste management unit or facility. The Regional Administrator may approve an extension to the closure period if the owner or operator complies with all applicable requirements for requesting a modification to the permit and demonstrates that:

(1)(i) The partial or final closure activities will, of necessity, take longer than 180 days to complete; or

(ii)(A) The hazardous waste management unit or facility has the capacity to receive additional hazardous wastes; and

(B) There is reasonable likelihood that he or another person will recommence operation of the hazardous waste management unit or the facility within one year; and

(C) Closure of the hazardous waste management unit or 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 not operating hazardous waste management unit or facility, including compliance with all applicable permit requirements.

(c) The demonstrations referred to in § 264.113(a) and (b) must be made as follows: (1) The demonstrations in paragraph (a) must be made at least 30 days prior to the expiration of the 90-day period in paragraph (a); and (2) the demonstration in paragraph (b) must be made at least 30 days prior to the expiration of the 180-day period in paragraph (b).

**§ 264.114 Disposal or decontamination of equipment, structures and soils.**

During the partial and final closure periods, all contaminated equipment, structures and soils must be properly disposed of or decontaminated unless otherwise specified in §§ 264.228, 264.258, 264.280, or 264.310. By removing any hazardous wastes or hazardous constituents during partial and final closure, the owner or operator may become a generator of hazardous waste and must handle that waste in accordance with all applicable requirements of Part 262 of this Chapter.

**§ 264.115 Certification of closure.**

Within 60 days of completion of closure of each hazardous waste surface impoundment, waste pile, land treatment, and landfill unit, and within 60 days of the completion of final closure, the owner or operator must submit to the Regional Administrator, by

registered mail, a certification that the hazardous waste management unit or facility, as applicable, has been closed in accordance with the specifications in the approved closure plan. The certification must be signed by the owner or operator and by an independent registered professional engineer. Documentation supporting the independent registered professional engineer's certification must be furnished to the Regional Administrator upon request until he releases the owner or operator from the financial assurance requirements for closure under § 264.143(i).

#### § 264.116 Survey plat.

No later than the submission of the certification of closure of each hazardous waste disposal unit, 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 survey plat indicating the location and dimensions of landfills cells or other hazardous waste disposal units 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 hazardous waste disposal unit in accordance with the applicable Subpart G regulations.

#### § 264.117 Post-closure care and use of property.

(a)(1) Post-closure care for each hazardous waste management unit subject to the requirements of §§ 264.117-264.120 must begin after completion of closure of the unit and continue for 30 years after that date 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) Any time preceding partial closure of a hazardous waste management unit subject to post-closure care requirements or final closure, or any time during the post-closure period for a particular unit, the Regional Administrator may, in accordance with the permit modification procedures in Parts 124 and 270:

(i) Shorten the post-closure care period applicable to the hazardous

waste management unit, or facility, if all disposal units have been closed, if he finds that the reduced period is sufficient to protect human health and the environment (e.g., leachate or ground-water monitoring results, characteristics of the hazardous wastes, application of advanced technology, or alternative disposal, treatment, or re-use techniques indicate that the hazardous waste management unit or facility is secure); or

(ii) Extend the post-closure care period applicable to the hazardous waste management unit or facility if he finds that the extended period is necessary to protect human health and the environment (e.g., leachate or ground-water monitoring results indicate a potential for migration of hazardous wastes at levels which may be harmful to human health and the environment).

(b) The Regional Administrator may require, at partial and final closure, continuation of any of the security requirements of § 264.14 during part or all of the post-closure period when:

(1) Hazardous wastes may remain exposed after completion of partial or final 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 partial or final closure must never be allowed to disturb the integrity of the final cover, liner(s), or any other components of the 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.

#### § 264.118 Post-closure plan; amendment of plan.

(a) *Written Plan.* The owner or operator of a hazardous waste disposal unit must have a written post-closure plan. In addition, certain surface impoundments and waste piles from which the owner or operator intends to remove or decontaminate the hazardous wastes at partial or final closure are required by §§ 264.228(c)(1)(ii) and 264.258(c)(1)(ii) to have contingent post-closure plans. Owners or operators of surface impoundments and waste piles

not otherwise required to prepare contingent post-closure plans under §§ 264.228(c)(1)(ii) and 264.258(c)(1)(ii) must submit a post-closure plan to the Regional Administrator within 90 days from the date that the owner or operator or Regional administrator determines that the hazardous waste management unit must be closed as a landfill, subject to the requirements of §§ 264.117-264.120. 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 procedures 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 RCRA permit issued.

(b) For each hazardous waste management unit subject to the requirements of this Section, the post-closure plan must identify the activities that will be carried on after closure of each disposal unit 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; and

(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 systems in accordance with the requirements of Subparts K, L, M, and N of this Part; and

(ii) The function of the 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 hazardous waste disposal unit or facility during the post-closure care period.

(c) Until final closure of the facility, a copy of the approved post-closure plan must be furnished to the Regional Administrator upon request, including request by mail. After final closure has been certified, the person or office specified in § 264.188(b)(3) must keep the approved post-closure plan during the remainder of the post-closure period.

(d) *Amendment of plan.* The owner or operator must request a permit modification to authorize a change in the approved post-closure plan in accordance with the applicable requirements of Parts 124 and 270. The written request must include a copy of the amended post-closure plan for approval by the Regional Administrator.

(1) The owner or operator may submit a written request to the Regional Administrator for a permit modification to amend the post-closure plan at any time during the active life of the facility or during the post-closure care period.

(2) The owner or operator must submit a written request for a permit modification to authorize a change in the approved post-closure plan whenever:

(i) Changes in operating plans or facility design affect the approved post-closure plan, or

(ii) There is a change in the expected year of final closure, if applicable, or

(iii) Events which occur during the active life of the facility, including partial and final closures, affect the approved post-closure plan.

(3) The owner or operator must submit a written request for a permit modification at least 60 days prior to the proposed change in facility design or operation, or no later than 60 days after an unexpected event has occurred which has affected the post-closure plan. An owner or operator of a surface impoundment or waste pile that intends to remove all hazardous waste at closure and is not otherwise required to submit a contingent post-closure plan under §§ 264.228(c)(1)(ii) and 264.258(c)(1)(ii) must submit a post-closure plan to the Regional Administrator no later than 90 days after the date that the owner or operator or Regional Administrator determines that the hazardous waste management unit must be closed as a landfill, subject to the requirements of § 264.310. The Regional Administrator will approve, disapprove or modify this plan in accordance with the procedures in Parts 124 and 270. In accordance with § 270.32 of this Chapter, the approved post-closure plan will become a permit condition.

(4) The Regional Administrator may request modifications to the plan under the conditions described in § 264.118(d)(2). The owner or operator must submit the modified plan no later than 60 days after the Regional Administrator's request, or no later than 90 days if the unit is a surface impoundment or waste pile not previously required to prepare a contingent post-closure plan. Any modifications requested by the Regional Administrator will be approved, disapproved, or modified in accordance with the procedures in Parts 124 and 270.

#### § 264.119 Post-closure notices.

(a) No later than 60 days after certification of closure of each hazardous waste disposal unit, 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 other disposal unit of the facility. For hazardous wastes disposed of before January 12, 1981, the owner or operator must identify the type, location, and quantity of the hazardous wastes to the best of his knowledge and in accordance with any records he has kept.

(b) Within 60 days of certification of closure of the first hazardous waste disposal unit and within 60 days of certification of closure of the last hazardous waste disposal unit, the owner or operator must:

(1) 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:

(i) The land has been used to manage hazardous wastes; and

(ii) Its use is restricted under 40 CFR Subpart G regulations; and

(iii) The survey plat and record of the type, location, and quantity of hazardous wastes disposed of within each cell or other hazardous waste disposal unit of the facility required by § 264.116 and § 264.119(a) have been filed with the local zoning authority or the authority with jurisdiction over local land use and with the Regional Administrator; and

(2) Submit a certification, signed by the owner or operator, that he has recorded the notation specified in paragraph (b)(1) of this Section, including a copy of the document in which the notation has been placed, to the Regional Administrator.

(c) If the owner or operator or any subsequent owner or operator of the land upon which a hazardous waste disposal unit is located wishes to remove hazardous wastes and hazardous waste residues, the liner, if any, or contaminated soils, he must request a modification to the post-closure permit in accordance with the applicable requirements in Parts 124 and 270. The owner or operator must demonstrate that the removal of hazardous wastes will satisfy the criteria of § 264.117(c). By removing hazardous waste, the owner or operator may become a generator of hazardous waste and must manage it in accordance with all applicable requirements of this Chapter. If he is granted a permit modification or otherwise granted approval to conduct such removal activities, the owner or operator may

request that the Regional Administrator approve either:

(1) The removal of the notation on the deed to the facility property or other instrument normally examined during title search; or

(2) The addition of a notation to the deed or instrument indicating the removal of the hazardous waste.

#### § 264.120 Certification of completion of post-closure care.

No later than 60 days after completion of the established post-closure care period for each hazardous waste disposal unit, the owner or operator must submit to the Regional Administrator, by registered mail, a certification that the post-closure care period for the hazardous waste disposal unit was performed in accordance with the specifications in the approved post-closure plan. The certification must be signed by the owner or operator and an independent registered professional engineer. Documentation supporting the independent registered professional engineer's certification must be furnished to the Regional Administrator upon request until he releases the owner or operator from the financial assurance requirements for post-closure care under § 264.145(i).

#### Subpart H—Financial Requirements

40 CFR Part 264 Subpart H is amended as follows:

1. In § 264.141, the following term is added to paragraph (f) in alphabetical order:

#### § 264.141 Definitions of terms as used in this subpart.

(f) \* \* \*

"Current plugging and abandonment cost estimate" means the most recent of the estimates prepared in accordance with § 144.62(a), (b), and (c) of this title.

2. In § 264.142, paragraphs (a), introductory text of (b) and (c) are revised to read as follows:

#### § 264.142 Cost estimate for closure.

(a) The owner or operator must have a detailed written estimate, in current dollars, of the cost of closing the facility in accordance with the requirements in §§ 264.111–264.115 and applicable closure requirements in §§ 264.178, 264.197, 264.228, 264.258, 264.280, 264.310, and 264.351.

(1) The estimate must equal the cost of final closure at the point in the facility's active life when the extent and manner of its operation would make closure the

most expensive, as indicated by its closure plan (see § 264.112(b)); and

(2) The closure cost estimate must be based on the costs to the owner or operator of hiring a third party to close the facility. A third party is a party who is neither a parent nor a subsidiary of the owner or operator. (See definition of parent corporation in § 264.141(d).) The owner or operator may use costs for on-site disposal if he can demonstrate that on-site disposal capacity will exist at all times over the life of the facility.

(3) The closure cost estimate may not incorporate any salvage value that may be realized with the sale of hazardous wastes, facility structures or equipment, land, or other assets associated with the facility at the time of partial or final closure.

(4) The owner or operator may not incorporate a zero cost for hazardous wastes that might have economic value.

(b) During the active life of the facility, the owner or operator must adjust the closure cost estimate for inflation within 60 days prior to the anniversary date of the establishment of the financial instrument(s) used to comply with § 264.143. For owners and operators using the financial test or corporate guarantee, the closure cost estimate must be updated for inflation within 30 days after the close of the firm's fiscal year and before submission of updated information to the Regional Administrator as specified in § 264.143(f)(3). The adjustment may be made by recalculating the maximum costs of closure in current dollars, or by using an inflation factor derived from the most recent Implicit Price Deflator for Gross National Product published by the U.S. Department of Commerce in its *Survey of Current Business*, as specified in paragraphs (b)(1) and (b)(2) of this section. The inflation factor is the result of dividing the latest published annual Deflator by the Deflator for the previous year.

(c) During the active life of the facility, the owner or operator must revise the closure cost estimate no later than 30 days after the Regional Administrator has approved the request to modify the closure plan, if the 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).

3. In § 264.143, paragraphs (a)(10), (b)(4)(ii), (c)(5), (d)(8), (e)(5), (f)(1)(i)(B), (f)(1)(i)(D), (f)(1)(ii)(B), (f)(1)(ii)(D), (f)(2), and (i) are revised to read as follows:

§ 264.143 Financial assurance for closure.

(a) \* \* \*

(10) After beginning partial or final closure, an owner or operator or another person authorized to conduct partial or final closure may request reimbursements for partial or final closure expenditures by submitting itemized bills to the Regional Administrator. The owner or operator may request reimbursements for partial closure only if sufficient funds are remaining in the trust fund to cover the maximum costs of closing the facility over its remaining operating life. Within 60 days after receiving bills for partial or final closure activities, the Regional Administrator will instruct the trustee to make reimbursements in those amounts as the Regional Administrator specifies in writing, if the Regional Administrator determines that the partial or final closure expenditures are in accordance with the approved closure plan, or otherwise justified. If the Regional Administrator has reason to believe that the maximum cost of closure over the remaining life of the facility will be significantly greater than the value of the trust fund, he may withhold reimbursements 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 final closure of the facility. If the Regional Administrator does not instruct the trustee to make such reimbursements, he will provide the owner or operator with a detailed written statement of reasons.

(b) \* \* \*

(4) \* \* \*

(ii) Fund the standby trust fund in an amount equal to the penal sum within 15 days after an administrative order to begin final closure issued by the Regional Administrator becomes final, or within 15 days after an order to begin final closure is issued by a U.S. district court or other court of competent jurisdiction; or

(c) \* \* \*

(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 final administrative determination pursuant to section 3008 of RCRA that the owner or operator has failed to perform final closure in accordance with the approved 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.

(d) \* \* \*

(8) Following a final administrative 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.

(e) \* \* \*

(5) After beginning partial or final closure, an owner or operator or any other person authorized to conduct closure may request reimbursements for closure expenditures by submitting itemized bills to the Regional Administrator. The owner or operator may request reimbursements for partial closure only if the remaining value of the policy is sufficient to cover the maximum costs of closing the facility over its remaining operating life. Within 60 days after receiving bills for closure activities, the Regional Administrator will instruct the insurer to make reimbursements in such amounts as the Regional Administrator specifies in writing, if the Regional Administrator determines that the partial or final closure expenditures are in accordance with the approved closure plan or otherwise justified. If the Regional Administrator has reason to believe that the maximum cost of closure over the remaining life of the facility will be significantly greater than the face amount of the policy, he may withhold reimbursements 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 final closure of the facility. If the Regional Administrator does not instruct the insurer to make such reimbursements, he will provide the owner or operator with a detailed written statement of reasons.

(f) \* \* \*

(1) \* \* \*

(i) \* \* \*

(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 the current plugging and abandonment cost estimates; and

(D) Assets located in the United States amounting to at least 90 percent of total assets or at least six times the

sum of the current closure and post-closure cost estimates and the current plugging and abandonment cost estimates.

(ii) \* \* \*

(B) Tangible net worth at least six times the sum of the current closure and post-closure cost estimates and the current plugging and abandonment cost estimates; and

(D) Assets located in the United States amounting to at least 90 percent of total assets or at least six times the sum of the current closure and post-closure cost estimates and the current plugging and abandonment 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)). The phrase "current plugging and abandonment 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 (§ 144.70(f) of this title).

(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 final closure has been completed in accordance with the approved 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 final closure of the facility, unless the Regional Administrator has reason to believe that final closure has not been in accordance with the approved closure plan. The Regional Administrator shall provide the owner or operator a detailed written statement of any such reason to believe that closure has not been in accordance with the approved closure plan.

4. In § 264.144, paragraphs (a), the introductory text of (b), and paragraph (c) are revised to read as follows:

**§ 264.144 Cost estimate for post-closure care.**

(a) The owner or operator of a disposal surface impoundment, land treatment, or landfill unit, or of a surface impoundment or waste pile required under §§ 264.228 and 264.258 to prepare a contingent closure and post-closure plan, must have a detailed 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 §§ 264.117-264.120, 264.228, 264.258, 264.280, and 264.310.

(1) The post-closure cost estimate must be based on the costs to the owner or operator of hiring a third party to conduct post-closure care activities. A third party is a party who is neither a parent nor a subsidiary of the owner or operator. (See definition of parent corporation in § 264.141(d).)

(2) 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 § 264.117.

(b) During the active life of the facility, the owner or operator must adjust the post-closure cost estimate for inflation within 60 days prior to the anniversary date of the establishment of the financial instrument(s) used to comply with § 264.145. For owners or operators using the financial test or corporate guarantee, the post-closure cost estimate must be updated for inflation within 30 days after the close of the firm's fiscal year and before the submission of updated information to the Regional Administrator as specified in § 264.145(f)(5). The adjustment may be made by recalculating the post-closure cost estimate in current dollars or by using an inflation factor derived from the most recent Implicit Price Deflator for Gross National Product published by the U.S. Department of Commerce in its *Survey of Current Business* as specified in § 264.145(b)(1) and (b)(2). The inflation factor is the result of dividing the latest published annual Deflator by the Deflator for the previous year.

(c) During the active life of the facility, the owner or operator must revise the post-closure cost estimate within 30 days after the Regional Administrator has approved the request to modify the post-closure plan, if the 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).

5. In § 264.145, the introductory paragraph and paragraphs (a)(11), (b)(4)(ii), (c)(5), (d)(9), (e)(5), (f)(1)(i)(B), (f)(1)(i)(D), (f)(1)(ii)(B), (f)(1)(ii)(D), (f)(2), and (i) are revised to read as follows:

**§ 264.145 Financial assurance for post-closure care.**

The owner or operator of a hazardous waste management unit subject to the

requirements of § 264.144 must establish financial assurance for post-closure care in accordance with the approved post-closure plan for the facility 60 days prior to the initial receipt of hazardous waste or the effective date of the regulation, whichever is later. He must choose from the following options:

(a) \* \* \*

(1) An owner or operator or any other person authorized to conduct post-closure care may request reimbursements for post-closure care expenditures by submitting itemized bills to the Regional Administrator. Within 60 days after receiving bills for post-closure care activities, the Regional Administrator will instruct the trustee to make reimbursements in those amounts as the Regional Administrator specifies in writing, if the Regional Administrator determines that the post-closure care expenditures are in accordance with the approved post-closure plan or otherwise justified. If the Regional Administrator does not instruct the trustee to make such reimbursements, he will provide the owner or operator with a detailed written statement of reasons.

(b) \* \* \*

(4) \* \* \*

(ii) Fund the standby trust fund in an amount equal to the penal sum within 15 days after an administrative order to begin final closure issued by the Regional Administrator becomes final, or within 15 days after an order to begin final closure is issued by a U.S. district court or other court of competent jurisdiction; or

(c) \* \* \*

(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 final administrative determination pursuant to section 3008 of RCRA that the owner or operator has failed to perform post-closure care in accordance with the approved 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.

(d) \* \* \*

(9) Following a final administrative determination pursuant to Section 3008 of RCRA that the owner or operator has failed to perform post-closure care in accordance with the approved post-



closure plan and other permit requirements, the Regional Administrator may draw on the letter of credit.

(e) \* \* \*

(5) An owner or operator or any other person authorized to conduct post-closure care may request reimbursements for post-closure care expenditures by submitting itemized bills to the Regional Administrator. Within 60 days after receiving bills for post-closure care activities, the Regional Administrator will instruct the insurer to make reimbursements in those amounts as the Regional Administrator specifies in writing, if the Regional Administrator determines that the post-closure care expenditures are in accordance with the approved post-closure plan or otherwise justified. If the Regional Administrator does not instruct the insurer to make such reimbursements, he will provide the owner or operator with a detailed written statement of reasons.

(f) \* \* \*

(1) \* \* \*

(i) \* \* \*

(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 the current plugging and abandonment cost estimates; 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 and the current plugging and abandonment cost estimates.

(ii) \* \* \*

(B) Tangible net worth at least six times the sum of the current closure and post-closure cost estimates and the current plugging and abandonment cost estimates; 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 and the current plugging and abandonment 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)). The phrase "current plugging and abandonment 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 (§ 144.70(f) of this Title).

(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 the post-closure care period has been completed for a hazardous waste disposal unit in accordance with the approved plan, the Regional Administrator will notify the owner or operator that he is no longer required to maintain financial assurance for post-closure care of that unit, unless the Regional Administrator has reason to believe that post-closure care has not been in accordance with the approved post-closure plan. The Regional Administrator shall provide the owner or operator with a detailed written statement of any such reason to believe that post-closure care has not been in accordance with the approved post-closure plan.

6. In § 264.147, paragraph (e) is revised to read as follows:

§ 264.147 Liability requirements.

(e) Period of coverage. Within 60 days after receiving certifications from the owner or operator and an independent registered professional engineer that final closure has been completed in accordance with the approved closure plan, the Regional Administrator will notify the owner or operator in writing that he is no longer required by this Section to maintain liability coverage for that facility, unless the Regional Administrator has reason to believe that closure has not been in accordance with the approved closure plan.

7. In § 264.151 paragraph (b) is revised and paragraphs (f)(5) and (g)(5) are added to read as follows:

§ 264.151 Wording of the Instruments.

(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 a 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 a final order to begin closure is issued by an EPA Regional Administrator or a U.S. district court or other court of competent jurisdiction,

(f) \* \* \*

(5) This firm is the owner or operator of the following UIC facilities for which financial assurance for plugging and abandonment is required under Part 144. The current closure cost estimates as required by 40 CFR 144.62 are shown for each facility:

(g) \* \* \*

(5) This firm is the owner or operator of the following UIC facilities for which financial assurance for plugging and

abandonment is required under Part 144. The current closure cost estimates as required by 40 CFR 144.62 are shown for each facility:

\* \* \* \* \*

**PART 265—STANDARDS FOR OWNERS AND OPERATORS OF HAZARDOUS WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITIES**

40 CFR Part 265 is amended as follows:

1. The authority citation for Part 265 continues to read as follows:

Authority: Secs. 1006, 2002(a), 3004, 3005 and 3015 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 6935).

2. In 40 CFR Part 265 Subpart G, §§ 265.110–265.120 are revised as follows:

**Subpart G—Closure and Post-Closure**

- 265.110 Applicability.
- 265.111 Closure performance standard.
- 265.112 Closure plan; amendment of plan.
- 265.113 Closure; time allowed for closure.
- 265.114 Disposal or decontamination of equipment, structures and soils.
- 265.115 Certification of closure.
- 265.116 Survey plat.
- 265.117 Post-closure care and use of property.
- 265.118 Post-closure plan; amendment of plan.
- 265.119 Post-closure notices.
- 265.120 Certification of completion of post-closure care.

**Subpart G—Closure and Post-Closure**

**§ 265.110 Applicability.**

Except as § 265.1 provides otherwise:

(a) Sections 265.111–265.115 (which concern closure) apply to the owners and operators of all hazardous waste management facilities; and

(b) Sections 265.116–265.120 (which concern post-closure care) apply to the owners and operators of:

(1) All hazardous waste disposal facilities; and

(2) Waste piles and surface impoundments for 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 §§ 265.228 or 265.258.

**§ 265.111 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 protect human health and the environment, post-

closure escape of hazardous waste, hazardous constituents, leachate, contaminated run-off, or hazardous waste decomposition products to the ground or surface waters or to the atmosphere, and

(c) Complies with the closure requirements of this Subpart including, but not limited to, the requirements of §§ 265.197, 265.228, 265.258, 265.280, 265.310, 265.351, 265.381 and 265.404.

**§ 265.112 Closure plan; amendment of plan.**

(a) *Written plan.* By May 19, 1981, the owner or operator of a hazardous waste management facility must have a written closure plan. Until final closure is completed and certified in accordance with § 265.115, a copy of the most current plan must be furnished to the Regional Administrator upon request, including request by mail. In addition, for facilities without approved plans, it must also be provided during site inspections, on the day of inspection, to any officer, employee or representative of the Agency who is duly designated by the Administrator.

(b) *Content of plan.* The plan must identify steps necessary to perform partial and/or final closure of the facility at any point during its active life. The closure plan must include, at least:

(1) A description of how each hazardous waste management unit at the facility will be closed in accordance with § 265.111; and

(2) A description of how final closure of the facility will be conducted in accordance with § 265.111. The description must identify the maximum extent of the operation which will be unclosed during the active life of the facility; and

(3) An estimate of the maximum inventory of hazardous wastes ever on-site over the active life of the facility and a detailed description of the methods to be used during partial and final closure, including, but not limited to methods for removing, transporting, treating, storing or disposing of all hazardous waste, identification of and the type(s) of off-site hazardous waste management unit(s) to be used, if applicable; and

(4) A detailed description of the steps needed to remove or decontaminate all hazardous waste residues and contaminated containment system components, equipment, structures, and soils during partial and final closure including, but not limited to, procedures for cleaning equipment and removing contaminated soils, methods for sampling and testing surrounding soils, and criteria for determining the extent of

decontamination necessary to satisfy the closure performance standard; and

(5) A detailed description of other activities necessary during the partial and final closure period to ensure that all partial closures and final closure satisfy the closure performance standards, including, but not limited to, ground-water monitoring, leachate collection, and run-on and run-off control; and

(6) A schedule for closure of each hazardous waste management unit and for final closure of the facility. The schedule must include, at a minimum, the total time required to close each hazardous waste management unit and the time required for intervening closure activities which will allow tracking of the progress of partial and final closure. (For example, in the case of a landfill unit, estimates of the time required to treat or dispose of all hazardous waste inventory and of the time required to place a final cover must be included.); and

(7) An estimate of the expected year of final closure for facilities that use trust funds to demonstrate financial assurance under §§ 265.143 or 265.145 and whose remaining operating life is less than twenty years, and for facilities without approved closure plans.

(c) *Amendment of plan.* The owner or operator may amend the closure plan at any time prior to the notification of partial or final closure of the facility. An owner or operator with an approved closure plan must submit a written request to the Regional Administrator to authorize a change to the approved closure plan. The written request must include a copy of the amended closure plan for approval by the Regional Administrator.

(1) The owner or operator must amend the closure plan whenever:

(i) Changes in operating plans or facility design affect the closure plan, or

(ii) There is a change in the expected year of closure, if applicable, or

(iii) In conducting partial or final closure activities, unexpected events require a modification of the closure plan.

(2) The owner or operator must amend the closure plan at least 60 days prior to the proposed change in facility design or operation, or no later than 60 days after an unexpected event has occurred which has affected the closure plan. If an unexpected event occurs during the partial or final closure period, the owner or operator must amend the closure plan no later than 30 days after the unexpected event. These provisions also apply to owners or operators of surface impoundments and waste piles who

intended to remove all hazardous wastes at closure, but are required to close as landfills in accordance with § 265.310.

(3) An owner or operator with an approved closure plan must submit the modified plan to the Regional Administrator at least 60 days prior to the proposed change in facility design or operation, or no more than 60 days after an unexpected event has occurred which has affected the closure plan. If an unexpected event has occurred during the partial or final closure period, the owner or operator must submit the modified plan no more than 30 days after the unexpected event. These provisions also apply to owners or operators of surface impoundments and waste piles who intended to remove all hazardous wastes at closure but are required to close as landfills in accordance with § 265.310. If the amendment to the plan is a major modification according to the criteria in § 270.41 and § 270.42, the modification to the plan will be approved according to the procedures in § 265.112(d)(4).

(4) The Regional Administrator may request modifications to the plan under the conditions described in paragraph (c)(1) of this Section. An owner or operator with an approved closure plan must submit the modified plan within 60 days of the request from the Regional Administrator, or within 30 days if the unexpected event occurs during partial or final closure. If the amendment is considered a major modification according to the criteria in §§ 270.41 and 270.42, the modification to the plan will be approved in accordance with the procedures in § 265.112(d)(4).

*(d) Notification of partial closure and final closure.*

(1) The owner or operator must submit the closure plan to the Regional Administrator at least 180 days prior to the date on which he expects to begin closure of the first surface impoundment, waste pile, land treatment, or landfill unit, or final closure if it involves such a unit, whichever is earlier. The owner or operator must submit the closure plan to the Regional Administrator at least 45 days prior to the date on which he expects to begin final closure of a facility with only tanks, container storage, or incinerator units. Owners or operators with approved closure plans must notify the Regional Administrator in writing at least 60 days prior to the date on which he expects to begin closure of a surface impoundment, waste pile, landfill, or land treatment unit, or final closure of a facility involving such a unit. Owners and operators with approved closure plans

must notify the Regional Administrator in writing at least 45 days prior to the date on which he expects to begin final closure of a facility with only tanks, container storage, or incinerator units.

(2) The date when he "expects to begin closure" must be either within 30 days after the date on which any hazardous waste management unit receives the known final volume of hazardous wastes or, if there is a reasonable possibility that the hazardous waste management unit will receive additional hazardous wastes, no later than one year after the date on which the unit received the most recent volume of hazardous waste. If the owner or operator of a hazardous waste management unit can demonstrate to the Regional Administrator that the hazardous waste management unit or facility has the capacity to receive additional hazardous wastes and he has taken, and will continue to take, all steps to prevent threats to human health and the environment, including compliance with all interim status requirements, the Regional Administrator may approve an extension to this one-year limit.

(3) The owner or operator must submit his closure plan to the Regional Administrator no later than 15 days after:

(i) Termination of interim status except when a permit is issued simultaneously with termination of interim status; or

(ii) Issuance of a judicial decree or final order under Section 3008 of RCRA to cease receiving hazardous wastes or close.

(4) 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 to the plan no later than 30 days from 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 he shall provide the owner or operator with a detailed written statement of reasons for the refusal and the owner or operator must modify the plan or submit a new plan for approval within 30 days

after receiving such written statement. 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 must assure that the approved plan is consistent with §§ 265.111 through 265.115 and the applicable requirements of §§ 265.90 *et seq.*, 265.197, 265.228, 265.258, 265.280, 265.310, 265.351, 265.381, and 265.404. A copy of the modified plan with a detailed statement of reasons for the modifications must be mailed to the owner or operator.

(e) *Removal of wastes and decontamination or dismantling of equipment.* Nothing in this section shall preclude the owner or operator from removing hazardous wastes and decontaminating or dismantling equipment in accordance with the approved partial or final closure plan at any time before or after notification of partial or final closure.

**§ 265.113 Closure; time allowed for closure.**

(a) Within 90 days after receiving the final volume of hazardous wastes at a hazardous waste management unit or facility, or within 90 days after approval of the closure plan, whichever is later, the owner or operator must treat, remove from the unit or facility, 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 hazardous waste management unit or facility has the capacity to receive additional hazardous wastes; and

(B) There is a reasonable likelihood that he or another person will recommence operation of the hazardous waste management unit or the facility within one year; and

(C) Closure of the hazardous waste management unit or 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, including compliance with all applicable interim status requirements.

(b) The owner or operator must complete partial and final closure activities in accordance with the approved closure plan and within 180 days after receiving the final volume of

hazardous wastes at the hazardous waste management unit or facility, or 180 days after approval of the closure plan, if that is later. The Regional Administrator may approve an extension to the closure period if the owner or operator demonstrates that:

(1) (i) The partial or final closure activities will, of necessity, take longer than 180 days to complete; or

(ii) (A) The hazardous waste management unit or facility has the capacity to receive additional hazardous wastes; and

(B) There is reasonable likelihood that he or another person will recommence operation of the hazardous waste management unit or the facility within one year; and

(C) Closure of the hazardous waste management unit or 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 not operating hazardous waste management unit or facility, including compliance with all applicable interim status requirements.

(c) The demonstrations referred to in § 265.113(a) and (b) must be made as follows: (1) The demonstrations in paragraph (a) must be made at least 30 days prior to the expiration of the 90-day period in paragraph (a); and (2) The demonstrations in paragraph (b) must be made at least 30 days prior to the expiration of the 180-day period in paragraph (b).

**§ 265.114 Disposal or decontamination of equipment, structures and soils.**

During the partial and final closure periods, all contaminated equipment, structures and soil must be properly disposed of, or decontaminated unless specified otherwise in §§ 265.228, 265.258, 265.280, or 265.310. By removing all hazardous wastes or hazardous constituents during partial and final closure, the owner or operator may become a generator of hazardous waste and must handle that hazardous waste in accordance with all applicable requirements of Part 262 of this Chapter.

**§ 265.115 Certification of closure.**

Within 60 days of completion of closure of each hazardous waste surface impoundment, waste pile, land treatment, and landfill unit, and within 60 days of completion of final closure, the owner or operator must submit to the Regional Administrator, by registered mail, a certification that the hazardous waste management unit or facility, as applicable, has been closed in accordance with the specifications in

the approved closure plan. The certification must be signed by the owner or operator and by an independent registered professional engineer. Documentation supporting the independent registered professional engineer's certification must be furnished to the Regional Administrator upon request until he releases the owner or operator from the financial assurance requirements for closure under § 265.143(h).

**§ 265.116 Survey plat.**

No later than the submission of the certification of closure of each hazardous waste disposal unit, an 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 survey plat indicating the location and dimensions of landfill cells or other hazardous waste disposal units 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 hazardous waste disposal unit in accordance with the applicable Subpart C regulations.

**§ 265.117 Post-closure care and use of property.**

(a)(1) Post-closure care for each hazardous waste management unit subject to the requirements of §§ 265.117-265.120 must begin after completion of closure of the unit and continue for 30 years after that date. It 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) Any time preceding closure of a hazardous waste management unit subject to post-closure care requirements or final closure, or any time during the post-closure period for a particular hazardous waste disposal unit, the Regional Administrator may:

(i) Shorten the post-closure care period applicable to the hazardous waste management unit, or facility, if all disposal units have been closed, if he finds that the reduced period is sufficient to protect human health and the environment (e.g., leachate or ground-water monitoring results,

characteristics of the hazardous waste, application of advanced technology, or alternative disposal, treatment, or re-use techniques indicate that the hazardous waste management unit or facility is secure); or

(ii) Extend the post-closure care period applicable to the hazardous waste management unit or facility, if he finds that the extended period is necessary to protect human health and the environment (e.g., leachate or ground-water monitoring results indicate a potential for migration of hazardous wastes at levels which may be harmful to human health and the environment).

(b) The Regional Administrator may require, at partial and final closure, continuation of any of the security requirements of § 265.14 during part or all of the post-closure period when:

(1) Hazardous wastes may remain exposed after completion of partial or final 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 partial or final closure must never be allowed to disturb the integrity of the final cover, liner(s), or any other components of the 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 § 265.118.

**§ 265.118 Post-closure plan; amendment of plan.**

(a) *Written plan.* By May 19, 1981, the owner or operator of a hazardous waste disposal unit must have a written post-closure plan. An owner or operator of a surface impoundment or waste pile that intends to remove all hazardous wastes at closure must prepare a post-closure plan and submit it to the Regional Administrator within 90 days of the date that the owner or operator or Regional Administrator determines that the hazardous waste management unit or facility must be closed as a landfill, subject to the requirements of §§ 265.117-265.120.

(b) Until final closure of the facility, a copy of the most current post-closure

plan must be furnished to the Regional Administrator upon request, including request by mail. In addition, for facilities without approved post-closure plans, it must also be provided during site inspections, on the day of inspection, to any officer, employee or representative of the Agency who is duly designated by the Administrator. After final closure has been certified, the person or office specified in § 265.118(c)(3) must keep the approved post-closure plan during the post-closure period.

(c) For each hazardous waste management unit subject to the requirements of this Section, the post-closure plan must identify the activities that will be carried on after closure of each disposal unit 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; and

(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 systems in accordance with the requirements of Subparts K, L, M, and N of this Part; and

(ii) The function of the 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 hazardous waste disposal unit or facility during the post-closure care period.

(d) *Amendment of plan.* The owner or operator may amend the post-closure plan any time during the active life of the facility or during the post-closure care period. An owner or operator with an approved post-closure plan must submit a written request to the Regional Administrator to authorize a change to the approved plan. The written request must include a copy of the amended post-closure plan for approval by the Regional Administrator.

(1) The owner or operator must amend the post-closure plan whenever:

(i) Changes in operating plans or facility design affect the post-closure plan, or

(ii) Events which occur during the active life of the facility, including partial and final closures, affect the post-closure plan.

(2) The owner or operator must amend the post-closure plan at least 60 days prior to the proposed change in facility design or operation, or no later than 60 days after an unexpected event has

occurred which has affected the post-closure plan.

(3) An owner or operator with an approved post-closure plan must submit the modified plan to the Regional Administrator at least 60 days prior to the proposed change in facility design or operation, or no more than 60 days after an unexpected event has occurred which has affected the post-closure plan. If an owner or operator of a surface impoundment or a waste pile who intended to remove all hazardous wastes at closure in accordance with §§ 265.228(b) or 265.258(a) is required to close as a landfill in accordance with § 265.310, the owner or operator must submit a post-closure plan within 90 days of the determination by the owner or operator or Regional Administrator that the unit must be closed as a landfill. If the amendment to the post-closure plan is a major modification according to the criteria in §§ 270.41 and 270.42, the modification to the plan will be approved according to the procedures in § 265.118(f).

(4) The Regional Administrator may request modifications to the plan under the conditions described in above paragraph (d)(1). An owner or operator with an approved post-closure plan must submit the modified plan no later than 60 days of the request from the Regional Administrator. If the amendment to the plan is considered a major modification according to the criteria in §§ 270.41 and 270.42, the modifications to the post-closure plan will be approved in accordance with the procedures in § 265.118(f). If the Regional Administrator determines that an owner or operator of a surface impoundment or waste pile who intended to remove all hazardous wastes at closure must close the facility as a landfill, the owner or operator must submit a post-closure plan for approval to the Regional Administrator within 90 days of the determination.

(e) The owner or operator of a facility with hazardous waste management units subject to these requirements must submit his post-closure plan to the Regional Administrator at least 180 days before the date he expects to begin partial or final closure of the first hazardous waste disposal unit. The date he "expects to begin closure" of the first hazardous waste disposal unit must be either within 30 days after the date on which the hazardous waste management unit receives the known final volume of hazardous waste or, if there is a reasonable possibility that the hazardous waste management unit will receive additional hazardous wastes, no later than one year after the date on which the unit received the most recent

volume of hazardous wastes. The owner or operator must submit the post-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 final orders under Section 3008 of RCRA to cease receiving wastes or close.

(f) The Regional Administrator will provide the owner or operator and the public, through a newspaper notice, the opportunity to submit written comments on the post-closure plan and request modifications to the plan no later than 30 days from 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 post-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 he shall provide the owner or operator with a detailed written statement of reasons for the refusal and the owner or operator must modify the plan or submit a new plan for approval within 30 days after receiving such written statement. 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 ensure that the approved post-closure plan is consistent with §§ 265.117 through 265.120. A copy of the modified plan with a detailed statement of reasons for the modifications must be mailed to the owner or operator.

(g) The post-closure plan and length of the post-closure care period may be modified any time prior to 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 applicable to a hazardous waste management unit or facility 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 hazardous waste management unit or 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 ground-water monitoring results, characteristics of the wastes, 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 (e.g., leachate or ground-water monitoring results indicate a potential for migration of hazardous wastes at levels which may be harmful 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 (g)(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 applicable to a hazardous waste management unit or facility 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 (g)(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 (g)(1)(i) of this section. 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 Post-closure notices.

(a) No later than 60 days after certification of closure of each hazardous waste disposal unit, 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 other disposal unit of the facility. For hazardous wastes disposed of before January 12, 1981, the owner or operator must identify the type, location and quantity of the hazardous wastes to the best of his knowledge and in accordance with any records he has kept.

(b) Within 60 days of certification of closure of the first hazardous waste disposal unit and within 60 days of certification of closure of the last hazardous waste disposal unit, the owner or operator must:

(1) 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:

(i) The land has been used to manage hazardous wastes; and

(ii) Its use is restricted under 40 CFR Subpart G regulations; and

(iii) The survey plat and record of the type, location, and quantity of hazardous wastes disposed of within each cell or other hazardous waste disposal unit of the facility required by § 265.116 and § 265.119(a) have been filed with the local zoning authority or the authority with jurisdiction over local land use and with the Regional Administrator; and

(2) Submit a certification signed by the owner or operator that he has recorded the notation specified in paragraph (b)(1) of this Section and a

copy of the document in which the notation has been placed, to the Regional Administrator.

(c) If the owner or operator or any subsequent owner of the land upon which a hazardous waste disposal unit was located wishes to remove hazardous wastes and hazardous waste residues, the liner, if any, and all contaminated structures, equipment, and soils, he must request a modification to the approved post-closure plan in accordance with the requirements of § 265.118(g). The owner or operator must demonstrate that the removal of hazardous wastes will satisfy the criteria of § 265.117(c). By removing hazardous waste, the owner or operator may become a generator of hazardous waste and must manage it in accordance with all applicable requirements of this Chapter. If the owner or operator is granted approval to conduct the removal activities, the owner or operator may request that the Regional Administrator approve either:

(1) The removal of the notation on the deed to the facility property or other instrument normally examined during title search, or

(2) The addition of a notation to the deed or instrument indicating the removal of the hazardous waste.

#### § 265.120 Certification of completion of post-closure care.

No later than 60 days after the completion of the established post-closure care period for each hazardous waste disposal unit, the owner or operator must submit to the Regional Administrator, by registered mail, a certification that the post-closure care period for the hazardous waste disposal unit was performed in accordance with the specifications in the approved post-closure plan. The certification must be signed by the owner or operator and an independent registered professional engineer. Documentation supporting the independent registered professional engineer's certification must be furnished to the Regional Administrator upon request until he releases the owner or operator from the financial assurance requirements for post-closure care under § 265.145(h).

#### Subpart H—Financial Requirements

40 CFR Part 265 Subpart H is amended as follows:

1. In § 265.140, paragraph (a) is revised as follows:

#### § 265.140 Applicability.

(a) The requirements of §§ 265.142, 265.143 and 265.147 through 265.150 apply to owners or operators of all

hazardous waste facilities, except as provided otherwise in this section or in § 265.1.

2. In 40 CFR § 265.141, the following term is added to paragraph (f) in alphabetical order:

§ 265.141 [Amended]

(f) \* \* \*  
"Current plugging and abandonment cost estimate" means the most recent of the estimates prepared in accordance with § 144.62(a), (b), and (c) of this Title.

3. In § 265.142, paragraphs (a) and the introductory text of paragraph (b), and paragraph (c) are revised. Paragraphs (b)(i) and (b)(ii) are correctly designated as paragraphs (b)(1) and (b)(2), respectively.

§ 265.142 Cost estimate for closure.

(a) The owner or operator must have a detailed written estimate, in current dollars, of the cost of closing the facility in accordance with the requirements in §§ 265.111-265.115 and applicable closure requirements of §§ 265.178, 265.197, 265.228, 265.258, 265.280, 265.310, 265.351, 265.381 and 265.404.

(1) The estimate must equal the cost of final closure at the point in the facility's active life when the extent and manner of its operation would make closure the most expensive, as indicated by its closure plan (see § 265.112(b)); and

(2) The closure cost estimate must be based on the costs to the owner or operator of hiring a third party to close the facility. A third party is a party who is neither a parent nor a subsidiary of the owner or operator. (See definition of parent corporation in § 265.141(d).) The owner or operator may use costs for on-site disposal if he can demonstrate that on-site disposal capacity will exist at all times over the life of the facility.

(3) The closure cost estimate may not incorporate any salvage value that may be realized by the sale of hazardous wastes, facility structures or equipment, land or other facility assets at the time of partial or final closures.

(4) The owner or operator may not incorporate a zero cost for hazardous waste that might have economic value.

(b) During the active life of the facility, the owner or operator must adjust the closure cost estimate for inflation within 60 days prior to the anniversary date of the establishment of the financial instrument(s) used to comply with § 265.143. For owners and operators using the financial test or corporate guarantee, the closure cost estimate must be updated for inflation within 30 days after the close of the

firm's fiscal year and before submission of updated information to the Regional Administrator as specified in § 265.143(e)(3). The adjustment may be made by recalculating the closure cost estimate in current dollars, or by using an inflation factor derived from the most recent Implicit Price Deflator for Gross National Product published by the U.S. Department of Commerce in its *Survey of Current Business*, as specified in paragraphs (b)(1) and (b)(2) of this section. The inflation factor is the result of dividing the latest published annual Deflator by the Deflator for the previous year.

(c) During the active life of the facility, the owner or operator must revise the closure cost estimate no later than 30 days after a revision has been made to the closure plan which increases the cost of closure. If the owner or operator has an approved closure plan, the closure cost estimate must be revised no later than 30 days after the Regional Administrator has approved the request to modify the closure plan, if the 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).

4. In § 265.143, paragraphs (a)(10), (b)(4)(ii), (c)(8), (d)(5), (e)(1)(i)(B), (e)(1)(i)(D), (e)(1)(ii)(B), (e)(1)(ii)(D), (e)(2), and (h) are revised as follows:

§ 265.143 Financial assurance for closure.

(a) \* \* \*  
(10) After beginning partial or final closure, an owner or operator or another person authorized to conduct partial or final closure may request reimbursements for partial or final closure expenditures by submitting itemized bills to the Regional Administrator. The owner or operator may request reimbursements for partial closure only if sufficient funds are remaining in the trust fund to cover the maximum costs of closing the facility over its remaining operating life. No later than 60 days after receiving bills for partial or final closure activities, the Regional Administrator will instruct the trustee to make reimbursements in those amounts as the Regional Administrator specifies in writing, if the Regional Administrator determines that the partial or final closure expenditures are in accordance with the approved closure plan, or otherwise justified. If the Regional Administrator has reason to believe that the maximum cost of closure over the remaining life of the facility will be significantly greater than

the value of the trust fund, he may withhold reimbursements 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 final closure of the facility. If the Regional Administrator does not instruct the trustee to make such reimbursements, he will provide to the owner or operator a detailed written statement of reasons.

(b) \* \* \*

(4) \* \* \*

(ii) Fund the standby trust fund in an amount equal to the penal sum within 15 days after an administrative order to begin final closure issued by the Regional Administrator becomes final, or within 15 days after an order to begin final closure is issued by a U.S. district court or other court of competent jurisdiction; or

(c) \* \* \*

(8) Following a final administrative determination pursuant to Section 3008 of RCRA that the owner or operator has failed to perform final closure in accordance with the approved closure plan when required to do so, the Regional Administrator may draw on the letter of credit.

(d) \* \* \*

(5) After beginning partial or final closure, an owner or operator or any other person authorized to conduct closure may request reimbursements for closure expenditures by submitting itemized bills to the Regional Administrator. The owner or operator may request reimbursements for partial closure only if the remaining value of the policy is sufficient to cover the maximum costs of closing the facility over its remaining operating life. Within 60 days after receiving bills for closure activities, the Regional Administrator will instruct the insurer to make reimbursements in such amounts as the Regional Administrator specifies in writing if the Regional Administrator determines that the partial or final closure expenditures are in accordance with the approved closure plan or otherwise justified. If the Regional Administrator has reason to believe that the maximum cost of closure over the remaining life of the facility 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 final closure of the particular facility. If the Regional Administrator does not instruct the insurer to make such reimbursements, he will provide to the owner or operator a detailed written statement of reasons.

- (e) \* \* \*
- (1) \* \* \*
- (i) \* \* \*

(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 the current plugging and abandonment cost estimates; and

(D) Assets located in the United States amounting to at least 90 percent of total assets or at least six times the sum of the current closure and post-closure cost estimates and the current plugging and abandonment cost estimates.

- (ii) \* \* \*

(B) Tangible net worth at least six times the sum of the current closure and post-closure cost estimates and the current plugging and abandonment cost estimates; and

(D) Assets located in the United States amounting to at least 90 percent of total assets or at least six times the sum of the current closure and post-closure cost estimates and the current plugging and abandonment 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)). The phrase "current plugging and abandonment 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 (§ 144.70(f) of this Title).

(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 final closure has been completed in accordance with the approved 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 final closure of the facility, unless the Regional Administrator has reason to believe that

final closure has not been in accordance with the approved closure plan. The Regional Administrator shall provide the owner or operator a detailed written statement of any such reason to believe that closure has not been in accordance with the approved closure plan.

5. In § 265.144, paragraphs (a), introductory text of (b) and (c) are revised to read as follows:

**§ 265.144 Cost estimate for post-closure care.**

(a) The owner or operator of a hazardous waste disposal unit must have a detailed 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 §§ 265.117-265.120, 265.228, 265.258, 265.280, and 265.310.

(1) The post-closure cost estimate must be based on the costs to the owner or operator of hiring a third party to conduct post-closure care activities. A third party is a party who is neither a parent nor subsidiary of the owner or operator. (See definition of parent corporation in § 265.141(d).)

(2) 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 § 265.117.

(b) During the active life of the facility, the owner or operator must adjust the post-closure cost estimate for inflation within 60 days prior to the anniversary date of the establishment of the financial instrument(s) used to comply with § 265.145. For owners or operators using the financial test or corporate guarantee, the post-closure care cost estimate must be updated for inflation no later than 30 days after the close of the firm's fiscal year and before submission of updated information to the Regional Administrator as specified in § 265.145(d)(5). The adjustment may be made by recalculating the post-closure cost estimate in current dollars or by using an inflation factor derived from the most recent Implicit Price Deflator for Gross National Product published by the U.S. Department of Commerce in its *Survey of Current Business* as specified in § 265.145 (b)(1) and (b)(2). The inflation factor is the result of dividing the latest published annual Deflator by the Deflator for the previous year.

(c) During the active life of the facility, the owner or operator must revise the post-closure cost estimate no later than 30 days after a revision to the post-closure plan which increases the cost of

post-closure care. If the owner or operator has an approved post-closure plan, the post-closure cost estimate must be revised no later than 30 days after the Regional Administrator has approved the request to modify the plan, if the 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).

4. In § 265.145, the introductory paragraph and paragraphs (a)(11), (b)(4)(ii), (c)(9), (d)(5), (e)(1)(i)(B), (e)(1)(i)(D), (e)(1)(ii)(B), (e)(1)(ii)(D), (e)(2), and (h) are revised as follows:

**§ 265.145 Financial assurance for post-closure care.**

By the effective date of these regulations, an owner or operator of a facility with a hazardous waste disposal unit must establish financial assurance for post-closure care of the disposal unit(s).

- (a) \* \* \*

(11) An owner or operator or any other person authorized to conduct post-closure care may request reimbursements for post-closure expenditures by submitting itemized bills to the Regional Administrator. Within 60 days after receiving bills for post-closure care activities, the Regional Administrator will instruct the trustee to make reimbursements in those amounts as the Regional Administrator specifies in writing, if the Regional Administrator determines that the post-closure expenditures are in accordance with the approved post-closure plan or otherwise justified. If the Regional Administrator does not instruct the trustee to make such reimbursements, he will provide the owner or operator with a detailed written statement of reasons.

- (b) \* \* \*

- (4) \* \* \*

(ii) Fund the standby trust fund in an amount equal to the penal sum within 15 days after an administrative order to begin final closure issued by the Regional Administrator becomes final, or within 15 days after an order to begin final closure is issued by a U.S. district court or other court of competent jurisdiction; or

- (iii) \* \* \*

- (c) \* \* \*

(9) Following a final administrative determination pursuant to Section 3009 of RCRA that the owner or operator has failed to perform post-closure care in



accordance with the approved post-closure plan and other permit requirements, the Regional Administrator may draw on the letter of credit.

(d) \* \* \*

(5) An owner or operator or any other person authorized to perform post-closure care may request reimbursement for post-closure care expenditures by submitting itemized bills to the Regional Administrator. Within 60 days after receiving bills for post-closure care activities, the Regional Administrator will instruct the insurer to make reimbursements in those amounts as the Regional Administrator specifies in writing, if the Regional Administrator determines that the post-closure expenditures are in accordance with the approved post-closure plan or otherwise justified. If the Regional Administrator does not instruct the insurer to make such reimbursements, he will provide a detailed written statement of reasons.

(e) \* \* \*

(1) \* \* \*

(i) \* \* \*

(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 the current plugging and abandonment cost estimates; 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 and the current plugging and abandonment cost estimates.

(ii) \* \* \*

(B) Tangible net worth at least six times the sum of the current closure and post-closure cost estimates and the current plugging and abandonment cost estimates; 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 and the current plugging and abandonment 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)). The phrase "current plugging and abandonment 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 (§ 144.70(f) of this Title).

(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 the post-closure care period has been completed in accordance with the approved post-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 post-closure care of that unit, unless the Regional Administrator has reason to believe that post-closure care has not been in accordance with the approved post-closure plan. The Regional Administrator will provide the owner or operator a detailed written statement of any such reason to believe that post-closure care has not been in accordance with the approved post-closure plan.

7. In § 265.147, paragraph (e) is revised to read as follows:

#### § 265.147 Liability Requirements.

(e) *Period of coverage.* Within 60 days after receiving certifications from the owner or operator and an independent registered professional engineer that final closure has been completed in accordance with the approved closure plan, the Regional Administrator will notify the owner or operator in writing that he is no longer required by this Section to maintain liability coverage for that facility, unless the Regional Administrator has reason to believe that closure has not been in accordance with the approved closure plan.

#### PART 270—EPA ADMINISTERED PERMIT PROGRAMS: THE HAZARDOUS WASTE PERMIT PROGRAM

1. The authority citation for Part 270 continues to read as follows:

Authority: Secs. 1006, 2002, 3005, 3007, 3019, 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, 6939, and 6974).

#### Subpart B—Permit Application

40 CFR Part 270 Subpart B is amended as follows:

2. In § 270.14, paragraphs (b)(14), (15) and (16) are revised to read as follows:

#### § 270.14 Contents of Part B application: General requirements.

(b) \* \* \*

(14) For hazardous waste disposal units that have been closed, documentation that notices required under § 264.119 have been filed.

(15) The most recent closure cost estimate for the facility prepared in accordance with § 264.142 and a copy of the documentation required to demonstrate financial assurance under § 264.143. For a new facility, a copy of the required documentation may be submitted 60 days prior to the initial receipt of hazardous wastes, if that is later than the submission of the Part B.

(16) Where applicable, the most recent post-closure cost estimate for the facility prepared in accordance with § 264.144 plus a copy of the documentation required to demonstrate financial assurance under § 264.145. For a new facility, a copy of the required documentation may be submitted 60 days prior to the initial receipt of hazardous wastes, if that is later than the submission of the Part B.

3. In § 270.42, paragraph (d) is revised to read as follows:

#### § 270.42 Minor modifications of permits.

(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 between the current and new permittees has been submitted to the Director. Changes in the ownership or operational control of a facility may be made if the new owner or operator submits a revised 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 264, Subpart H (Financial Requirements), until the new owner or operator has demonstrated to the Director that he is complying with the requirements of that Subpart. The new owner or operator must demonstrate compliance with Subpart H requirements within six months of the date of the change in the ownership or operational control of the facility. Upon demonstration to the Director by the new owner or operator of compliance with Subpart H, the Director shall notify the old owner or operator in writing that he no longer needs to comply with

Subpart H as of the date of demonstration.

\* \* \* \* \*

4. In § 270.72, paragraph (d) is revised to read as follows:

**§ 270.72 Changes during interim status.**

\* \* \* \* \*

(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 265, Subpart H (Financial Requirements), until the new owner or operator has demonstrated to the Director that he is complying with the requirements of that Subpart. The new owner or operator must demonstrate compliance with Subpart H requirements within six months of the date of the change in the ownership or operational control of the facility. Upon demonstration to the Director by the

new owner or operator of compliance with Subpart H, the Director shall notify the old owner or operator in writing that he no longer needs to comply with Subpart H as of the date of demonstration. All other interim status duties are transferred effective immediately upon the date of the change of ownership or operational control of the facility.

\* \* \* \* \*

[FR Doc. 86-6368 Filed 5-1-86; 8:45 am]

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Wednesday  
May 28, 1986

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Part VI

Environmental  
Protection Agency

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40 CFR Part 261  
Hazardous Waste Management System;  
Identification and Listing of Hazardous  
Waste; Final Rule

**ENVIRONMENTAL PROTECTION  
AGENCY**
**40 CFR Part 261**
**[FRL-2992-9]**
**Hazardous Waste Management  
System; Identification and Listing of  
Hazardous Waste**
**AGENCY:** Environmental Protection  
Agency.

**ACTION:** Final rule.

**SUMMARY:** The U.S. Environmental Protection Agency (EPA) is today amending the regulations for hazardous waste management under the Resource Conservation and Recovery Act by clarifying that the listing for spent pickle liquor from steel finishing operations (EPA Hazardous Waste No. K062) applies only to wastes generated by iron and steel facilities. The Agency is taking this action in response to a rulemaking petition submitted by four porcelain enamel companies and in response to comments received on a notice of proposed rulemaking challenging the Agency's interpretation of the scope of the listing. The effect of this amendment is to grant the rulemaking petition by confirming that the listing applies only to those persons who produce iron and steel. Thus, spent acids from other steel finishing operations would be considered hazardous only if they exhibit one or more of the hazardous waste characteristics.

**DATE:** Final rule is effective May 28, 1986.

**ADDRESS:** The public docket for this final rule is located at the U.S. Environmental Protection Agency, RCRA docket (Sub-basement) 401 M Street SW., Washington, DC 20460. The docket is open from 9:30 a.m. to 3:30 p.m.; Monday through Friday, except for Federal holidays. The public must make an appointment to review docket materials. The public may copy a maximum of 50 pages of material from any one regulatory docket at no cost. Additional copies cost \$.20/page.

**FOR FURTHER INFORMATION CONTACT:** RCRA Hotline, toll free at (800) 424-9346 or (202) 382-3000. For technical information contact Jacqueline Sales, Office of Solid Waste (WH-562B), U.S. Environmental Protection Agency, 401 M Street, SW., Washington, DC 20460, (202) 382-4770.

**I. Supplementary Information**
**A. Background**

On February 6, 1985, several porcelain enamel companies—the Hobart Corporation, Maytag Corporation, Magic

Chef, Inc., and State Industries—filed a rulemaking petition with EPA requesting that the listing description for "Spent pickle liquor from steel finishing operations" (40 CFR 261.32—EPA Hazardous Waste No. K062) be amended or clarified to indicate that the listing applies only to spent pickle liquor generated by the iron and steel industry. The listing appears in the rules under the heading of "Waste From Specific Sources," and from the "Iron and Steel" industry. In response to this rulemaking petition, the Agency published in the Federal Register a notice which made available to the public both the Agency and industry interpretations of the scope of the existing listing (see Notice of Proposed Rulemaking and Request for Comments and Data, 50 FR 36966, September 10, 1985, for background information and further details). The notice also indicated a variety of actions EPA might take in response to the petition, and requested comments and data relevant to these possible actions. The Agency also requested comments on how the listing is interpreted by the regulated community and data supporting industry claims that lime stabilized waste pickle liquor sludge (LSWPLS)<sup>1</sup> from non-iron and steel industries is non-hazardous.

The Agency received approximately eighty comments to the notice of proposed rulemaking. The majority of the comments were submitted by facilities involved in porcelain enameling and galvanizing. The comments are summarized below.

**B. Summary Of Comments On Notice  
Of Proposed Rulemaking**

The majority of the commenters strongly supported the petitioners' claim that the plain language of the listing for spent pickle liquor from steel finishing operations (EPA Hazardous Waste No. K062) indicates that the listing applies only to facilities within the iron and steel industry, and that the background document to the listing supports this interpretation, since it presents data only from the iron and steel industry. The petitioners argued that the background document repeatedly refers to "mills" and "integrated steel plants," while no discussion was included for any other industry.

In the notice, EPA requested commenters to explain why so many non-iron and steel facilities appeared to have acted as if the listing applied to

them. The commenters stated that there was no significance that many facilities other than iron and steel initially notified as generating "spent pickle liquor" because these were protective filings. Some commenters indicated that Agency officials advised them to notify EPA if there were any questions regarding the regulatory status of their waste to ensure that they did not lose interim status.<sup>2</sup> (In addition, all of these persons were required to notify in any event since the waste is hazardous by virtue of its corrosivity.)

Several commenters from the hot dip galvanizing industry stated that pickle liquor generated from their process does not meet the listing description because chromium and lead are typically present in these wastes in concentrations well below the maximum permissible leachate concentrations as defined by the EP toxicity test.<sup>3</sup> They believe that spent pickle liquor generated from hot dip galvanizing should be classified as a hazardous waste only because of its corrosivity. In fact, EP toxicity data (for LSWPLS) was submitted by several commenters within the hot dip galvanizing industry (as well as several porcelain enameling companies). One commenter submitted EP toxicity data on sludge resulting from the hydroxide precipitation of spent pickle liquor. All data demonstrated that hexavalent chromium and lead, as well as the remaining EP toxic metals, were substantially below the maximum permissible leachate concentrations.

Two States likewise commented that they interpreted the listing as applying only to facilities within the iron and steel industry. One State, in particular, commented that if the Agency wished to cover additional wastes, it should specifically list non-iron and steel pickle liquor wastes as hazardous since, in the State's view, the existing listing did not apply. (These additional wastes also could exhibit a characteristic and so be subject to RCRA for that reason.) Another State, however, agreed with the Agency's interpretation that the scope of the K062 listing applies to all industries engaged in steel finishing operations. This State did not base its position on the regulatory language, but rather

<sup>2</sup> To be eligible for interim status, persons who generated, transported, treated, stored, or disposed of hazardous waste had to notify EPA of that fact by August 8, 1980, and submit a Part A permit application by November 19, 1980 (see 45 FR 33086, May 19, 1980).

<sup>3</sup> Spent pickle liquor generated from the iron and steel industry contains chromium and lead, the constituents for which the waste was originally listed, in concentrations well above the maximum permissible leachate concentrations.

<sup>1</sup> The sludge is generated by a well known technique involving lime neutralization, flocculation, clarification, and dewatering of the resultant sludge. These wastes are deemed hazardous waste by virtue of the provisions of the so-called "residue rule" (40 CFR 261.3(c)(2)).

indicated that the toxic and corrosive characteristics of spent pickle liquor are inherent in the waste itself and are not dependent upon the industry category.

Many of the commenters also stated that the reason non-iron and steel facilities did not comment on the Notice of Availability of Data published on January 4, 1984, which reiterated EPA's view of the broader scope of the listing, was because these facilities did not read the notice. They believed the notice addressed spent pickle liquor generated by the iron and steel industry—based on the regulatory language—and so it did not apply to them.

Many of the commenters further stated that EPA itself has not been consistent in its interpretation of the listing. In particular, they state that in promulgating effluent limitation guidelines and standards for the porcelain enameling industry, the Agency concluded that sludges from treatment of wastewaters (from the pickling operation) are expected to be non-hazardous under RCRA. (See EPA Development Document for Effluent Guidelines and Standards for Porcelain Enameling Point Source Categories, EPA 440/1-82/072, November 1982.) The commenters believe the Agency would not have made this statement, if it believed the waste was derived from a listed waste, and so automatically hazardous until delisted (see § 261.3(c)(2)). Moreover, the commenters argued that several EPA Regional Offices also interpreted the listing as covering only the iron and steel industry.

In summary, the great majority of commenters requested that EPA adopt the third option presented in the September 10 notice—that is, grant the relief requested by the petitioners and agree that the listing applies, and has applied, only to spent pickle liquor wastes generated by the iron and steel industry.

**II. Agency's Decision to Rulemaking Petition and Response to Comments**

The Agency believes that the petitioners (as well as the commenters responding to the notice) have a valid argument that the listing should be read to apply only to those facilities within the iron and steel industry. Upon re-evaluation, we believe that the broad interpretation taken by the Agency (*i.e.*, the scope of the listing applies to spent pickle liquor from all "steel finishing operations") is not supported by the rulemaking record; rather, a more correct reading of the scope of the listing would apply only to spent acids generated by iron and steel facilities. Many of the arguments put forth by the

petitioners (as well as the commenters to the notice) provide the basis for EPA's re-interpretation, including:

- the plain language of the listing as well as the fact that the listing was put in 40 CFR 261.32 (Wastes From Specific Sources under the sub-heading "Iron and Steel") suggests that it should apply only to the iron and steel industry;
- the background document to the listing supports the narrower interpretation, since it addresses spent acid and LSWPLS generated from the iron and steel industry;
- notification under section 3010 of RCRA from a diverse group of industry categories is not a valid basis for taking a broader interpretation since most of these were protective filings.

Although the Agency has been consistent in its interpretation with regard to the spent pickle liquor listing in processing delisting petitions, we must go back to the rulemaking record on which the listing is based. When this is done, the scope of the listing should be read to apply only to those facilities within the iron and steel industry.

Therefore, in light of the comments received and arguments made, the Agency has decided to modify its interpretation and narrow the scope of the spent pickle liquor listing to apply only to those facilities within the iron and steel industry. To clarify this point, the Agency has decided to clarify that the listing applies in the narrow manner urged by the petitioners. To eliminate any confusion, we are amending the regulatory language for EPA Hazardous Waste No. K062 to read as follows:

"Spent pickle liquor generated by steel finishing operations of plants that produce iron and steel."

Thus, we are granting the rulemaking petition submitted by the Hobart Corporation, the Maytag Corporation, Magic Chef, Inc., and State Industries.

As a practical matter, this means that any spent pickle liquor generated by non-iron and steel industries would be hazardous only if it exhibits one or more of the characteristics of hazardous waste (*i.e.*, ignitability, corrosivity, reactivity, and extraction procedure (EP) toxicity). In addition, this interpretation will be retroactive to the date that the listing was promulgated (*i.e.*, the Agency now believes that the listing's scope was always limited). Based on the comments received, this pickle liquor would probably still be hazardous because it exhibits the characteristics of corrosivity and/or EP toxicity. Thus, the waste spent acid itself remains subject to the applicable RCRA management standards. Likewise, any residue derived from the treatment of this spent pickle liquor (for example, lime stabilized waste pickle liquor sludge)

would be hazardous if it exhibits one or more of the hazardous waste characteristics.<sup>4</sup> Consequently, any person who generates these residues would not need to go through the delisting procedures under 40 CFR §§ 260.20 and 260.22, unless these residues are mixed with other listed hazardous wastes or are derived from listed wastes. As a result, the following "generator-specific" delisting petitions submitted to the Agency to exclude this waste will become moot by today's rule.

Petition No.	Name	City	State
0338	Westinghouse Electric Corp.	Winston-Salem.....	NC
0460	Steel Warehouse Co. Inc.	South Bend.....	IN
0523	All-Brite Galvanizing Co. ....	Kansas City.....	MO
0536	Wheeling-Pittsburgh Steel.	Martins Ferry.....	OH
0565	Vallay City Steel Co.....	Vallay City.....	OH
0609	Talbot Industries, Inc.	Neosho.....	MO
0610	Galvan Industries, Inc.....	Harrisburg.....	NC

**III. Effective Date**

This rule will become effective immediately. The Hazardous and Solid Waste Amendments of 1984 amended Section 3010 of RCRA to allow rules to become effective in less than six months where the regulated community does not need the six-month period to come into compliance. That is the case here since we are now interpreting our rules in a manner that will reduce the scope of the existing interpretation (*i.e.*, clarifies that under the language of the rule, these people were never covered by the spent pickle liquor listing). Since an effective date of six months after promulgation is not necessary, we believe that these rules should be effective immediately. These reasons also provide a basis for making this rule effective immediately under the Administrative Procedure Act, pursuant to 5 U.S.C. 553(d).

**IV. Regulatory Impact**

Under Executive Order 12291, EPA must judge whether a regulation is "major" and therefore subject to the requirement of a Regulatory Impact Analysis. This final regulation is not a major rule because it will not result in an effect on the economy of \$100 million or more, nor will it result in an increase in costs or prices to industry. In fact, this regulation will reduce the overall costs and economic impact of EPA's

<sup>4</sup> Limited data was presented by hot dip galvanizers, agricultural equipment manufacturers, and porcelain enamel industries. These data generally demonstrate that these sludges would leach very low levels of the toxic heavy metals, and so would not exhibit a hazardous waste characteristic.

hazardous waste management regulations. There will be no adverse impact on the ability of U.S.-based enterprises to compete with foreign based enterprises in domestic or export markets. Because this amendment is not a major rule, no Regulatory Impact Analysis is being conducted.

**V. Regulatory Flexibility Act**

Pursuant to the Regulatory Flexibility Act, 5 U.S.C. 60 *et seq.*, whenever an Agency is required to publish general notice of rulemaking for any proposed or final rule, it must prepare and make available for public comment a regulatory flexibility analysis which describes the impact of the rule on small entities (*i.e.*, small businesses, small organizations, and small governmental jurisdictions). The Administrator may certify, however, that the rule will not have a significant economic impact on a substantial number of small entities.

This amendment will have no adverse economic impact on small entities since the rule will reduce the hazardous waste requirements to those persons who

generate spent acid in non-iron and steel industries. Accordingly, I hereby certify that this regulation will not have a significant economic impact on a substantial number of small entities. This regulation does not require a regulatory flexibility analysis.

**VI. Paperwork Reduction Act**

This rule does not contain any information collection requirements subject to OMB review under the Paperwork Reduction Act of 1980, 44 U.S.C. 3501 *et seq.*

**List of Subjects in 40 CFR Part 261**

Hazardous materials, Recycling.

Dated: May 21, 1986.

Lee M. Thomas,  
*Administrator.*

For reasons set out in the preamble, 40 CFR Part 261 is amended as follows:

**PART 261—IDENTIFICATION AND LISTING OF HAZARDOUS WASTE**

1. The authority citation for Part 261 continues to read as follows:

Authority: Sections 1008, 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. Section 261.32 is amended by revising EPA Hazardous Waste No. K062 to read as follows:

**§ 261.32 Hazardous Wastes From Specific Sources.**

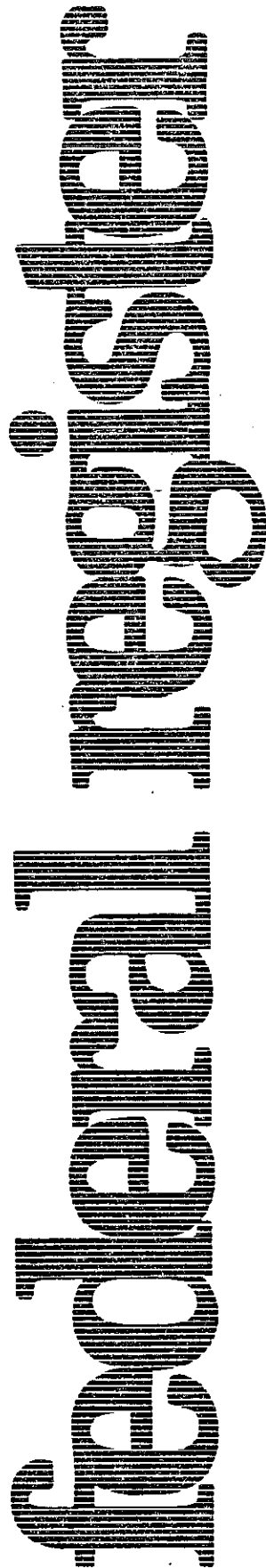
* * * * *	* * * * *	* * * * *
Industry and EPA hazardous waste No.	Hazardous waste	Hazard code
K062.....	Spent pickle liquor generated by steel finishing operations of plants that produce iron or steel.	(C,T)

[FR Doc. 86-11869 Filed 5-27-86; 8:45 am]  
BILLING CODE 6560-60-M

File: HW 1.21-4

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Friday  
July 11, 1986



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**Part IV**

**Environmental  
Protection Agency**

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**40 CFR Parts 264 and 265  
Standards Applicable to Owners and  
Operators of Hazardous Waste  
Treatment, Storage, and Disposal  
Facilities; Liability Coverage; Interim Final  
Rule**

## ENVIRONMENTAL PROTECTION AGENCY

### 40 CFR Parts 264 and 265

[SWH-FRL-3015-3]

#### Standards Applicable to Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities; Liability Coverage

**AGENCY:** Environmental Protection Agency.

**ACTION:** Interim final rule.

**SUMMARY:** On August 21, 1985 (50 FR 33902), the Environmental Protection Agency (EPA or the Agency) published a notice of proposed rulemaking to amend the financial responsibility requirements concerning liability coverage for owners and operators of hazardous waste treatment, storage, and disposal facilities (50 FR 33902). The proposal set forth several regulatory options under consideration by the Agency to provide relief for owners and operators who have encountered difficulties in obtaining insurance necessary to comply with these requirements. EPA is today amending these requirements in interim final form to allow use of one additional financial responsibility mechanism: A corporate guarantee. This action will facilitate greater compliance with the liability coverage requirements. The Agency is also requesting comments on the form of the guarantee.

**EFFECTIVE DATE:** These regulations shall become effective September 9, 1986.

**ADDRESSES:** The public must send an original and two copies of their comments on the interim final rule no later than August 11, 1986, to: EPA RCRA docket, (S-212) (WH-562) U.S. Environmental Protection Agency, 401 M Street, SW., Washington, DC 20460. Place the docket #F-86-CGIF-FFFFF on your comments. The comments received plus the record supporting this rulemaking are available for public inspection at the docket room from 9:30 a.m. to 4:30 p.m., Monday through Friday, excluding holidays. The public must make an appointment to review docket materials. As provided in 40 CFR Part 2, a reasonable fee may be charged for copying services.

**FOR FURTHER INFORMATION CONTACT:** RCRA Hotline, toll free, at (800) 424-9346 or at (202) 382-3000. For technical information, contact Carlos M. Lago, Office of Solid Waste (HW-562B), U.S. Environmental Protection Agency, 401 M Street, SW., Washington, DC 20460, (202) 382-4780.

#### SUPPLEMENTARY INFORMATION:

##### I. Authority

- II. Background
  - A. Current Liability Coverage Requirements
  - B. August 21, 1985, Proposed Rule
- III. Authorization of the Corporate Guarantee
- IV. Response to Comments on Corporate Guarantee
- V. Effective Date
- VI. State Authority
- VII. Request for Comments
- VIII. Executive Order 12291
- IX. Paperwork Reduction Act
- X. Regulatory Flexibility Act
- XI. Supporting Documents
- XII. List of Subjects

##### I. Authority

This regulation is being promulgated under the authority of sections 2002(a), 3004, and 3005 of the Solid Waste Disposal Act; as amended by the Resource Conservation and Recovery Act, as amended [42 U.S.C. 6912(a), 6924, and 6925].

##### II. Background

###### A. Current Liability Coverage Requirements

Section 3004(a)(6) of the Resource Conservation and Recovery Act, as amended (RCRA), requires EPA to establish financial responsibility standards for owners and operators of hazardous waste management facilities as may be necessary or desirable to protect human health and the environment.

On April 16, 1982, EPA promulgated regulations requiring owners and operators to demonstrate liability coverage during the operating life of the facility for bodily injury and property damage to third parties resulting from accidental occurrences arising from facility operations (47 FR 16554). Under the liability coverage regulations (40 CFR 264.147 and 265.147), owners and operators of hazardous waste treatment, storage, and disposal facilities are required to demonstrate, on a per firm basis, liability coverage for sudden accidental occurrences in the amount of \$1 million per occurrence and \$2 million annual aggregate, exclusive of legal defense costs. Owners and operators of surface impoundments, landfills and land treatment facilities are also required to demonstrate, on a per firm basis, liability coverage for nonsudden accidental occurrences in the amount of \$3 million per occurrence and \$6 million annual aggregate, exclusive of legal defense costs. "First-dollar" coverage is required; that is, the amount of any deductible must be covered by the insurer, who may have a right of reimbursement of the deductible amount from the insured. Financial responsibility can be demonstrated

through a financial test, liability insurance, or a combination of the two.

The requirements for coverage of sudden accidental occurrences became effective on July 15, 1982. The requirements for nonsudden accidental occurrences were phased in gradually according to annual dollar sales or revenue figures of the owner or operator. January 16, 1985 was the final phase-in date.

Congress has expressed its support for financial responsibility requirements in section 213 of the Hazardous and Solid Waste Amendments of 1984 (RCRA section 3005(e)). That section provides for the termination of interim status for all land disposal facilities by November 8, 1985, unless: (1) The owner or operator applies for a final determination regarding the issuance of a permit by that date and (2) certifies that the facility is in compliance with all applicable ground water monitoring and financial responsibility requirements for liability coverage, closure, and post-closure care. Prior to the enactment of HSWA, a facility's interim status could be terminated only when final administrative disposition of the permit application was made, or if the facility failed to furnish the necessary application information.

###### B. August 21, 1985, Proposed Rule

Some owners and operators have encountered difficulties in obtaining insurance necessary to comply with the liability coverage requirements. In the notice of proposed rulemaking published by EPA on August 21, 1985 (50 FR 33902), the Agency considered taking one or a combination of the following five regulatory actions in response to this problem:

- (1) Maintain the existing requirements;
- (2) Clarify the required scope of coverage and/or lower the required levels of coverage;
- (3) Authorize other financial responsibility mechanisms;
- (4) Authorize waivers; and
- (5) Suspend or withdraw the liability coverage requirements.

The Agency has decided at this time to authorize owners and operators to use a corporate guarantee as another mechanism to comply with the liability coverage requirements. EPA is still considering the other options proposed in the August 21, 1985, Notice of Proposed Rulemaking, and will publish its decision in the future. Comments on the proposed rule that address the corporate guarantee are discussed in Section IV of this preamble. Comments on other issues raised by the proposal



will be addressed in subsequent publications.

### III. Authorization of the Corporate Guarantee

To enable more firms to comply with the liability coverage required during a facility's operating life, the Agency has decided to revise 40 CFR 264.147, 264.151, and 265.147 to authorize, in addition to insurance and the financial test, the use of the corporate guarantee. The Agency believes this will provide owners and operators with greater flexibility while still ensuring that funds will be available to pay third-party liability claims. Use of the corporate guarantee is consistent with EPA's closure and post-closure financial responsibility regulations (40 CFR 264.143, 264.145, 265.143 and 265.145) and with Congressional intent. In the 1984 Hazardous and Solid Waste Amendments (HSWA), Congress provides that RCRA financial responsibility for liability insurance may be established by, among other options, guarantees and self-insurance (HSWA section 205; section 3004(t) of RCRA).

A corporate guarantee is a promise by one corporation to answer for the default of another. It is a collateral undertaking and presupposes another obligation which is identified in the guarantee. There is ordinarily a contract or other agreement between the principal (obligor) and a third party creating the primary obligations. The guarantee is then a contract between the principal and the guarantor, guaranteeing payment of the primary obligation. However, in the corporate guarantee that is the subject of today's rule, the obligation between the principal and third party will generally arise out of tort liability, not contract. In any case, if the principal defaults on the primary obligation, then the guarantor is liable to the third party on the obligation created by the guarantee. As provided in §§ 264.147(g)(1) and 265.147(g)(1) of today's rule, the guarantor must be the parent corporation of the owner or operator, directly owning at least 50 percent of the voting stock of the corporation that owns or operates the facility; the latter corporation is deemed a "subsidiary" of the parent corporation.

The Agency has decided to allow use of the corporate guarantee only if the guarantor is the parent corporation of the owner or operator because it believes such a guarantee is more likely to be enforceable under state law, and because the parent corporation is interested in its subsidiaries' performance, and is in a better position than other corporate entities to ensure that the facilities in question are being

operated in conformance with EPA regulations.

The corporate guarantee that is the subject of today's rule differs from the corporate guarantee for closure or post-closure care in several ways. First, and most important, the guarantee is not made to the Environmental Protection Agency, as obligee. Instead, the corporate guarantee for liability coverage is made by the corporate parent on behalf of the owner or operator "to any and all third parties who have sustained or may sustain bodily injury or property damage caused by [sudden and/or nonsudden] accidental occurrences arising from operations of the facilities covered by [the] guarantee". Unlike the corporate guarantee for closure or post-closure care, EPA cannot take action to enforce the terms of the corporate guarantee for liability coverage. Action to notify the corporate guarantor of an obligation to pay under the terms of the guarantee will have to be taken by injured parties who are covered by the guarantee.

Second, the Agency has modified the cancellation provisions. The guarantee for closure and/or post-closure care may be terminated 120 days or later, after notice is provided to the EPA Regional Administrator. In that case, the guarantor is responsible for providing alternative financial assurance if the owner or operator fails to provide such assurance. Today's rule, however, provides guarantor cannot terminate a liability coverage guarantee unless and until the owner or operator obtains alternative liability coverage that the Regional Administrator(s) for the Region(s) in which the facility(ies) is (are) located approve(s). We believe that this formulation will better provide continued assurance of financial responsibility. In addition, while the Regional Administrator can require an owner or operator to undertake closer or post-closure actions, and may decide to invoke that authority upon receipt of a cancellation notice, no comparable authority exists for third-party liability.

Finally, the Agency has added a requirement, not found in the corporate guarantee for closure or post-closure care, that the guarantee is to be interpreted and enforced in accordance with the laws of the State of incorporation of the guarantor. This clause is intended to operate in conjunction with the regulatory requirement in § 264.147(g)(2) to ensure that the corporate guarantee for liability is valid and enforceable under the relevant State law. Section 264.147(g)(2) provides that the corporate guarantee may be used to satisfy the liability

coverage requirements only if the Attorney General(s) or insurance commissioner(s) of the State(s) in which the guarantor is incorporated and the State(s) in which the facility(ies) covered by the guarantee is (are) located have submitted a written statement to EPA that a corporate guarantee executed as required is a legally valid and enforceable obligation in that State. The Agency expects in this way to ensure that State limitations on the powers of corporations to undertake guarantee obligations will not affect the operation of the corporate guarantee for liability.

Because EPA recognizes that a subsidiary's assets and liabilities are usually consolidated into the balance sheet of parent corporations, the Agency has decided not to allow a corporate subsidiary to use the financial test in combination with the corporate guarantee. However, an owner or operator may use insurance in combination with either the financial test or the corporate guarantee to comply with the liability requirements (§ 264.147(a)(3) and § 265.147(a)(3)).

EPA has decided to allow use of the corporate guarantee because it may provide relief for some owners and operators who are unable to obtain insurance. However, the Agency has concerns about the enforceability of the guarantee under State insurance law. This is a major reason why the guarantee is restricted to parents. In addition, because the validity of the corporate guarantee will depend on applicable state law, the guarantee will be allowed only for facilities in States where the State Attorney General or State insurance commissioner has certified to EPA that the guarantee is fully valid and enforceable by third-parties who are injured by accidents arising from the operations of the facility involved. EPA has sent requests to the Attorney General in each State for an opinion on this subject. A list of non-authorized States where the parent corporate guarantee is fully valid and enforceable will then be compiled by the Agency to be published in the *Federal Register* in the near future.

### IV. Summary of and Response to Comments on Corporate Guarantee

In the August 21, 1985 notice of proposed rulemaking, the Agency requested comments on whether the corporate guarantee should be authorized as an alternative mechanism for demonstrating financial assurance for liability coverage. The Agency previously considered authorizing the corporate guarantee as an alternative

financial assurance mechanism for liability coverage, but had major questions about the validity and enforceability of such an arrangement, especially with respect to State insurance laws (47 FR 16547 (April 16, 1982)).

The Agency requested comments on the potential advantages and disadvantages of authorizing owners and operators to use a corporate guarantee to demonstrate financial assurance for liability coverage. In particular, comments were requested on the validity and the enforceability of this mechanism with respect to State laws. Most commenters on the proposed rule strongly endorsed the corporate guarantee as an additional financial responsibility alternative for satisfying liability coverage requirements.

Commenters stated that the corporate guarantee is a common commercial instrument and that most States' general corporation laws authorize corporations to enter into guarantee contracts. The commenters who provided information about State insurance laws generally stated that the corporate guarantee for liability coverage would be valid under their State's statutes. For example, one commenter from North Carolina said that initial research showed that the corporate guarantee would be a valid and enforceable obligation under North Carolina law. In addition, a commenter noted that Colorado and Montana currently allow the corporate guarantee for liability coverage. One commenter in Kentucky said that normal transporters, including hazardous waste transporters, are allowed to self-insure through their parent corporations to satisfy the Kentucky Department of Transportation's requirements for transporters.

Several commenters stated that if a corporate guarantee were allowed as an alternate mechanism, they would take advantage of that option. One commenter suggested that allowing the corporate guarantee to demonstrate financial assurance for liability coverage could increase compliance with the liability coverage requirements. Louisiana strongly supported the use of the corporate guarantee, stating that preliminary analysis showed that it would allow medium-sized companies and commercial hazardous waste disposers to comply with the liability coverage rules.

Several commenters noted that use of the corporate guarantee might simplify the task of preparing financial assurance documentation, which would result in increased compliance with the regulations. Because many subsidiaries consolidate their financial statements

with parent corporations, they do not have separately audited financial statements. According to some commenters, requiring each subsidiary to comply with the financial test greatly increases the cost of compliance and generates significant quantities of duplicate documentation.

Commenters also offered various other arguments in support of use of the corporate guarantee for liability coverage. Several said that the guarantee is consistent with existing business practices. Financial institutions have used corporate guarantees to assure repayment of debt by a subsidiary. The commenters believed that corporate guarantees would provide a cost-effective alternative to obtaining insurance. One commenter suggested that the corporate guarantee would better achieve the goal of the liability coverage regulations, because, unlike many insurance policies, it would provide financial assurance for liability exposure from pre-existing contamination.

Commenters who opposed use of the corporate guarantee as an alternative mechanism for demonstrating financial assurance for liability coverage made several arguments. First, some commenters were concerned that the guarantee would not be valid or enforceable. The Agency shares that concern, and is thus requiring that before a corporate guarantee can be used to demonstrate financial assurance, the State Attorney General(s) or insurance commissioner(s) in the State(s) where the guarantor is incorporated and where the facility(ies) is (are) located must issue a written statement that under the laws of that (these) State(s) such a guarantee is valid and enforceable.

Second, some commenters suggested that the corporate guarantee would not be an effective financial assurance mechanism in the long run because parent corporations eventually would find themselves in the situation currently faced by some private insurance companies, that is, subject to extensive litigation and clean-up expenses. The Agency believes that a parent will have a strong interest in ensuring that a guaranteed subsidiary has sufficient pollution monitoring and safety measures to prevent and minimize accidental releases and third party damages from occurring at the subsidiaries' TSDFs. In addition, where third party damages occur, the parent guarantor's financial liability will be limited to the amount of the guarantee, exclusive of legal defense costs.

One commenter asked whether it was advisable for a corporate parent to

advance a guarantee to a company that cannot obtain liability insurance, and wondered if that opened the door to a lawsuit against the parent's directors and officers. Parent corporations should use good judgment about the guarantees that they provide to subsidiaries. Nevertheless, the inability of a subsidiary to obtain liability insurance is not necessarily an indication that the subsidiary's facilities are likely to cause damages to third parties and should be closed.

Commenters argued that a parent corporation might guarantee subsidiaries for which the parent did not have the funding to provide liability coverage. The Agency disagrees. The requirement that a parent corporation seeking to provide a corporate guarantee must satisfy the requirements of the financial test will provide assurance that the parent corporation has sufficient financial strength to issue the guarantee.

Commenters who were concerned about the November 8, 1985, deadline for certifying compliance with the liability coverage requirements suggested combining the corporate guarantee with another alternative, such as waivers. Commenters suggested that the Agency should grant waivers to those facility owners and operators who could not certify compliance with the financial responsibility requirements for liability coverage, closure, and post-closure care on November 8, but who could use the corporate guarantee once it is authorized. The Agency cannot adopt this suggestion. Under section 3005(e) of RCRA, facilities who did not certify compliance with the liability coverage regulations by November 8, 1985, lost interim status. The Agency does not have authority to nullify that event.

One commenter suggested that the following concerns should be addressed in developing any corporate guarantee: (1) Whether funds would be required to be set aside or otherwise available for third party claims; and (2) whether, because of the complexity of the guarantee, third parties would be inhibited from obtaining access to "legitimate" compensation funds or whether inordinate time and resources would be required to enforce the guarantee. The Agency has considered these issues in promulgating the corporate guarantee. Although the guarantor is not required to set aside funds for third party compensation, it must pass the financial test and thereby demonstrate that it has sufficient funds to implement its guarantee, if necessary. Second, as discussed in detail in Section

III, the Agency has attempted to design the corporate guarantee to allow for the easiest possible enforcement by third parties.

In summary, the Agency disagrees with those commenters who opposed use of the corporate guarantee as an alternative mechanism. Although certain State laws may not authorize use of the corporate guarantee for liability coverage, the Agency believes that in most States the guarantee will be valid and enforceable. Under a corporate guarantee, the parent corporation guarantees its subsidiary's obligations and therefore has a direct financial stake in its subsidiaries' actions. The strict requirements of the financial test will deter a parent corporation from issuing a guarantee for a subsidiary when it does not have adequate financial strength to assure the availability of funds for third party liability claims. The Agency believes that expanding the number of available options is desirable, given the present state of the insurance market and the high level of assurance provided by the corporate guarantee.

#### V. Effective Date

This regulation is being published in "interim final form". This means that although the regulation will be effective in 60 days, the Agency solicits comments on the regulation (in particular the form of the corporate guarantee), and may modify it in response to additional public comment.

Section 3010(b) of RCRA provides that EPA's hazardous waste regulations and revisions thereto generally take effect six months after their promulgation. The purpose of this requirement is to allow sufficient lead time for the regulated community to prepare to comply with major new regulatory requirements. The statute allows for a shorter period prior to the effective date, however, for "good cause" (among other reasons), which the Agency believes exists here. The Agency believes that an effective date six months after promulgation for the amendment promulgated today, would cause substantial and unnecessary disruption in the implementation of the existing regulations and would be contrary to the interest of the regulated community and the public.

Today's amendment adopts the corporate guarantee as another mechanism for complying with third-party liability coverage requirements and thus makes it easier for some owners and operators to act in accordance with the RCRA liability coverage regulations. The Agency believes that it makes little sense to delay needed relief to owners or

operators by an additional four months. However, because the Agency may wish to revise the form of the guarantee on the basis of public comment, the amendments to §§ 264.147, 264.151 and 265.147 promulgated in this rulemaking action will not be effective until 60 days from the date of this Federal Register notice.

#### VI. State Authority

Under section 3006 of RCRA, EPA may authorize qualified States to administer and enforce the RCRA program within the State. (See 40 CFR Part 271 for the standards and requirements for authorization.) Following authorization, EPA retains enforcement authority under sections 3008, 7003, and 3013 of RCRA, although authorized States have primary enforcement responsibility.

Today's announcement will be automatically applicable only in those States that do not have final authorization. In authorized States, the requirements will not be applicable unless and until the State revises its program to adopt equivalent requirements under State law.

It should be noted that authorized States are required to modify their programs only when EPA promulgates Federal standards that are more stringent or broader in scope than the existing Federal standards. For those Federal program changes that are less stringent or reduce the scope of the Federal program, States are not required to modify their programs. This is a result of section 3009 of RCRA, which allows States to impose standards in addition to those in the Federal program.

The standards promulgated today are considered to be less stringent than the existing Federal requirements. Therefore, authorized States are not required to modify their programs to adopt requirements equivalent or substantially equivalent to the provisions listed above.

#### VII. Request for Public Comment

Although the use of a corporate guarantee was proposed August 21, 1985, the Agency did not specify what form the guarantee would take. We believe that the guarantee form included in § 264.151 of today's rule will generally be valid and enforceable. At a minimum, section 3004(t) of RCRA provides for a right of direct action against guarantors in the event of bankruptcy of the owner or operator, or if a court's jurisdiction cannot be obtained over an owner or operator likely to be insolvent at the time of judgment. Moreover, we believe that a right of action under the guarantee set forth in today's rule will

lie against the guarantor whenever a judgment has been obtained against the owner or operator or a settlement agreement has been executed.

However, due to the unusual nature of the guarantee (i.e., it is a general guarantee designed to assure payment of tortious, rather than contractual, obligations to unidentified third parties), the Agency would appreciate public comments *on the form itself*. In particular, the Agency requests comments on whether any modifications to the form would be desirable to facilitate claims by injured third parties against the guarantor. We do *not* solicit comments on the § 264.147 and § 265.147 requirements themselves.

Two copies of all comments should be sent, no later than 30 days after the date of this notice to: EPA public docket, room S-212, U.S. EPA, 401 M Street SW., Washington, DC 20460, where they may be inspected by all interested parties.

#### VIII. Executive Order 12291

This regulation was submitted to the Office of Management and Budget for review as required by Executive Order 12291. The regulatory amendments being considered today to the liability coverage requirements are not "major rules". The options under consideration will not likely result in a significant increase in costs (but are likely to decrease costs) and thus are not a major rule; no Regulatory Impact Analysis has been prepared.

#### IX. Paperwork Reduction Act

The information collection requirements contained in this rule have been approved by the Office of Management and Budget (OMB) under the provisions of the Paperwork Reduction Act of 1980, 44 U.S.C. 3501 *et seq.*, and have been assigned OMB control number 2050-0036.

#### X. Regulatory Flexibility Act

Under the Regulatory Flexibility Act of 1950 (5 U.S.C. 601 *et seq.*), Federal Agencies must, in developing regulations, analyze their impact on small entities (small businesses, small government jurisdictions, and small organizations). The option under consideration relaxes the existing insurance requirements and thus commonly reduces costs associated with compliance.

Accordingly, I certify that this proposed regulation will not have a significant impact on a substantial number of small entities.

## XI. Supporting Documents

Supporting documents available for this interim final rule include comments on the August 21, 1985 proposed rule, summary of the comments, and background documents on the financial test for liability coverage. In addition, background documents prepared for previous financial assurance regulations are also available.

All of these supporting materials are available for review in the EPA public docket (RCRA docket #F-86-CGIF-FFFFF), Room S-212, Waterside Mall, 401 M Street SW., Washington, DC 20460.

### List of Subjects

#### 40 CFR Part 264

Hazardous waste, Insurance, Packaging and containers, Reporting and recordkeeping requirements, Security measures, Surety bonds.

#### 40 CFR Part 265

Hazardous waste, Insurance, Packaging and containers, reporting and recordkeeping requirements, Security measures, Surety bonds, Water supply.

Dated: July 3, 1986.

Lee M. Thomas,  
Administrator.

For reasons set out in the preamble, Title 40 of the Code of Federal Regulations is amended as follows:

### PART 264—STANDARDS FOR OWNERS AND OPERATORS OF HAZARDOUS WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITIES: LIABILITY COVERAGE

40 CFR Part 264 is amended as follows:

1. The authority citation for Part 264 continues to read 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).

2. In § 264.147, paragraph (g) is redesignated as paragraphs (h), paragraph (a)(3), (b)(2), (a)(2), and (b)(3) are revised, and a new paragraph (g) is added, to read as follows:

#### § 264.147 Liability requirements.

(a) \* \* \*

(2) An owner operator may meet the requirements of this section by passing a financial test or using the corporate guarantee for liability coverage as specified in paragraph (g) of this section.

(3) An owner or operator may demonstrate the required liability coverage through use of the financial test, insurance, the corporate guarantee,

a combination of the financial test and insurance, or a combination of the corporate guarantee and insurance. The amount of coverage demonstrated must total at least the minimum amounts required by this paragraph.

(b) \* \* \*

(2) An owner or operator may meet the requirements of this section by passing a financial test or using the corporate guarantee for liability coverage as specified in paragraphs (f) and (g) of this section.

(3) An owner or operator may demonstrate the required liability coverage through use of the financial test, insurance, the corporate guarantee, a combination of the financial test and insurance, or a combination of the corporate guarantee and insurance. The amounts of coverage demonstrated must total at least the minimum amounts required by this paragraph.

\* \* \* \* \*

(g) Corporate guarantee for liability coverage.

(1) Subject to subparagraph (2), an owner or operator may meet the requirements of this section by obtaining a written guarantee, hereinafter referred to as "corporate guarantee." The guarantor must be the parent corporation of the owner or operator. The guarantee must meet the requirements for owners or operators in paragraphs (f)(1) through (7) of this section. The wording of the corporate guarantee must be identical to the wording specified in § 264.151(h)(2). A certified copy of 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 satisfy a judgment based on a determination of liability for bodily injury or property damage to third parties caused by sudden or nonsudden accidental occurrences (or both as the case may be), arising from the operation of facilities covered by this corporate guarantee, or fails to pay an amount agreed to in settlement of claims arising from or alleged to arise from such injury or damage, the guarantor will do so up to the limits of coverage.

(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(s). This guarantee may not be terminated unless and until the EPA Regional Administrator(s) approve(s) alternate liability coverage complying with section 264.147 and/or 265.147.

(2) A corporate guarantee may be used to satisfy the requirements of this section only if the Attorney General(s) or insurance commissioner(s) of the State in which the guarantor is incorporated and the State(s) in which the facility(ies) covered by the guarantee is (are) located has (have) submitted a written statement to EPA that a corporate guarantee executed as described in this section and Section 264.151(h)(2) is a legally valid and enforceable obligation in that State.

\* \* \* \* \*

3. In § 264.151, paragraph (g) is revised to read as follows:

#### § 264.151 Wording of the instruments.

\* \* \* \* \*

(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

[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 [firm'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 paragraphs regarding facilities and liability coverage. 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, and address.]

The firm identified above is the owner or operator of the following facilities for which liability coverage for [insert "sudden" or "nonsudden" or "both sudden and nonsudden"] accidental occurrences is being demonstrated through the financial test specified in Subpart H of 40 CFR Parts 264 and 265:—

The firm identified above guarantees, through the corporate guarantee specified in Subpart H of 40 CFR Parts 264 and 265, liability coverage for [insert "sudden" or "nonsudden" or "both sudden and nonsudden"] accidental occurrences at the following facilities owned or operated by the following subsidiaries of the firm:—

[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 firm 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 firm 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 firm 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 or post-closure cost estimates covered by such a test are shown for each facility:\_\_\_\_\_

4. The firm 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 mechanisms 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:\_\_\_\_\_

5. This firm is the owner or operator of the following UIC facilities for which financial assurance for plugging and abandonment is required under Part 144. The current closure cost estimates as required by 40 CFR 144.62 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 form 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].

\* \* \* \* \*

4. In § 264.151, introductory paragraph (h) is redesignated as paragraph (h)(1) and a new paragraph (h)(2) is added to read as follows:

**§ 264.151 Wording of the instruments.**

\* \* \* \* \*

(h)(2) A corporate guarantee, as specified in § 264.147(g) or § 265.147(g) 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 Liability Coverage**

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, on behalf of our subsidiary [owner or operator] of [business address], to any and all third parties who have sustained or may sustain bodily injury or property damage caused by [sudden and/or nonsudden] accidental occurrences arising from operation of the facility(ies) covered by this guarantee.

**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 264.147(g) and 265.147(g).

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.] This corporate guarantee satisfies RCRA third-party liability requirements for [insert "sudden" or "nonsudden" or "both sudden and nonsudden"] accidental occurrences in above-named owner or operator facilities for [insert dollar amount] of coverage.

3. For value received from [owner or operator], guarantor guarantees to any and all third parties who have sustained or may sustain bodily injury or property damage caused by [sudden and/or nonsudden] accidental occurrences arising from operations of the facility(ies) covered by this guarantee that in the event that [owner or operator] fails to satisfy a judgment or award based on a determination of liability for bodily injury or property damage to third parties caused by [sudden and/or nonsudden] accidental occurrences, arising from the operation of the above-named facilities, or fails to pay an amount agreed to in settlement of a claim arising from or alleged to arise from such injury or damage, the guarantor will satisfy such judgment(s), award(s), or settlement agreement(s) up to the limits of coverage identified above.

4. 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 liability coverage as specified in 40 CFR 264.147 and 265.147, as applicable, in the name of [owner or operator]. Within 120 days after the end of such fiscal year, the guarantor shall establish such liability coverage unless [owner or operator] has done so.

5. 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.

6. 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, he shall establish alternate liability coverage as specified in 40 CFR 264.147 or 265.147 in the name of [owner or operator], unless [owner or operator] has done so.

7. Guarantor reserves the right to modify this agreement to take into account amendment or modification of the liability requirements set by 40 CFR 264.147 and 265.147, provided that such modification shall become effective only if a Regional Administrator does not disapprove the modification within 30 days of receipt of notification of the modification.

8. Guarantor agrees to remain bound under this guarantee for so long as [owner or operator] must comply with the applicable requirements of 40 CFR 264.147 and 265.147 for the above-listed facility(ies), except as provided in paragraph 9 of this agreement.

9. Guarantor may terminate 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], provided that this guarantee may not be terminated unless and until [the owner or operator] obtains, and the EPA Regional Administrator(s) approve(s) alternate liability coverage complying with 40 CFR 264.147 and/or 265.147.

10. This guarantee is to be interpreted and enforced in accordance with the laws of [State of incorporation of guarantor].

11. Guarantor hereby expressly waives notice of acceptance of this guarantee by any party.

I hereby certify that the wording of this guarantee is identical to the wording specified in 40 CFR 264.151(h)(2).

Effective date: \_\_\_\_\_

[Name of guarantor]

[Authorized signature for guarantor]

[Name of person signing]

[Title of person signing]

Signature of witness or notary:

\* \* \* \* \*

**PART 265—STANDARDS FOR OWNERS AND OPERATORS OF HAZARDOUS WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITIES: LIABILITY COVERAGE**

40 CFR Part 265 is amended as follows:

1. The authority citation for Part 265 continues to read 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, 6908, 6912(a), 6924 and 6925).

2. In § 265.147, paragraph (g) is redesignated as paragraph (h), paragraphs (a)(2), (a)(3), (b)(2), and (b)(3) are revised, and a new paragraph (g) is added, to read as follows:

**§ 265.147 Liability requirements.**

(a) \* \* \*

(2) An owner or operator may meet the requirements of this section by passing a financial test or using the corporate guarantee for liability coverage as specified in paragraph (g) of this section.

(3) An owner or operator may demonstrate the required liability coverage through use of the financial test, insurance, the corporate guarantee, a combination of the financial test and insurance, or a combination of the corporate guarantee and insurance. The amounts of coverage demonstrated must total at least the minimum amounts required by this paragraph.

(b) \* \* \*

(2) An owner or operator may meet the requirements of this section by passing a financial test or using the corporate guarantee for liability coverage as specified in paragraphs (f) and (g) of this section.

(3) An owner or operator may demonstrate the required liability coverage through use of the financial test, insurance, the corporate guarantee, a combination of the financial test and insurance, or a combination of the corporate guarantee and insurance. The amounts of coverage demonstrated must total at least the minimum amounts required by this paragraph.

\* \* \* \* \*

(g) Corporate guarantee for liability coverage.

(1) Subject to subparagraph (2), an owner or operator may meet the requirements of this section by obtaining a written guarantee, hereinafter 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 (7) of this section. The wording of the corporate guarantee must be identical to the wording specified in § 264.151(h)(2). A certified copy of 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 satisfy a judgment based on a determination of liability for bodily injury or property damage to third parties caused by sudden or nonsudden accidental occurrences (or both as the case may be), arising from the operation of facilities covered by this corporate guarantee, or fails to pay an amount agreed to in settlement of claims arising from or alleged to arise from such injury

or damage, the guarantor will do so up to the limits of coverage.

(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(s). This guarantee may not be terminated unless and until the EPA Regional Administrator(s) approve(s) alternate liability coverage complying with § 264.147 and/or 265.147.

(2) A corporate guarantee may be used to satisfy the requirements of this section only if the Attorney General(s) or insurance commissioner(s) of the State in which the guarantor is incorporated *and* the State(s) in which the facility(ies) covered by the guarantee is (are) located has (have) submitted a written statement to EPA that a corporate guarantee executed as described in this section and Section 264.151(h)(2) is a legally valid and enforceable obligation in that State.

\* \* \* \* \*

[FR Doc. 86-15673 Filed 7-10-86; 8:45 am]

BILLING CODE 6560-50-M

**ENVIRONMENTAL PROTECTION AGENCY**

40 CFR Part 261  
[SWH-FRL-3082-6]

**Hazardous Waste Management System; Identification and Listing of Hazardous Waste**

**AGENCY:** Environmental Protection Agency.  
**ACTION:** Final rule; correction.

**SUMMARY:** On May 28, 1986 (51 FR 19320), EPA promulgated a rule to amend the regulations for hazardous waste management under the Resources Conservation and Recovery Act by stating more clearly that the listing for spent pickle liquor from steel finishing operations (EPA Hazardous Waste No. K062) applies only to wastes generated by iron and steel facilities. Since promulgation, the Agency has received several questions and comments as to the scope of the modified listing. This notice clarifies the listing and corrects an error.

**DATE:** This rule becomes effective on September 22, 1986.

**FOR FURTHER INFORMATION CONTACT:** For general information contact: the RCRA Hotline at (800) 424-9346 toll-free or (202) 382-3000. For information on specific aspects of this rule contact: Jacqueline Sales, Office of Solid Waste (WH-562B), U.S. Environmental Protection Agency, 401 M Street SW., Washington, DC. 20460, (202) 382-4440.

**I. SUPPLEMENTARY INFORMATION**

**A. Background**

On May 23, 1986 (51 FR 19320), EPA promulgated a final rule amending the listing for spent pickle liquor (EPA Hazardous Waste No. K062) from steel finishing operations to apply only to spent pickle liquor wastes generated by iron and steel facilities. Previously, the Agency has been interpreting the listing to apply to all industries engaged in steel finishing operations. As a result of this broad interpretation, the Agency received a rulemaking petition from several porcelain enamel companies to amend or clarify the listing to apply only to spent pickle liquor generated by the iron and steel industry. These companies did not agree with the Agency that the pickle liquor generated from their processes was covered under the spent pickle liquor listing. Rather, they asserted that spent pickle liquor generated by non-iron and steel

industries would be considered hazardous only if it exhibited one or more of the characteristics of hazardous wastes such as corrosivity or extraction procedure (EP) toxicity. After reviewing the original listing, the background documents, and the additional information supplied as a result of the rulemaking petition, the Agency concluded that the correct reading of the scope of the listing would apply the listing only to spent pickle liquor generated by the iron and steel industry.

However, in promulgating the final rule to amend the spent pickle liquor listing, an error was made in defining the scope of the listing. In one section of the preamble and in the regulatory language, the listing was stated incorrectly as applying only to those steel finishing operations that "produce" iron and steel. The Agency had intended the listing to apply to all facilities within the iron and steel industry that generate spent pickle liquor. In fact, this is specified in several other areas of the preamble to the final rule (see 51 FR 19320/1 (summary), 51 FR 19321/1, and 51 FR 12 19301/2). In addition, by applying the listing to spent pickle liquor generated from steel finishing operations of all facilities within the iron and steel industry, the Agency is being consistent with the June 5, 1984, final rule (49 FR 23284) which excludes lime stabilized waste pickle liquor sludge (LSWPLS) generated by plants in the iron and steel industry from the "derived-from" rule in 40 CFR 261.3 (c)(2)(i). (LSWPLS is the residue from

the treatment of spent pickle liquor.) We thus are correcting and clarifying the language of the final rule to reflect the Agency's stated interest.

**B. Correction**

The following error has been identified in the preamble of this rule: On page 19321, column, 2, second complete paragraph, line 15—change "finishing operations of plants that produce iron and steel" to "finishing operations of facilities within the iron and steel industry (SIC codes and 331 and 332)".

Dated: September 11, 1986.

**J.W. McGraw,**  
*Acting Assistant Administrator*

The following correction is made in FR Doc. 86-11869, 51 FR 19320 (May 28, 1986).

**PART 261—IDENTIFICATION AND LISTING OF HAZARDOUS WASTE**

1. The authority citation for Part 261 continues to reads follows:

Authority: Secs. 1008, 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. Section 261.32 is amended by revising the entry under the iron and steel industry for the hazardous waste listing K062 to read as follows:

**§ 261.32 Hazardous Wastes From Specific Sources.**

\* \* \* \* \*

Industry and EPA hazardous waste No.	Hazardous waste	Hazard code
Iron and Steel: x x x K062.....	Spent pickle liquor generated by steel finishing operations of facilities within the iron and steel industry (SIC Codes 331 and 332).	(C,T)

[FR Doc. 86-21387 Filed 9-19-86; 8:45 am]  
BILLING CODE 5560-50-M

**INTERSTATE COMMERCE COMMISSION**

49 CFR Part 1152

**Additions to List of Abandonment Docket Numbers**

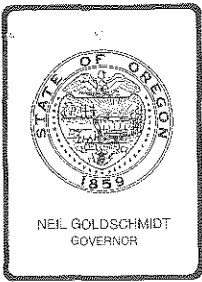
**AGENCY:** Interstate Commerce Commission.

**ACTION:** Final rules.

**SUMMARY:** In the appendix to Part 1152 of the Interstate Commerce Commission regulations in the *Code of Federal Regulations*, there is a list of abandonment docket numbers (AB numbers) to be used by rail lines as identification numbers when filing an abandonment application with the Commission. The list of numbers currently in the appendix has not been updated since 1976. This notice adds to that list of AB numbers.

**EFFECTIVE DATE:** This notice is effective upon publication in the Federal Register

**FOR FURTHER INFORMATION CONTACT:** Wyjean Garrett (202) 275-7141.



## Environmental Quality Commission

811 SW SIXTH AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

### MEMORANDUM

To: Environmental Quality Commission  
From: Director  
Subject: Agenda Item J, May 29, 1987, EQC Meeting

Informational Report: Individual Aerobic Sewage Treatment Plants

### Background

At the Public Forum during the April 17, 1987, EQC meeting, Mr. B. Curly Canoles addressed the Commission concerning his desire to expand his marketing of Jet Inc. aerobic sewage treatment plants to serve individual properties in Oregon. He asked the Commission to review laboratory data collected while testing a Jet Inc. system installed in Tillamook County as a repair to a failing on-site sewage disposal system (Attachment E), and requested amendment of OAR Chapter 340, Division 71 to allow a fifty (50) percent reduction in the disposal field, and elimination of the requirement that a future repair/replacement area be available. He indicated he has installed Jet Inc. plants in the State of Alaska where they are preferred over the use of septic tanks.

The Commission requested that staff review the material submitted by Mr. Canoles and prepare an informational report for the EQC meeting on May 29, 1987.

In the preparation of this report to the Commission, staff reviewed the submitted report and accompanying materials. Staff also contacted Alaska's Department of Environmental Conservation to learn about their approach toward installation of individual aerobic package plants. A summary of the review is provided in Attachment A.

The Department's current approach to individual package plants is presented in Attachment B.

### Staff Analysis of Request to Reduce Drainfield Size

Available literature generally supports the conclusion that soil absorption systems can be made smaller when wastewaters have lower 5-day Biochemical Oxygen Demand (BOD-5) and Suspended Solids (SS) values than typically observed coming from septic tanks. The Department has implemented this



philosophy with respect to conventional sand filter systems because the BOD-5 and SS values are consistently very low. Sand filter systems use disposal trenches that are approximately one-third (1/3) the size found in septic tank-drainfield systems. Aerobic plants are also capable of providing a higher level of wastewater treatment than septic tanks when they are properly operated and maintained. A comparison of effluent characteristics for septic tanks, aerobic package plants, and sand filters is shown below in Table 1.

Table 1. A Comparison of Effluent Characteristics

	Septic Tanks		Aerobic Package Plants			Sand Filters
	Oregon Study <sup>(1)</sup>	University of Wisconsin Study <sup>(2)</sup>	N.S.F. STD No. 40 Class I	N.S.F. STD No. 40 Class II	University of Wisconsin Study <sup>(2)</sup>	Oregon Study <sup>(1)</sup>
BOD-5 mg/L	217	138	30 <sup>(3)</sup> 45 <sup>(4)</sup>	60 <sup>(5)</sup>	37	3.2
SS mg/L	146	49	30 <sup>(3)</sup> 45 <sup>(4)</sup>	90 <sup>(5)</sup>	39	9.6 <sup>(6)</sup>

(1) Average values from Oregon study of 8 systems.  
 (2) Small Scale Waste Management Project (1978). Final report submitted to USEPA.  
 (3) Arithmetic mean of all effluent samples collected in a period of 30 consecutive days while testing plant.  
 (4) Arithmetic mean of all effluent samples collected in a period of 7 consecutive days while testing plant.  
 (5) Values not to be exceeded 90 percent of time while testing plant.  
 (6) The SS value was determined to be less than 1 mg/L when sediments were not disturbed while sampling.

If aerobic plants consistently provide the high degree of treatment they are capable of, a reduction of disposal field sizing approaching Mr. Canoles' request would appear reasonable. The primary concern of the Department, however, has been the high level of operational and maintenance required to assure aerobic systems continue to perform as designed. If through neglect or oversight the plants are not maintained or operated properly, over time their performance approaches the same treatment level as a septic tank. Thus, the Department has considered the disposal area requirements to be similar or the same as that for septic tank-drainfield systems.

For comparison, the operating complexities, maintenance needs, and potential for system failure due to lack of maintenance of different systems are displayed below:

Table 2. Comparison of System Operation and Maintenance

	Septic Tank- Drainfield	Sand Filter	Aerobic Plant
Complexity of Treatment and Disposal	Wastewater separation within septic tanks; effluent treatment and disposal occurs within the soils.	Wastewater separation within septic tanks; effluent treatment occurs within sand filter unit, polished effluent disposal in- to absorption facility.	Wastewater separation and treatment occurs within the package plant; polished effluent disposal in- to absorption facility.
Operational Needs	Use system within design limits; safeguard from physical damage.	Use system within design limits; safeguard from physical damage; frequently requires reliable source of electricity.	Use system within design limits; safeguard from physical damage; requires reliable source of electricity.
Maintenance Needs	Removal of accumulated solids from septic tank.	Removal of accumulated solids from septic tank; pump servicing.	Removal of accumulated solids from settling and aeration compartments; aeration unit servicing check plant and mechanical parts for proper performance.
Maintenance Interval	Average of 5 to 7 years.	Pump Tank at least once every 4 years. Service pump as needed.	Pump solids at least once a year, or more frequently if recommended by Plant Manufacturer; Service Aeration Unit as needed; check plant at least monthly.
Time Interval to Failure if System Inadequately Maintained	After passage of solids from tank, drainfield will clog in 5 years $\pm$ .	After passage of solids from tank, sand filter will clog in 4 months $\pm$ .	After passage of solids from plant, drainfield will clog in 5 years $\pm$ .

All on-site treatment systems require some level of maintenance. The Department recognizes that property owners are responsible for proper operation and maintenance of their systems and for repairs, should the system fail.

Whereas in standard septic tank and drainfield systems, the majority of treatment occurs in the soils, aerobic systems rely on proper functioning of a more complex unit which requires adequate aeration, a balanced population of microorganisms for treatment, and intermittent solids removal, prior to discharge to the soil absorption system.

As described in Attachment C, once solids are carried into the disposal area from a malfunctioning aerobic system, the disposal trenches will begin to plug, reducing the ability to pass effluent out of the disposal trenches. Septic tank systems, on the other hand, provide some buffer with respect to the frequency of maintenance and require little if any operational control.

To reduce the health and environmental risks associated with system failures, the Department provides information to the public on the benefits of periodic septic tank pumping. The Department may require written documentation of tank pumping on a scheduled basis for systems with a greater tendency to malfunction because of a lack of maintenance. Operation and maintenance manuals supplied to property owners by the manufacturer are required for aerobic systems.

Based on discussions with other states, the Department is concerned that property owners as a whole do not put forth the effort to maintain their aerobic plants. Recent discussions with Alaska (Attachment A) confirm observations made by DEQ staff in the 1970's when investigating aerobic system use in Colorado (Attachment C). Adequate maintenance may be more assured if responsibility is vested in a municipality, such as a city, county, or special service district. In the past, municipalities have been unwilling to assume this responsibility. Perhaps, other approaches for assuring adequate performance of aerobic system can be identified.

At this time, based upon operation and maintenance concerns relative to aerobic systems, staff are not satisfied that these systems will consistently provide good effluent quality. Without additional assurances for proper operation and maintenance, staff are reluctant to consider reducing drainfield sizing requirements. Staff would, however, be willing to continue working with Mr. Canoles to see if the problems can be overcome.

#### Staff Analysis of Request to Eliminate Repair/Replacement Area

All properties approved for new on-site sewage disposal methods since May 5, 1973, have been required to have designated areas of sufficient size to locate a treatment facility, an initial disposal facility, and a future repair/replacement disposal facility. A treatment facility in combination with a disposal facility constitutes a complete system.

The Department has viewed this as necessary, irrespective of the type of system to be initially installed, because counties had experienced great difficulties in trying to develop effective repairs to failing systems on small lots that had insufficient area to add additional disposal trenches. When this rule was adopted, it could not be retroactively applied to properties that were already developed. Frequently, houses with failing system on small lots continue to provide staff a challenge in developing effective repairs.

This repair/replacement area policy acknowledges that there are a vast number of variables that determine how well or if a system is going to function. While the procedures used to accurately site and select a system account for the observed physical characteristics, safeguards are needed for unforeseen and unexpected variables. These variables include differences in the soil textures and depths observed in test pits during a site evaluation versus that which may actually be encountered in the full soil absorption area. Similarly, the Department assumes peak sewage flow from a dwelling will not exceed four hundred fifty (450) gallons per day, though, occasionally, some households hydraulically overload their system with an average sewage flow that exceeds the standard design peak flow.

Therefore, the safeguard of sufficient land area affords the property owner the ability to correct a failure and provides a more reasonable alternative in place of moving off the property or being continually exposed to or causing a real health risk when the system fails. System performance historically has not provided sufficient justification to allow an exception to the repair/replacement area requirement. The Department notes that even conventional sand filter systems have designated repair/replacement areas even though they provide a very high level of treatment and require a relatively low level of preventative maintenance to sustain this level of treatment over time.

The Department does not recommend that elimination of the requirement for repair/replacement area be considered. The opportunity for repair/replacement of an on-site system is integral to the problem prevention approach of the on-site sewage disposal program.

#### Alternatives

1. Direct the Department to initiate the rulemaking process;
2. Direct the Department to advise Mr. Canoles of how to petition for rulemaking;
3. Direct the Department to assist Mr. Canoles in gathering information to enable the Department to further consider reductions in disposal field sizing;

4. Direct the Department to make no changes in action at this time.

Director's Recommendation

Based upon staff reservations that aerobic systems will not consistently provide good effluent quality, the Director recommends that the Commission not consider reducing drainfield sizing requirements at this time. The Director further recommends that staff be instructed to continue working with Mr. Canoles to see if the staff concerns about operation and maintenance can be overcome. The Director also recommends that the Commission reject further consideration of eliminating the repair area requirement.



Fred Hansen

Attachments: (5)

- A. Discussion of Canoles-Duvall Report and State of Alaska's Approach
- B. Department's Approach to Aerobic Plants
- C. Section 3 of Colorado Field Trip Report
- D. 1987 NSF Product Listing
- E. Report by Canoles and Duvall

Sherman O. Olson, Jr:h  
WH1952  
229-6443  
April 30, 1987

STAFF DISCUSSION OF CANOLES-DUVALL REPORT AND APPROACHES  
OF THE  
STATE OF ALASKA  
TOWARD INDIVIDUAL PACKAGE PLANTS

Description of the Jet Inc. Model J-153 Method of Operation

The model J-153 aerobic treatment plant designed for individual residential use by Jet Inc. contains primary settling, aeration, and clarification chambers, with a total volumetric capacity of twelve hundred (1200) gallons. The primary settling chamber receives the raw household wastewater and allows sewage solids to settle to the bottom, and floatable materials (such as grease and oils) to accumulate at the liquid surface. This process of wastewater separation is similar to that which occurs in a septic tank where anaerobic digestion takes place on these trapped floatable and settled organic solids. Effluent leaves the primary chamber by hydraulic displacement through a baffled transfer port into the aeration chamber. The liquid is mixed with recirculated activated sludge and aerated by means of a mechanical aerator. As oxygen is introduced and mixed within the solution, aerobic digestion of soluble organics occurs generating activated sludge. Hydraulic displacement causes the mixed liquor to flow into the clarification chamber, where settleable and floating material is returned to the aeration chamber. A baffled effluent port allows the clarified effluent to flow from the plant as treated sewage effluent by hydraulic displacement.

At this time, three (3) Jet Inc. aerobic systems are listed by the National Sanitation Foundation as meeting the NSF Standard No. 40. Two (2) models (J-150 and J-158 A) comply with the more stringent Class I requirements, while one (1) model (J-153) performs at the Class II level (Attachment D). Because these models have met the criteria of the NSF standard, they may be used as part of a treatment and disposal system in Oregon, as described further in Attachment B.

Review of Canoles-Duvall Report

In addition to a narrative history of the sewage disposal problems at the study site, the report by Canoles and Duvall describes the basic features of the current repair system in Tillamook County. Tests on the system included three (3) experiments conducted on effluent disinfection. The study examined the effectiveness of chlorination, ozone, and ultra-violet (UV) radiation at reducing the number of fecal coliform organisms being discharged from the aerobic package treatment units. Operation and maintenance oversight of the system is stressed in the report as an important and necessary safeguard.

May 29, 1987

The aerobic plants used in the repair system serve a residential property owned by Mr. and Mrs. Don Cameron and is located on a fifty (50) feet by one hundred (100) feet lot adjacent to the Nehalem River. The property is subject to seasonal flooding and has a shallow water table that is influenced by tidal action. Up until 1979, the home was used as a vacation home. Several months after it became a permanent residence, the sewage disposal system (consisting of a 1000 gallon septic tank followed by a drainfield) began to fail, with sewage seeping to the surface and the presence of noxious odors. In 1981, the system was repaired. It began to fail again, less than a year later. A new drainfield was installed when the second repair was made. It also failed to keep the sewage below the land surface. The approach taken in repairing the system a third time involved installation of two Jet Inc. individual aerobic treatment plants (each a Model J-153) connected in series, with the second plant ultimately discharging (by pump) into a gravel-filled pit. After more than a year of operation, the Camerons continue to be pleased with the aerobic system.

The report prepared by Mr. Canoles and Mr. Richard Duvall (Attachment E) describes their study of the performance of the Cameron system in conjunction with three (3) approaches to reduce pathogens. Samples were taken on thirty-three (33) different days during the period beginning on March 11, 1985 and ending on February 27, 1986. The parameters examined were: Five-day biochemical oxygen demand (BOD-5); suspended solids (SS); dissolved oxygen (DO); and fecal coliforms. The limited data collected tends to support the following staff conclusions:

1. Exposure of effluent from the second aerobic plant in the system to UV radiation is most effective at reducing fecal coliform counts when the suspended solids values are low. To be assured of fecal coliform die-off, the suspended solids values should consistently be less than ten (10) mg/L in this system.
2. Insufficient data was gathered to determine the effect of ozone exposure on reducing fecal coliform values. Historically, ozone has been shown to be an effective disinfecting mechanism in small systems.
3. Chlorine is effective at reducing fecal coliform values when metered into the effluent in proper amounts and with a sufficient contact time. The method of application and contact time are not discussed in the report.
4. Use of two (2) aerobic treatment plants placed in series appears to provide a reduction in BOD-5 and SS similar to what would be expected from an aerobic plant meeting NSF Class I requirements.

In staff's view, the Cameron system is located on a very difficult site. The shallow tidally influenced groundwater table and seasonal flooding hazard would normally be factors likely to cause any system dependent upon

soil absorption to fail, by causing the sewage to discharge at the ground surface. Staff expect that when the absorption pit is inundated with groundwater, the polished effluent from the aerobic plants is likely to seep to the ground surface. Provided the package plants are operated and maintained properly, and provided the clear and odorless effluent is disinfected appropriately, the health hazard risk to the Cameron family should be very low.

It should be mentioned that effluent disinfection processes are not addressed within the on-site sewage disposal rules (OAR Chapter 340, Division 71). All on-site systems are designed and expected to discharge effluent into the surface soils, where existing microorganisms look upon the entrained suspended solids and pathogens as a food source. The microbial activities, coupled with soil filtering, provide effective treatment of residential wastewater. Use of an injected disinfectant that may pass into the soil system with a residual (such as chlorine or iodine) may have an adverse impact upon the soil microbial populations, and thus promote soil clogging. However, it is appropriate to disinfect treated wastewaters that are discharged to surface locations (on the land or into surface waters), because there is an associated risk of exposure and contact to people. Treated wastewater disposal via land irrigation and discharges to surface waters are managed through other permit processes (NPDES and WPCF permits) that address minimum operation and maintenance requirements as well as continuous report monitoring and Department oversight. At the current time, discharges from individual on-site sewage disposal systems to surface waters are not permitted.

#### Discussions with State of Alaska

Staff contacted the Alaska Department of Environmental Conservation (D.E.C.) concerning their approach to the use of individual package plants. According to Mr. Dan Easton, Manager, Water Pollution Control Program of D.E.C., individual package plants may be used in Alaska if they have been tested and certified by NSF, and provided they can perform the same as a septic tank. State approval is required prior to installation of all systems. Residential-size package plants and septic tanks are allowed to discharge directly into marine and fresh waters under general state permits and into soil absorption facilities. The state requirements are administered out of three (3) D.E.C. District offices, two (2) of which were also contacted.

The district office in Anchorage is reluctant to allow small package plants to be installed because of their poor performance (caused by an apparent lack of proper operation and maintenance). The Ketchikan office, however, is more liberal in permitting their use because of the severe site conditions prevalent in the district. Development is occurring in areas with very shallow soil depths or in muskeg. Sites adjacent to marine waters may discharge package plant or septic tank effluents directly.



EQC Agenda Item J

May 29, 1987

Disinfection may be required to discharge to environmentally sensitive waters or when oyster beds are present. The package plant is not used where electrical power is not available. At muskeg sites where effluent seeping to the surface is expected, the District office prefers the use of systems having higher levels of treatment and disinfection (such as sand filters, mounds or package plants) so as to reduce the health hazard exposure. D.E.C. has found that most homeowners do not maintain their package plant system, thus health risk problems have been encountered. When the mechanical portions of the plant become inoperative, they are not repaired. Over time, the package plants functionally become the equivalent of a septic tank.

S00:H  
WH1975

**BRIEF SUMMARY OF THE DEPARTMENT'S APPROACH TO INDIVIDUAL  
PACKAGE PLANTS**

The Department's approach to individual aerobic package plants was established very early in the history of the program. At the time authority for on-site sewage disposal was transferred from the Health Division to the Department, very few individual plants were in use within Oregon. Consequently, the Department had little direct experience with them.

Department staff first considered granting approval of this type of system following a field review of systems in two (2) counties in Colorado during the summer of 1974. Section 3 of the field trip report (Attachment C) indicates most of the plants that had been in use for any length of time were not performing well. BOD-5 and SS values were high, and solids had been discharged from them. The cause appeared to be a lack of maintenance. Colorado officials viewed package plants negatively because a disproportionate personnel resource had to be committed to correcting health hazard conditions.

With manufacturer's interest in marketing aerobic systems in Oregon and because it was recognized their performance was dependent not only upon design, but also upon proper operation and maintenance, the Department promulgated conservative rules concerning individual package plants and allowed their use provided the Class I requirements of NSF Standard No. 40 were met. Over time, the rules have been relaxed to allow both NSF Class I and Class II plants. Additionally, the Department no longer requires a public entity to be responsible for the operation and maintenance of each plant, nor an inspection of the plant to be conducted every three (3) months. The current rule (contained within this attachment) allows NSF Class I plants to discharge into disposal fields that are twenty (20) percent smaller than would be required for a septic tank or Class II plant. The rule emphasizes the need to properly operate and maintain the plants, and requires they be inspected by the Agent at least annually. These policies generally recognize that if the system is not adequately maintained, it can continue to function as a septic tank (with discharge to the same or approximately the same disposal area as required for septic tanks).

## 340-71-345 AEROBIC SYSTEMS.

- (1) For the purpose of these rules:
- (a) "Aerobic Sewage Treatment Facility" means a sewage treatment plant which incorporates a means of introducing air (oxygen) into the sewage so as to provide aerobic biochemical stabilization during a detention period.
  - (b) "Mechanical Oxidation Sewage Treatment Facility" means an aerobic sewage treatment facility.
- (2) Criteria for Approval. Aerobic sewage treatment facilities may be approved for a construction-installation permit provided all the following criteria are met:
- (a) The daily sewage flow to be treated is less than five thousand (5000) gallons.
  - (b) The aerobic sewage treatment facility (plant) is part of an approved on-site sewage disposal system.
  - (c) The plant has been tested pursuant to the current version of the National Sanitation Foundation (NSF) Standard No. 40, relating to Individual Aerobic Wastewater Treatment Plants, and been found to conform with Class I or Class II and other requirements of the standard. In lieu of NSF testing, the Department may accept testing by another agency which it considers to be equivalent.
  - (d) The property owner records in the county land title records, in a form approved by the Department, an easement and a covenant in favor of the State of Oregon.
    - (A) Allowing its officers, agents, employees and representatives to enter and inspect, including by excavation, the aerobic sewage treatment facility; and
    - (B) Acknowledging that proper operation and maintenance of the plant is essential to prevent failure of the entire on-site sewage disposal system; and
    - (C) Agreeing for himself and his heirs, successors and assigns, to hold harmless, indemnify and defend the State of Oregon, its officers, representatives, employees and agents for any and all loss and damage caused by installation or operation of the system; and
    - (D) Agreeing not to put the land to any conflicting use.

- (3) The plant shall:
- (a) Have a visual and audible alarm, placed at a location acceptable to the Agent, which are activated upon an electrical or mechanical malfunction.
  - (b) Have a minimum rated hydraulic capacity equal to the daily sewage flow or five hundred (500) gallons per day, whichever is greater.
  - (c) Have aeration and settling compartments constructed of durable material not subject to excessive corrosion or decay.
  - (d) Have raw sewage screening or its equivalent.
  - (e) Have provisions to prevent surging of flow through the aeration and settling compartments.
  - (f) Have access to each compartment for inspection and maintenance.
  - (g) Have provisions for convenient removal of solids.
  - (h) Be designed to prevent:
    - (A) Short circuiting of flow.
    - (B) Deposition of sludge in the aeration compartment.
    - (C) Excessive accumulation of scum in the settling compartment.
- (4) Disposal Field Sizing. Disposal fields serving systems employing aerobic sewage treatment facilities shall be sized according to Tables 4 and 5 of these rules. Where a NSF Class I plant is installed, the linear footage of disposal trench installed may be reduced by twenty (20) percent, provided a full sized standard system replacement area is available.
- (5) Operation and Maintenance:
- (a) The supply of parts must be locally available for the expected life of the unit.
  - (b) The supplier of the plant shall be responsible for providing operation training to the owner.

- (c) The supplier of the plant shall provide the owner with an operation and maintenance (O & M) manual for the specific plant installed.
  - (d) The owner shall remove excess solids from the plant at least once per year, or more frequently if recommended by the O & M manual.
- (6) Inspection Requirements. Each aerobic sewage treatment facility installed under this rule shall be inspected by the Agent at least once per year (See OAR 340-71-260(4)(a)).

DEPARTMENT OF ENVIRONMENTAL QUALITY  
COLORADO FIELD TRIP REPORT  
July 29 to August 1, 1974

Section 3

It is my intent in Section 3 of the Colorado trip report to expand on alternate systems that have been used in the state of Colorado during the last few years. This section supplements Bob Jackman's section on the background of the governmental situation in the state and three populated counties in the Denver, Boulder, and Fort Collins area. Jim Goldsmith, in Section 2, has reported on modified systems to subsurface sewage disposal such as evapo-transpiration beds, both at the ground surface and mounded.

Approximately three years ago, because of the state not being prepared for such an avalanche, and the counties not being in any position to prevent it, approval was sought by a manufacturer engineer for the installation of his particular prefab sewage treatment plant and, with his sales pitch, approval was granted by the county board of health for installation of his units. This type of approval provided that a system could be installed where the effluent from the small package treatment plant could be discharged onto the ground surface behind a single family dwelling, or into the roadside ditch, or even into a receiving stream. It should be noted that as a result of this the counties have had to set up a surveillance and monitoring program in order to gather evidence to eliminate these health-hazard conditions. The health-hazard conditions have resulted from the inadequate operation of each of these systems. Where ground surface discharges or public water discharges were allowed in the past from these types of units, the counties are requiring corrections. In many cases the corrections are very difficult because of the soil conditions, property layout and other factors involved in getting a subsurface system installed.

Jefferson County

This county was the first one where the Board of Health allowed 60 such discharges to be installed. Because of many problems, including freezing, malfunctions, bad units, and of course no operation, the county has been on a full program of eliminating these discharges. The county started back in 1971 sampling and then requesting other methods of disposal up to 1974. We received data from 65 systems which were sampled by the county. Basically, the systems were aerating followed by chlorination. There are many different types of small package treatment plants that were installed but they basically followed that type of operation. There were Chromoglas CT-86, Cavitette, PCD, Jet-Aeration, Sanicell, Bio Pure, Nayadic, Envir-O-Treat, and Aerojet.

Of the many samples collected, normally there was no chlorine in the effluent where the state now presently has standards of 1.0 since January 1 of 1973 for discharge onto the surface of the ground. Even since that standard became effective the chlorination is still not evident in the sampling. The total coliform organisms and MPN's of course varied from small counts to many millions because of solids discharging, and no chlorination. The number of coliform bacteria being discharged is very high. We were able to obtain the lab results that have been collected by the Jefferson County Health Department. Suspended solids matter is not to exceed 30 and the results from both grab and composite samples normally are 30 and over. The BOD is supposed to be a maximum of 20 and of the many samples collected through the years of sampling probably 99% of them exceeded the 20 mg/L with most counts in the 100's.

Colorado Field Trip Report  
 July 29 to August 1 (Section 3)

Of the units we saw in the county in this particular field trip, the ones that have been in use for any length of time were malfunctioning; however between sewers being installed and modified subsurface sewage disposal systems, the surface discharges were being eliminated. Below each of these units were grease balls, solids, no chlorination in the effluent, no mixed liquor-suspended solids in the aeration units, odors, flies, no care or maintenance being given in the cases we observed.

Small package type treatment plants have to meet a certain performance criteria in order to be installed. The effluent standards which are set by the state are as follows:

<u>Location - Method of Discharge</u>	<u>Fecal Coliform</u>	<u>5 day BOD</u>	<u>Suspended Solids</u>	<u>COD</u>
Atmosphere or Ground Surface with possible direct human contact	2 per 100 ml	20 mg/L	40 mg/L	85 mg/L
Atmosphere or Ground Surface with protection from human contact	500 per 100 ml	20 mg/L	40 mg/L	85 mg/L
Underground at crop irrigation depth - no entry into ground water		40 mg/L	40 mg/L	
Underground & Soil with percolation faster than one inch in 5 minutes - no entry into ground water		60 mg/L	40 mg/L	

Note: They do allow a reduction in the subsurface sewage disposal field if an aeration system is allowed.

Boulder County

Boulder County has also conducted surveys on these systems and are also in the process of eliminating the surface discharges from them, including the CT-86, the Jet-Aeration, Chromoglass, and other similar units. In fact, we observed on one of our field trips a Bio Pure unit discharging into a septic lagoon. Again, the sampling results follow the same as in Jefferson County. Chlorine residuals were not normally run but the high fecal counts that were obtained would indicate again that with no chlorination there has been a problem, and in most cases the BOD and Suspended Solids were well over the maximum limits allowed.

Conclusions

1. Because of the many malfunctions and failures in most of the systems that have been installed in the past, the manufacturers of these small package treatment plants are now in the process of adding devices on the back end of the aeration plant - such as upflow filters and other techniques. But, even with these, the counties are still requiring that they go to subsurface because of the chlorination requirement in the effluent standards to the surface grounds.

Colorado Field Trip Report  
July 29 to August 1 (Section 3)

2. Because performance criteria is used to allow systems to go in, monitoring and surveillance is required. Where the systems have failed, enforcement is essential to provide correction; but because of staffing and time and the number of systems that have to be converted, it is very difficult for personnel in the counties to obtain compliance.
3. It is the policy presently to stop the proliferation of individual sewage treatment plants. But, because of state laws and effluent standards, they can only bluff their way to accomplish this.
4. They feel if they do set standards it will help to up-grade industries in order to meet those standards, but the environment in Colorado is suffering because of what has been allowed in the past. A lot of these systems were allowed to go in in areas where the only solution will be sewers.
5. In working with these environmental people in Colorado they were quoted many times as saying, "be firm and tough in your state and don't let this happen to you".
6. On the basis of what was observed in the counties, and from my experience in Oregon, I would predict that their environmental program in order to make their state liveable is now 10 years behind us. I base this on the time it has taken us to solve the problems created in Washington County back in the early 60's.

Recommendations

1. I believe that we should identify and set up a sampling program for all individual package treatment plants which are installed in the state of Oregon.
2. Because of the extensive work that has already been done and will continue to be done in Colorado, we should stay in close contact with the state and use them as our experimental station for these systems. Because of history problems they have faced it would be a step backwards for us to allow these systems to go in in any manner at this time, in our state, based on the results we have seen in Colorado. It has been my opinion, and will continue to be, that as long as an individual citizen would have to maintain these systems they cannot do an adequate job.
3. Because the systems are very small and very sensitive, they are not reliable to the shock discharges, the two weeks of time when there is no discharge into them, malfunctions of the equipment, and the energy situation of these units having to run on a 24 hour basis, in which you cannot even be in your back yard without the hum of a compressor or aerator damaging the sounds of the environment.



Colorado Field Trip Report  
July 29 to August 1 (Section 3)

4. The Subsurface Citizens Task Force should concentrate their efforts on modified systems and water quality and staff engineers with experience should be involved with the package-type treatment plants. These complex systems, and the knowledge that is needed to understand them, require staff from the Department rather than a citizens group investigating them. I believe that the County Board of Health, made up of physicians and nurses, who allowed these systems to go in in Colorado, prove again that technical knowledge and experience is needed in these types of systems. We are required by law to set up standards and rules for alternate systems, but we should set a minimum size requirement for systems that can be used so that they can be more reliable and be allowed in areas where planning has been done for sewers. I can see a fantastic economic cost that will come to the state of Colorado in order to phase out all these malfunctioning and health-hazard systems, when the people are tired of living in their own sewage or in the sewage of their neighbors. Prevention and planning should be our program, rather than correction and enforcement.
5. We should continue on with our strong state effort to maintain the work that has been accomplished by our past Directors, past Commissioners, and staff, by not opening the door to such a disaster of environmental quality. The Governor has put us in the right direction and I hope we can continue this as the new Governor takes office in January.

Prepared by



Fred M. Bolton  
Assistant Director  
Enforcement Division

FMB/bw

P.S. The trip was very worthwhile from my standpoint and it was an honor to represent the state of Oregon and DEQ in Colorado. It also indicated to me the environmental improvement that has been accomplished in Oregon and made me proud to be a part of the action during the last few years.

# 1987 ANNUAL LISTINGS

ATTACHMENT D

## Wastewater Treatment Units and Related Products and Components



NATIONAL SANITATION FOUNDATION  
LISTING SERVICES  
JANUARY 30, 1987

EQUIPMENT LISTED AS MEETING NATIONAL SANITATION FOUNDATION

STANDARD 40

INDIVIDUAL AEROBIC WASTEWATER TREATMENT PLANTS

[2]

AQUAROBIC LIMITED  
 171 ROBERT ST., E.  
 P. O. BOX 704  
 PENETANGUISHENE, ONTARIO LOK 2P0

Model Number	Rated Capacity Gallons/Day	Classification
Mini-Plant 54291-5-110*	500	CLASS II
Mini-Plant 54291-6*	600	CLASS II
Mini-Plant 54291-7*	700	CLASS II
Mini-Plant 54291-7.5*	750	CLASS II
Mini-Plant 54291-8*	800	CLASS II
Mini-Plant 54291-9*	900	CLASS II
Mini-Plant 54291-10*	1,000	CLASS II
Mini-Plant 54291-11*	1,100	CLASS II
Mini-Plant 54291-12*	1,200	CLASS II
Mini-Plant 54291-13*	1,300	CLASS II
Mini-Plant 54291-14*	1,400	CLASS II
Mini-Plant 54291-15*	1,500	CLASS II
Mini-Plant F54291-5-S	500	CLASS I
Mini-Plant F54291-6-S	600	CLASS I
Mini-Plant F54291-7-S	700	CLASS I
Mini-Plant F54291-7.5-S	750	CLASS I
Mini-Plant F54291-8-S	800	CLASS I
Mini-Plant F54291-9-S	900	CLASS I
Mini-Plant F54291-10-S	1,000	CLASS I
Mini-Plant F54291-11-S	1,100	CLASS I
Mini-Plant F54291-12-S	1,200	CLASS I
Mini-Plant F54291-13-S	1,300	CLASS I
Mini-Plant F54291-14-S	1,400	CLASS I
Mini-Plant F54291-15-S	1,500	CLASS I

\* When used in conjunction with Filter Kit Model 3000, Models 54291-5 thru 54291-15 are Class I

Class II with suffix F = Fiberglass Tank  
 Class II without suffix F = Concrete Tank  
 Class I without prefix F = Concrete Tank

CMS ROTORDISK, INC.  
5266 GENERAL RD., UNIT 12  
MISSISSAUGA, ONTARIO, CANADA  
L4W 1Z7

Model Number	Rated Capacity Gallons/Day	Classification
S-12 Rotordisk*	500	CLASS I

\* With fiberglass tank

CROMAGLASS CORPORATION  
P O BOX 3215  
WILLIAMSPORT, PA 17701

Model Number	Rated Capacity Gallons/Day	Classification
Cromaglass CA-5	500	CLASS II

JET INC  
750 ALPHA DRIVE  
CLEVELAND, OH 44143

Model Number	Rated Capacity Gallons/Day	Classification
J-150	500	CLASS I
J-158A	500	CLASS I
J-153	500	CLASS II

MULTI-FLO WASTE TREATMENT SYSTEMS, INC.  
2324 EAST RIVER ROAD  
DAYTON, OH 45439

Model Number	Rated Capacity Gallons/Day	Classification
FTB-0.5	500	CLASS I
FTB-0.75	750	CLASS I
FTB-1.0	1,000	CLASS I
FTB-1.5	1,500	CLASS I

NAYADIC SCIENCES, INC.  
RD #4  
BOX 235  
CLARKS SUMMIT, PA 18411

Plant At: SCRANTON, PA

Model Number	Rated Capacity Gallons/Day	Classification
Nayadic M-6A-F	400	CLASS I
Nayadic M-8A-F	600	CLASS I
Nayadic M-1050A-F	800	CLASS I
Nayadic M-2000A-F	1,500	CLASS I
Nayadic M-6A	400	CLASS II
Nayadic M-8A	600	CLASS II
Nayadic M-1050A	800	CLASS II
Nayadic M-2000A	1,500	CLASS II

NORWECO INC  
FIRELANDS INDUSTRIAL PARK  
220 REPUBLIC STREET  
NORWALK, OH 44857

Model Number	Rated Capacity Gallons/Day	Classification
Singulair 820	500	CLASS I

WESTERN ENV. & ENGINEERING CORP.  
199 S. FIFTH STREET  
COLUMBUS, OH 43215

Model Number	Rated Capacity Gallons/Day	Classification
Western RBC 500	500	CLASS I

BOX 5060  
KETCHIKAN, AK 99901  
907-247-8507

CANOLES CONCRETE PRODUCTS

*B. C. Canoles*

ULTRAVIOLET DISINFECTANT UNITS  
LICENSED JET AERATION • DISTRIBUTOR  
JET AERATION SEWAGE TREATMENT PLANTS  
HOME PLUS COMMERCIAL  
1,500 TO 50,000 GAL.

P.O. BOX 10  
NEHALEM, OR 97131  
503-368-6535

March 26, 1987

Environmental Quality Commission  
811 S.W. 6th  
Portland, Oregon 97204

ATTENTION: DIRECTOR'S OFFICE

Dear Sir:

The enclosed tests for the plant enclosed in this report were installed under the most difficult conditions imaginable. During the tests we did some experimenting using ozone treatment, which slightly disrupted the normal testing process.

Sincerely,

*B.C. Canoles*  
B.C. Canoles

BCC:lje

A STUDY OF SEWAGE TREATMENT USING AERATION METHODOLOGY  
AS A BASIS, AND IN COMBINATION WITH ULTRAVIOLET,  
OZONE, AND CHLORINE TREATMENT ON A SITE LOCATED IN  
A TIDAL FLOOD PLAIN.

By B.C. Canoles and Richard Duvall

Funded by Canoles Concrete Products of Oregon  
and R. Duvall of North Coast Concrete Products

April 21, 1986

We wish to acknowledge our wholehearted support and endorsement of the Jet Inc. Wastewater Treatment Plant.

Until the installation of the Jet Inc. Plant, we were faced with an intolerable situation, such as standing wastewater in the yard and offensive odors.

Our home is located on a 50 X 100 ft. lot adjacent to the Nehalem River. This area is in tidewater and subject to winter flooding and extreme high tides. The property was purchased as a vacation home in 1968 and used as such until 1979 when it became a permanent residence. The home was equipped with a 1000 gallon septic tank and drain field.

Several months after full time occupancy, seepage and odors began to appear. In January 1980 the septic tank was pumped. However, we soon learned that this was not the problem and our troubles were far from over.

The Tillamook County Sanitarian and a local contractor felt the best approach was to install a Doseing System.

In late summer of 1981, after removing a hedge, several trees, numerous bushes and plants the doseing system was installed. In less than a year this system began to fail. An attempt to ration and schedule water use was tried with little effect. Again we sought the aid of the County Sanitarian and the Department of Environmental Quality. After soil tests and etc., it was suggested we dig a new drain field and incorporate an over and under device. When one system fills the effluents would drain to the other. Once more we were ankle deep in grey water and attempting every water saving technic possible.

We learned that Canoles Concrete of Oregon and North Coast Concrete Products were seeking a test site for the Jet Inc. Wastewater Treatment Plant that was located in a flood plain. We certainly qualified and were prepared to try anything that would grant relief from a sewage saturated yard and the fowl odors.

The Jet System was installed according to specifications with the exception of the effluents draining into the holding tank from the Doseing system and pumped to a rock drain pit. The Effluents appear clear and odorless.

The Jet Inc. System has been in operation for over a year and we have experienced no problems and have thankfully enjoyed a trouble free yard.

We were at wits end with the situation and frankly do not know what course could have been taken if it were not for the installation of the Jet System. Therefore we offer sincere praise and our highest recommendation for the Jet Inc. Wastewater Treatment Plant.

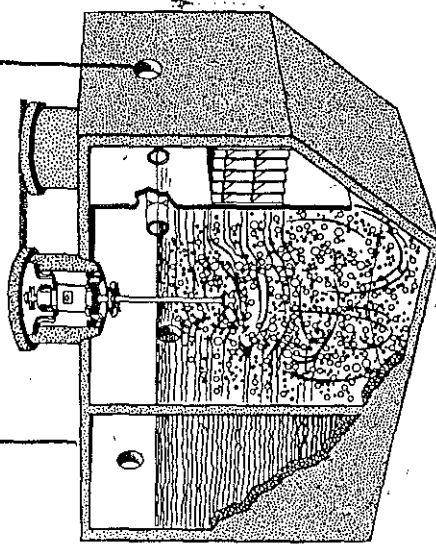
Yours truly,



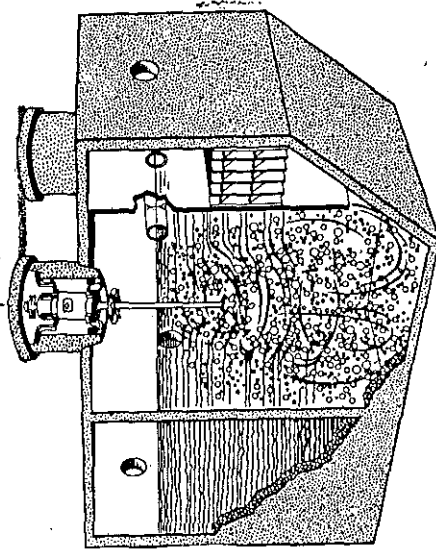
Norma F. Cameron  
Don H. Cameron  
16375 McDonald Rd.  
Nehalem, Or. 97131

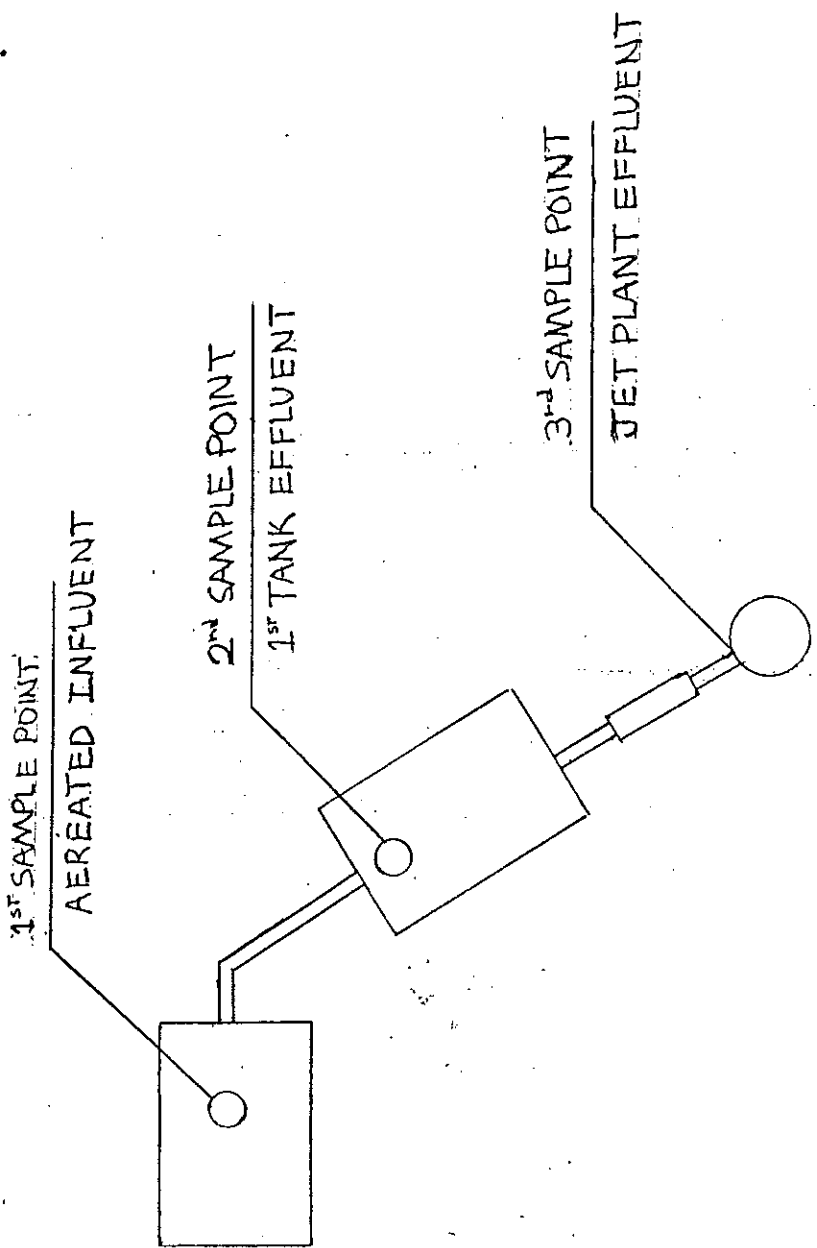


1ST PLANT EFFLUENT  
2ND PLANT EFFLUENT



AERATED INFILTRANT





A STUDY OF SEWAGE TREATMENT USING AERATION METHODOLOGY  
AS A BASIS AND IN COMBINATION WITH ULTRAVIOLET, OZONE,  
AND CHLORINE TREATMENT ON A SITE LOCATED IN A  
TIDAL FLOOD PLAIN

## THE SITE

The site was a residential lot located adjacent to the Nehalem River on the Oregon Coast. The lot is about two miles from the juncture of the river with the Pacific Ocean, and is considered within the flood plain. The lot lies below the river flood level when high tides and heavy rainfall occurs. The lot is subject to flooding. The site contained a house using septic tank sewage disposal dispersed through a standard state specified first and second drain fields. Both drain fields were completely sewage saturated. The entire area had gone septic. The soil was sandy silt. Sewage odors were constantly present.

The purpose of this group of experiments was to see if an aeration treatment plant (JET) in combination with other technologies could provide an acceptable environmental effluent under the most difficult and probably worst case situations.

## MATERIALS AND METHODS

The aeration plant(s) chosen to serve as the nucleus for this trial was the 1200 gallon, three compartment standard JET aeration sewage plant. See Appendix A. In this situation it was decided due to the lack of area to devote to the sand filter drain fields, that two plants would be run in tandem to try and achieve environmentally acceptable effluents. Because of the high ground water table, the drain fields were considered of no value. The water level was influenced by the tide levels and installation of the reinforced concrete tanks require that they be buried at low tide. Otherwise, they would float in the excavation and the walls of the excavation would fall into hole. See Appendix B for site and plant system layout.

Each plant contained an aeration motor to pull air for oxidation into the sewage compartments. In experiment #1, at the termination of the second plant was located an ultraviolet disinfecting device composed of a teflon tube through which the effluent from plant 2 passes. The teflon tube is surrounded by four General Electric germicidal lamps #G25T8. Each lamp is rated at 25 watts at 110-120 volts. The lamps produce short wave length ultraviolet light of 253.7 nanometers wave length. It is lethal to bacteria, protozoa, viruses, molds, yeasts, fungi, nematode eggs, and algae. The device is housed in an aluminum casing, which in turn was enclosed in a plywood box.

In experiment #2 the aeration motor was removed from plant #2 and it was replaced by an ozone generator called Photozone. The ultraviolet device was not used during this stage.

In experiment #3 the ozone generator was removed and the aeration motor was reinstalled in plant #2. A chlorinator device replaced the ultraviolet device to provide germicidal action.

Experiment #1 April 3 - May 30, 1985

Laboratory Test Results - conducted by Donald H. Irvin - Wastewater Operator III - Nehalem, Oregon.

## DISCUSSION

Refer to table #1 and to site drawing Appendix B. In this experiment, aerated influent was sampled from the center cell of plant #1. Before ultra-violet samples were taken from cell 3 of plant #2 and after ultra-violet samples were removed from the dosing well. In reviewing the data, one would conclude that while the results hoped for were not quite achieved, the final effluents were far superior to the septic tank arrangement. At this point, additional septic organic matter was not being added to the 'previously saturated soil. By the end of experiment #1 timeframe, the sewage odors were no longer evident.

It is interesting to note that ultra-violet treatment of the effluent reduced the biological oxygen demand (BOD) to 24-52% of effluent's pre-ultra-violet BOD values. Perhaps oxygen dependent microbes were destroyed thus lowering the BOD values. The suspended solids were also reduced after ultra-violet treatment in the range of 50-76%. Reasons why are unknown to the author, however, again, one might make some speculations. Perhaps the natural electropotential of suspended particles was changed by ultra-violet radiation similar to that of a magnetic field. Or perhaps the ultra-violet device did indeed produce a magnetic field. Another theory might be the elimination of motile microbes by the germicidal effects of ultra-violet radiation would precipitate the microbes and nullify the effects of their agitating, motions upon inert and non-motile particles.

The ultra-violet was effective in its germicidal action on fecal coliforms. It should be considered as an ideal germicidal treatment of effluents clear enough to pass the light waves generated by proper ultra-violet devices. Effluents produced by the type of aeration plants in this experiment meets this standard and are quite adaptable to ultra-violet treatment. This is in contrast to septic tank effluents which can run 400 ppm and is too opaque to pass the rays. Ultra-violet treatment has the distinct advantage of not adding a chemical load to the environment. The disadvantage of UV treatment was quite apparent in this experiment. The device requires electricity and due to the housing not being totally watertight, it shorted out and terminated experiment #1. Due to testing and inspection, covers were not sealed water tight as would be required on a standard installation.

Several additional observations might be made about experiment #1. The ground was quite septic at the time of installation and the plants were not watertight. Thus, contaminated ground

water could flow back into the plants' several apertures. This would affect the performance. Perhaps installation with the plants not completely buried and protruding 18 inches above ground would solve ground water contamination of the units. There are numerous like plants in Alaska installed in a like fashion. Some plants are on the coastal beaches and are totally above ground. This would also keep an ultra-violet device free from moisture. Also, in most other sites, the water table would not be as high as in this case. One last comment concerning testing results, it is disappointing to have missing data from areas of the experiment. It would have been valuable to have the BOD values on 5-8-85 in light of a suspended solids of 6 mg/l. Also, one finds the last test results of 5-30-85 as being unrealistic. One would suspect that the suspended solids data as being reversed.

Experiment 2 June 20 - July 12, 1985

#### DISCUSSION

The use of the ozone generator (Photozone) and experiment #2 was short lived. The unit replaced the aeration motor in plant 2. The generator produced ozone which was delivered to the bottom of the center cell of plant 2 by means of a porous plastic tubing. The ozone would bubble up through the solution which had passed through the aeration process in plant 1. This experiment probably did not get an adequate time allotment and a fair trial. Although BOD and suspended solids (SS) values were not too far above the target of 10 ppm, the dissolved oxygen (DO) dropped to very low values indicating a septic environment. The fecal coliforms seemed to be favored in experiment 2. The 6-27-85 test had colonies too numerous to count after photozone. There was no ultra-violet or chlorination devices on the effluent outfall. The Photozone unit also had the disadvantage of being a very expensive (\$2,000) addition to this project. Had better results been obtained, this phase would have been extended out of professional curiosity.

Experiment 3 September 12, 1985 - February 27, 1986

#### DISCUSSION

This experiment was the best of the three for achieving the goals of 10 ppm for BOD and SS. Referring to the graph on experiment #3, one can see how often the red line depicting 10 ppm is encountered by the 2nd plant effluent's BOD and SS curves. In comparing experiment 1 with experiment 2, one would wonder why they are not more similar. The major difference was the use of chlorine or ultra-violet to kill residual fecal coliforms. Perhaps in experiment 3 the system was in place for a longer period before the exercise began. This would encourage growth of more beneficial microbes for sewage processing. Another factor mentioned briefly before was that at the earlier date of experiment 1, the soil was more contaminated. Seepage of ground water into the plants, especially plant 2, cell 3 would affect results. By the time experiment 3 was ready, most of the ground contamination had leached away.

## SUMMARY

It is possible for areas of high water tables and poor soil perk and/or small lots to have environmentally acceptable on-site sewage treatment and disposal. It does require more rigorous processing than one could expect from a septic tank installation. The above site is an excellent example. The owner of the house had no other solution. The soil could not take any more sewage, additional amounts were passed on to adjacent areas of drainage, and the air smelled of failure. Today the owner is happy with his system. There are many other like situations along the Oregon Coast.

If such methodology becomes common place, it would behoove officials in responsible positions to insist on adequate monitoring of all installations. The supply of parts must be locally available for the expected life of the unit. The supplier of the plant shall be responsible for providing operation training to the owner. The supplier of the plant shall provide the owner with an operation and maintenance (O & M) manual for the specific plant installed. The owner shall remove excess solids from the plant at least once per year, or more frequently if recommended by the O & M manual.

Inspection Requirements. Each aerobic sewage treatment facility installed under this rule shall be inspected by the Agent at least once per year (see OAR 340-71-260(4)(a)).



# NORTH TILLAMOOK COUNTY SANITARY AUTHORITY

P.O. BOX 219

NEHALEM, OREGON 97131

PHONE 368-5125


DUVALL JET PLANT  
McDonald Road, Nehalem, OR 97131

## EXPLANATION OF TESTING PROBLEMS WITH JET PLANT

- May 8, 1985 BOD<sup>5</sup> test did not come out due to incubator failure. Incubator could not maintain proper temperature of 20°C over a 5 day period.
- May 8, 1985 The reason for the high Suspended Solids in the effluent was due to introducing a flow through the system to pickup grab samples, this stirred up the lighter solids in the effluent sample.
- August 1st, 9th and 21, 1985 No BOD<sup>5</sup> and fecal tests on effluent were performed on these dates due to very high CL<sup>2</sup> residual (over 5.0 + Res.) There were also many broken off CL<sup>2</sup> particles, from the CL<sup>2</sup> system tables, in the effluent sample.
- Sept. 4, 1985 No BOD<sup>5</sup> or fecal test were performed due to a high CL<sup>2</sup> residual. (over 5.0 + Res.)
- Feb. 19, 1986 High suspended solids due to introducing a flow through the system to pickup grab samples. This induced flow caused the lighter solids (Pin Flock) to become suspended in the effluent sample.

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NOTE: In the years (13 to be exact) I have worked in wastewater treatment, I have seen many systems come and go. In the results of the tests performed I have personally gained some confidence in the jet plant. I also believe that this system will work if run and maintained properly. Due to its low maintenance, almost any household with proper care could run this plant.

  
Donald H. Irvin - Plant Operator III

	FECAL COLIFORMS PER/100ML	BIOLOGICAL OXYGEN DEMAND MG/L	SUSPEND SOLIDS MG/L	DISSOLVED OXYGEN MG/L
3-11-85				
AERATED				
INFLUENT	856	45	20	7.5
BEFORE UV	2,200	55	16	0.4
AFTER UV	176	42	33	0.5
3-12-85				
AERATED				
INFLUENT	NO DATA	NO DATA	22	6.8
BEFORE UV	NO DATA	NO DATA	21	1.3
AFTER UV	NO DATA	NO DATA	27	0.6
3-20-85				
AERATED				
INFLUENT	2,880	106	15	7.1
BEFORE UV	1,800	91	16	3.7
AFTER UV	50	45	13	8.2

These points not charted due to incomplete data.



TABLE 1 EXPERIMENT 1

TESTING WAS CONDUCTED BY DONALD H. IRVIN - WASTEWATER OPERATOR 3

	FECAL COLIFORMS PER/100ML	BIOLOGICAL OXYGEN DEMAND MG/L	SUSPEND SOLIDS MG/L	DISSOLVED OXYGEN MG/L
4-3-85				
AERATED				
INFLUENT	TNTC	88	30	6
BEFORE UV	TNTC	69	18	3.5
AFTER UV	1	27	13	9.5
4-10-85				
AERATED				
INFLUENT	TNTC	62	23	5.7
BEFORE UV	18,000	55	17	3.5
AFTER UV	35	29	13	9.2
4-17-85				
AERATED				
INFLUENT	NO RESULTS	92	42	5
BEFORE UV	NO RESULTS	76	31	1.7
AFTER UV	NO RESULTS	29	20	8.2
4-24-85				
AERATED				
INFLUENT	1,800	93	37	7.8
BEFORE UV	248	40	20	2.5
AFTER UV	20	16	17	9.1
5-1-85				
AERATED				
INFLUENT	1,440	57	26	NO DATA
BEFORE UV	840	41	21	NO DATA
AFTER UV	1	10	15	NO DATA
5-8-85				
AERATED				
INFLUENT	TNTC	NO DATA	19	NO DATA
BEFORE UV	44	NO DATA	12	NO DATA
AFTER UV	14	NO DATA	6	NO DATA
5-30-85				
AERATED				
INFLUENT	TNTC	54	14	NO DATA
BEFORE UV	504	19	15	NO DATA
AFTER UV	1	17	30	NO DATA

TABLE 2 EXPERIMENT 2

TESTING WAS CONDUCTED BY DONALD H. IRVIN - WASTEWATER OPERATOR 3

	FECAL COLIFORMS PER/100ML	BIOLOGICAL OXYGEN DEMAND MG/L	SUSPEND SOLIDS MG/L	DISSOLVED OXYGEN MG/L
5-20-85				
AERATED				
INFLUENT	TNTC	81	13	7.3
BEFORE PROTOZONE	492	58	6	8.2
AFTER PROTOZONE	186	17	5	5
5-27-85				
AERATED				
INFLUENT	TNTC	127	28	5.8
BEFORE PROTOZONE	NO DATA	NO DATA	NO DATA	NO DATA
AFTER UV	TNTC	20	13	3.5
7-12-85				
AERATED				
INFLUENT	NO DATA	34	31	4.6
BEFORE PROTOZONE	NO DATA	21	25	6.2
AFTER UV	3	8	11	5

	FECAL COLIFORMS PER/100ML	BIOLOGICAL OXYGEN DEMAND MG/L	SUSPEND SOLIDS MG/L	DISSOLVED OXYGEN MG/L
8-2-85				
AERATED				
INFLUENT	NO DATA	NO DATA	35	5.6
EFFLUENT	<1	NO DATA	15	8.6
8-9-85				
AERATED				
INFLUENT	NO DATA	NO DATA	37	6.6
EFFLUENT	10	NO DATA	4	9.0
8-15-85				
AERATED				
INFLUENT	NO DATA	67	10	7.0
EFFLUENT	<1	2	2	7.5
8-21-85				
AERATED				
INFLUENT	NO DATA	NO DATA	17	7.0
EFFLUENT	NO DATA	NO DATA	14	13.2

These points not charted due to incomplete data.

TABLE 3      EXPERIMENT 3

TESTING WAS CONDUCTED BY DONALD H. IRVIN - WASTEWATER OPERATOR 3

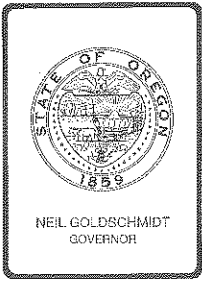
	FECAL COLIFORMS PER/100ML	BIOLOGICAL OXYGEN DEMAND MG/L	SUSPEND SOLIDS MG/L	DISSOLVED OXYGEN MG/L
9-12-85 AERATED INFLUENT OF FIRST PLANT	----	44	15	6.8
EFFLUENT 2ND PLANT	<1	12	3	8.4
9-19-85 AERATED INFLUENT OF FIRST PLANT	----	89	23	6.3
EFFLUENT 2ND PLANT	85	13	4	7.8
10-17-85 AERATED INFLUENT EFFLUENT 1ST PLANT	----	67	76	6
EFFLUENT 2ND PLANT	----	41	46	2.8
	103	10	6	7.4
10-24-85 AERATED INFLUENT EFFLUENT 1ST PLANT	----	107	56	4.8
EFFLUENT 2ND PLANT	----	73	41	3.6
	4	12	4	9
11-1-85 AERATED INFLUENT EFFLUENT 1ST PLANT	----	111	82	6.5
EFFLUENT 2ND PLANT	----	71	45	3.6
	125	12	3	8.1
11-14-85 AERATED INFLUENT EFFLUENT 1ST PLANT	----	111	103	7.1
EFFLUENT 2ND PLANT	----	----	25	6.5
	<1	8	6	9.6

TESTING WAS CONDUCTED BY DONALD H. IRVIN - WASTEWATER OPERATOR 3

	FECAL COLIFORMS PER/100ML	BIOLOGICAL OXYGEN DEMAND MG/L	SUSPEND SOLIDS MG/L	DISSOLVED OXYGEN MG/L
11-28-85 AERATED INFLUENT	-----	133	104	7.4
EFFLUENT 1ST PLANT	-----	-----	98	4.5
EFFLUENT 2ND PLANT	<1	17	6	9.2
12-4-85 AERATED INFLUENT	-----	109	144	5.5
EFFLUENT 1ST PLANT	-----	100	82	5.3
EFFLUENT 2ND PLANT	<1	11	11	9.7
12-12-85 AERATED INFLUENT	-----	74	114	8.4
EFFLUENT 1ST PLANT	-----	-----	96	7.4
EFFLUENT 2ND PLANT	<1	9	13	10.6
12-19-85 AERATED INFLUENT	-----	95	83	7.1
EFFLUENT 1ST PLANT	-----	79	44	6.7
EFFLUENT 2ND PLANT	NO TEST	12	7	10.2
1-9-86 AERATED INFLUENT	-----	88	71	6.9
EFFLUENT 1ST PLANT	-----	64	42	5.3
EFFLUENT 2ND PLANT	67	13	13	10.2
1-16-86 AERATED INFLUENT	-----	84	108	6.6
EFFLUENT 1ST PLANT	-----	101	36	5.4
EFFLUENT 2ND PLANT	69	10	9	9.3

TESTING WAS CONDUCTED BY DONALD H. IRVIN - WASTEWATER OPERATOR 3

	FECAL COLIFORMS PER/100ML	BIOLOGICAL OXYGEN DEMAND MG/L	SUSPEND SOLIDS MG/L	DISSOLVED OXYGEN MG/L
1-23-86				
AERATED INFLUENT	----	120	75	7
EFFLUENT				
1ST PLANT EFFLUENT	----	106	46	6.4
2ND PLANT	65	12	21	9.2
REMAINING PORTION OF EXPERIMENT IS NOT CHLORINATED				
2-13-86				
AERATED INFLUENT	----	129	107	7.4
EFFLUENT				
1ST PLANT EFFLUENT	----	----	----	----
2ND PLANT	99	5	9	10.5
RESIDENT FLUSHED BACTERICIDAL SOLUTION INTO SYSTEM				
2-19-86				
AERATED INFLUENT	----	157	101	5.6
EFFLUENT				
1ST PLANT EFFLUENT	----	71	47	4.3
2ND PLANT	TNTC	20	27	9.6
2-27-86				
AERATED INFLUENT	----	81	52	8.1
EFFLUENT				
1ST PLANT EFFLUENT	----	54	43	6.7
2ND PLANT	223	14	8	9.8



## Environmental Quality Commission

811 SW SIXTH AVENUE, PORTLAND, OR 97204 PHONE (503) 229-5696

### MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Agenda Item L, May 29, 1987, EQC Meeting

Adoption of Rules for Contested Case Hearing on  
Senate Bill 662 Landfill Siting Decision

### Background

With this memorandum, the Environmental Quality Commission (EQC) is receiving three items:

- (1) Notice of Proposed Adoption of Temporary Rules;
- (2) Statutory Authority Statement of Need; and
- (3) State of Oregon Attorney General's Model Rules of Procedure Applicable to Conducted Cases.

On May 7, 1987, the EQC voted to provide interested parties an opportunity for a contested case hearing on the SB 662 landfill siting decision. In accord with this decision, it is requested that the Commission adopt the attached Attorney General's model rules of procedure applicable to contested cases.

The reasons for adopting these model rules of procedure in lieu of the existing EQC rules are set forth in the Statutory Authority and Statement of Need document (attached).

Fred Hansen

Cathy Fitch:b  
229-5110  
May 22, 1987  
SB6708

OAR 340, Division 11, Title - Procedures for Conduct of Contested Case on Order of Environmental Quality Commission selecting a land fill disposal site under authority of 1985 Oregon Laws, chapter 679.

340-11-141. Rules/Applicability. (a) The Environmental Quality Commission hereby adopts the Attorney General's Model Rules numbered OAR 137-03-001 through 137-03-093 and OAR 137-04-010 (Model Rules) for application to any contested case conducted by or for the commission on its order selecting a landfill disposal site pursuant to 1985 Oregon Laws, chapter 679.

(b) The Model Rules shall only apply to the contested case (or cases) described in subsection 340-11-141(a). The commission's rules for conduct of contested cases, OAR 340-11-097 through 340-11-140, shall continue to apply in all other cases. These rules shall become effective upon filing of the adopted rule with the Secretary of State.

DGE:tla132/052287rule3.2



ENVIRONMENTAL QUALITY COMMISSION  
TEMPORARY RULES FOR CONDUCT OF CONTESTED CASE  
ON ORDER OF ENVIRONMENTAL QUALITY COMMISSION  
TO ESTABLISH A LANDFILL DISPOSAL SITE TO SERVE  
CLACKAMAS, MULTNOMAH AND WASHINGTON COUNTIES  
UNDER OREGON LAWS 1985, CHAPTER 679

Temporary Rules Adopted May 29, 1987

For more information, contact:  
Department of Environmental Quality  
811 SW Sixth Street  
Portland, OR 97203  
(Phone: 503-229-5731)

1                   Before the Environmental Quality Commission  
2                                           of the State of Oregon

3     In the matter of the adoption     )  
4     of the Attorney General's         )  
5     Model Rules for the Conduct       )         STATUTORY AUTHORITY  
6     of Contested Cases to be         )         STATEMENT OF NEED AND REASONS  
7     applied to the commission's       )         IN SUPPORT OF TEMPORARY  
8     selection of a land fill           )         RULEMAKING  
9     site for the Portland             )  
10    Metropolitan area.                )

11           1.     Citation of statutory authority:   ORS 183.341 and  
12           183.335(5) which authorize the Environmental Quality Commission  
13           (EQC) to adopt the Attorney General's Model Rules and also  
14           authorize the agency to adopt temporary rules.

15           2.     Need for the adoption of rules and reasons why  
16           temporary rulemaking is required:

17           (a)    The St. Johns landfill which currently serves the  
18           Multnomah/Washington/Clackamas tri-county area will be closed in  
19           1991 and time is thus of the essence in completing the EQC's  
20           selection of a new disposal site.

21           (b)    The EQC will select a land fill disposal site to serve  
22           the tri-county area on June 12, 1987, under the authority of 1985  
23           Oregon Laws, chapter 679.

24           (c)    Interested persons will be given an opportunity to have  
25           a contested case on the EQC order selecting the disposal site.

26           (d)    The EQC's administrative rules for conduct of a  
27           contested case provide for a lengthy appeal of the hearings  
28           officer's final order to the full commission.   OAR 340-11-132.

29           (e)    Procedural rules which provide necessary procedural  
30           protections to interested parties and yet eliminate unnecessary

1 lengthy appeal periods are necessary because of the time  
2 sensitive nature of the EQC's responsibility to select a new  
3 disposal site to serve the Portland Metropolitan Area.

4 (f) The Attorney General's Model Rules provide such  
5 procedural protections without lengthy administrative appeal  
6 procedures.

7 3. The EQC finds that its failure to act promptly to adopt  
8 the Attorney General's Model Rules will result in serious  
9 prejudice of the public interest or the interest of the parties  
10 concerned for the following reasons:

11 (a) Because of the need to act as rapidly as possible,  
12 consistent with protection of the procedural rights of interested  
13 parties, the administrative appeal procedures contained in the  
14 EQC's existing rules for conduct of contested cases are  
15 inappropriate for application to any contested case conducted on  
16 the EQC's order selecting a landfill to serve the Portland  
17 Metropolitan Area. Lengthy delays caused by such administrative  
18 appeals would seriously prejudice the public interest by  
19 unnecessarily postponing development of a new land fill for the  
20 Portland Metropolitan Area beyond the time when the St. Johns  
21 landfill may be closed. Adoption of the Attorney General's Model  
22 Rules will allow the EQC to conduct any contested case in a  
23 manner consistent with protection of interested parties'  
24 procedural rights and without unnecessary delays.

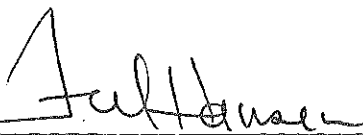
25 (b) The EQC is unable to adopt the Attorney General's Model  
26 Rules under the ordinary notice and hearing procedure prescribed

1 by ORS 183.335 because there is not sufficient time to conduct  
2 such a rulemaking hearing and also provide interested parties  
3 with a timely notice of the procedural rules to be applied in any  
4 contested case held on the EQC's order selecting a landfill for  
5 the Portland Metropolitan Area.

6 4. Fiscal and economic impact: None.

7 DATED May 29, 1987.

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Fred Hansen, Director  
Department of Environmental  
Quality

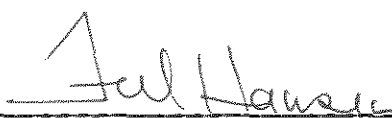


1 Environmental Quality, telephone number 229-5731, has been  
2 designated by the EQC as the contact person to receive public  
3 comments pertaining to this rule prior to the May 29, 1987  
4 meeting. A copy of the rule can be obtained from Ms. Perry.

5 5. The members of the Environmental Quality Commission  
6 shall preside over the meeting.

7 DATED May \_\_\_\_\_, 1987.

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Fred Hansen, Director  
Department of Environmental  
Quality

**OREGON ADMINISTRATIVE RULES**  
**CHAPTER 137, DIVISION 3 - DEPARTMENT OF JUSTICE**

**DIVISION 3**

**MODEL RULES OF PROCEDURE  
APPLICABLE TO  
CONTESTED CASES**

**Contested Case Defined**

**137-03-000** [IAG 14, f. & ef. 10-22-75;  
IAG 17, f. & ef. 11-25-77;  
IAG 4-1979, f. & ef. 12-3-79;  
IAG 1-1981, f. & ef. 11-17-81;  
Repealed by JD 2-1986,  
f. & ef. 1-27-86]

**Notice**

**137-03-001** In addition to the requirement of ORS 183.415(2), a contested case notice may include a statement that the record of the proceeding to date, including the agency file or files on the subject of the contested case, automatically become part of the contested case record upon default for the purpose of proving a prima facie case.

Stat. Auth.: ORS Ch. 183

Hist.: IAG 14, f. & ef. 10-22-75; IAG 17, f. & ef. 11-25-77; IAG 4-1979,  
f. & ef. 12-3-79; JD 2-1986, f. & ef. 1-27-86

**Rights of Parties in Contested Cases**

**137-03-002** (1) In addition to the information required to be given under ORS 183.413(2) and 183.415(7), before commencement of a contested case hearing, the agency shall inform a party, if the party is an agency, corporation, or an unincorporated association, that such party must be represented by an attorney licensed in Oregon, unless statutes applicable to the contested case proceeding specifically provide otherwise.

(2) Except as otherwise required by ORS 183.415(7), the information referred to in section (1) of this rule may be given in writing or orally before the commencement of the hearing.

(3) Unless precluded by law, informal disposition may be made of any contested case by stipulation, agreed settlement, consent order, or default. Informal settlement may be made in license revocation proceedings by written agreement of the parties and the agency consenting to a suspension, fine, or other form of intermediate sanction.

(4) Unless precluded by law, informal disposition includes, upon agreement between the agency and the parties, but is not limited to, a modified contested case proceeding, nonrecord abbreviated hearing, nonbinding arbitration, and mediation, but does not include binding arbitration.

Stat. Auth.: ORS Ch. 183

Hist.: IAG 1-1981, f. & ef. 11-17-81; JD 2-1986, f. & ef. 1-27-86

**Request by Person to Participate as Party or Limited Party**

**137-03-005** (1) When an agency gives notice that it intends to hold a contested case hearing, persons who have an interest in the outcome of the agency's proceeding or who represent a public interest in such result, shall upon request be given the opportunity to participate as parties or limited parties.

(2) A person requesting to participate as a party or limited party, shall file a petition with sufficient copies for service on all parties, with the agency at least 14 business days before the date set for the hearing. Petitions untimely filed shall not be considered unless the agency determines that good cause has been shown for failure to file timely.

(3) The petition shall include the following:

(a) Names and addresses of the petitioner and of any organization the petitioner represents;

(b) Name and address of the petitioner's attorney, if any;

(c) A statement of whether the request is for participation as a party or a limited party, and, if as a limited party, the precise area or areas in which participation is sought.

(d) If the petitioner seeks to protect a personal interest in the outcome of the agency's proceeding, a detailed statement of the petitioner's interest, economic or otherwise, and how such interest may be affected by the results of the proceeding.

(e) If the petitioner seeks to represent a public interest in the results of the proceeding, a detailed statement of such public interest, the manner in which such public interest will be affected by the results of the proceeding, and the petitioner's qualifications to represent such public interest.

(f) A statement of the reasons why existing parties to the proceeding cannot adequately represent the interest identified in subsections (3)(d) or (e) of this rule.

(4) The agency shall serve a copy of the petition on each party personally or by mail. Each party shall have seven business days from the date of personal service or agency mailing to file a response to the petition.

(5) If the agency determines that good cause has been shown for failure to file a timely petition, the agency at its discretion may:

(a) Shorten the time within which answers to the petition shall be filed; or

(b) Postpone the hearing until disposition is made of the petition.

(6) If a person is granted participation as a party or a limited party, the agency may postpone or continue the hearing to a later date when it appears that commencing or continuing the hearing would jeopardize or unduly burden one or more of the parties in the case.

(7) In ruling on petitions to participate as a party or a limited party, the agency shall consider:

(a) Whether the petitioner has demonstrated a personal or public interest that could reasonably be affected by the outcome of the proceeding;

(b) Whether any such affected interest is within the scope of the agency's jurisdiction;

(c) The qualifications the petitioner represents in cases in which a public interest is alleged;

(d) The extent to which the petitioner's alleged interest will be represented by existing parties.

(8) A petition to participate as a party may be treated as a petition to participate as a limited party.

(9) The agency has discretion to grant petitions for persons to participate as a party or a limited party. The agency shall specify areas of participation and procedural limitations as it deems appropriate.

(10) An agency ruling on a petition to participate as a party or as a limited party shall be by written order and served promptly on the petitioner and all parties. The agency shall also serve petitioner with the notice of rights required by ORS 183.413(2).

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Stat. Auth.: ORS Ch. 183  
Hist.: IAG 17, f. & ef. 11-25-77; IAG 4-1979, f. & ef. 12-3-79; JD 2-1986, f. & ef. 1-27-86

**Request by Agency to Participate as a Party or an Interested Agency**

**137-03-007** (1) When an agency gives notice that it intends to hold a contested case hearing, it may name any other agency that has an interest in the outcome of that proceeding as a party or as an interested agency, either on its own initiative or upon request by that other agency.

(2) An agency named as a party or as an interested agency has the same procedural rights and shall be given the same notices, including notice of rights, as any party in the proceeding.

(3) An agency may not be named as a party under this rule without written authorization of the Attorney General.

Stat. Auth.: ORS Ch. 180 & 183  
Hist.: JD 2-1986, f. & ef. 1-27-86

**Immediate Suspension or Refusal to Renew a License, Notice of Opportunity for Hearing, Service**

**137-03-010** (1) If the agency finds there is a serious danger to the public health or safety, it may immediately suspend or it may refuse to renew a license.

(2) The agency shall give notice to the party upon immediate suspension or refusal to renew a license. The notice shall be served personally or by registered or certified mail and shall include:

(a) The statements required under ORS 183.415(2) and (3).

(b) The effective date of the suspension or refusal to renew the license.

(c) A statement that any demand for a hearing must be received within 90 days of date of notice or the hearing is waived.

(d) A statement giving reasonable grounds and supporting the finding that a serious danger to the public health and safety would exist without the immediate suspension or refusal to renew the license.

Stat. Auth.: ORS Ch. 183  
Hist.: IAG 14, f. & ef. 10-22-75; IAG 17, f. & ef. 11-25-77; JD 2-1986, f. & ef. 1-27-86

**Orders When no Hearing Requested or Failure to Appear**

**137-03-020** [IAG 14, f. & ef. 10-22-75;  
IAG 17, f. & ef. 11-25-77;  
IAG 1-1981, f. & ef. 11-17-81;  
Repealed by JD 2-1986,  
f. & ef. 1-27-86]

**Subpoenas, Depositions**

**137-03-030** [IAG 14, f. & ef. 10-22-75;  
IAG 17, f. & ef. 11-25-77;  
IAG 4-1979, f. & ef. 12-3-79;  
IAG 1-1981, f. & ef. 11-17-81;  
Repealed by JD 2-1986,  
f. & ef. 1-27-86]

**Hearing**

**137-03-040** (1) The contested case hearing shall be

conducted by and under the control of the presiding officer. The presiding officer may be the chief administrative officer of the agency, a member of its governing body, or any other person designated by the agency.

(2) If the presiding officer or any decision maker has a potential conflict of interest as defined in ORS 244.020(4), that officer shall comply with the requirements of ORS Chapter 244 (e.g., ORS 244.120 and 244.130).

(3) The hearing shall be conducted, subject to the discretion of the presiding officer, so as to include the following:

(a) The statement and evidence of the proponent in support of its action.

(b) The statement and evidence of opponents, interested agencies, and other parties; except that limited parties may address only subjects within the area to which they have been limited.

(c) Any rebuttal evidence.

(d) Any closing arguments.

(4) Presiding officers or decision makers, interested agencies, and parties shall have the right to question witnesses. However, limited parties may question only those witnesses whose testimony may relate to the area or areas of participation granted by the agency.

(5) The hearing may be continued with recesses as determined by the presiding officer.

(6) The presiding officer may set reasonable time limits for oral presentation and may exclude or limit cumulative, repetitious, or immaterial matter.

(7) Exhibits shall be marked and maintained by the agency as part of the record of the proceedings.

(8) If the presiding officer or any decision maker receives any written or oral ex parte communication on a fact in issue during the contested case proceeding, that person shall notify all parties and otherwise comply with the requirements of OAR 137-03-055.

Stat. Auth.: ORS Ch. 183  
Hist.: IAG 14, f. & ef. 10-22-75; IAG 4-1979, f. & ef. 12-3-79; JD 2-1986, f. & ef. 1-27-86

**Evidentiary Rules**

**137-03-050** (1) Evidence of a type commonly relied upon by reasonably prudent persons in conduct of their serious affairs shall be admissible.

(2) Irrelevant, immaterial, or unduly repetitious evidence shall be excluded.

(3) All offered evidence, not objected to, will be received by the presiding officer subject to the officer's power to exclude irrelevant, immaterial, or unduly repetitious matter.

(4) Evidence objected to may be received by the presiding officer. Rulings on its admissibility or exclusion, if not made at the hearing, shall be made on the record at or before the time a final order is issued.

(5) Any time ten (10) days or more before a hearing, the agency, any interested agency, and any party may serve upon every party, interested agency, and the agency a copy of any affidavit, certificate, or other document proposed to be introduced in evidence. Unless cross-examination is requested of the affiant, certificate preparer, or other document preparer or custodian, within five (5) days prior to hearing the affidavit, certificate, or other document may be offered subject to the same standards and received with the same effect as oral testimony.



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(6) If cross-examination is requested of the affiant, certificate preparer, or other document preparer or custodian as provided in section (5) of this rule, and the requestor is informed within five (5) days prior to the hearing that the requested witness will not appear for cross-examination, the affidavit, certificate, or other document may be received in evidence, if the agency or presiding officer determines that the party requesting cross-examination would not be unduly prejudiced or injured by lack of cross-examination.

Stat. Auth.: ORS Ch. 183  
Hist.: IAG 14, f. & ef. 10-22-75; IAG 17, f. & ef. 11-25-77; IAG 4-1979, f. & ef. 12-3-79; IAG 1-1981, f. & ef. 11-17-81; JD 2-1986, f. & ef. 1-27-86

#### **Ex Parte Communications**

**137-03-055** (1) An ex parte communication is an oral or written communication to an agency decision maker or the presiding officer not made in the presence of all parties to the hearing, concerning a fact in issue in the proceeding, and includes communication of any new facts from staff.

(2) If an agency decision maker or presiding officer receives an ex parte communication during the pendency of the proceeding, the officer shall:

(a) Give all parties notice of the substance of the communication, if oral, or a copy of the communication, if written; and

(b) Provide any party who did not present the ex parte communication an opportunity to rebut the substance of the ex parte communication at the hearing, at a separate hearing for the limited purpose of receiving evidence relating to the ex parte communication, or in writing.

(3) The agency's record of a contested case proceeding shall include:

(a) The ex parte communication, if in writing;

(b) A statement of the substance of the ex parte communication, if oral;

(c) The agency or presiding officer's notice to the parties of the ex parte communication; and

(d) Rebuttal evidence.

Stat. Auth.: ORS Ch. 183  
Hist.: JD 2-1986, f. & ef. 1-27-86

#### **Contested Cases - Orders and Default Orders - Rehearing and Reconsideration**

#### **Proposed Orders in Contested Cases, Filing of Exceptions and Argument, an Adoption of Order**

**137-03-060** (1) If a majority of the officials who are to render the final order in a contested case have neither attended the hearing nor reviewed and considered the record, and the order is adverse to a party, a proposed order including findings of fact and conclusions of law shall be served upon the parties.

(2) When the agency serves a proposed order on the parties, the agency shall at the same time or at a later date notify the parties:

(a) When written exceptions must be filed to be considered by the agency; and

(b) When and in what form argument may be made to the officials who will render the final order.

(3) The agency decision maker, after receiving exceptions and argument, may adopt the proposed order or prepare a new order.

Stat. Auth.: ORS Ch. 183  
Hist.: IAG 14, f. & ef. 10-22-75; IAG 17, f. & ef. 11-25-75; IAG 4-1979, f. & ef. 12-3-79; IAG 1-1981, f. & ef. 11-17-81; JD 6-1983, f. 9-23-83, ef. 9-26-83; JD 2-1986, f. & ef. 1-27-86

#### **Ex Parte Communications to an Agency**

**137-03-062** [ IAG 4-1979, f. & ef. 12-3-79; IAG 1-1981, f. & ef. 11-17-81; Repealed by JD 2-1986, f. & ef. 1-27-86]

#### **Ex Parte Communications**

**137-03-063** [IAG 4-1979, f. & ef. 12-3-79; IAG 1-1981, f. & ef. 11-17-81; Repealed by JD 2-1986, f. & ef. 1-27-86]

#### **Ex Parte Communication Record**

**137-03-064** [IAG 4-1979, f. & ef. 12-3-79; IAG 1-1981, f. & ef. 11-17-81; Repealed by JD 2-1986, f. & ef. 1-27-86]

#### **Final Orders**

**137-03-070** Final orders on contested cases shall be in writing and shall include the following:

(1) Rulings on admissibility of offered evidence when the rulings are not set forth in the record.

(2) Findings of fact - those matters that are either agreed as fact or that, when disputed, are determined by the fact finder, on substantial evidence to be facts over contentions to the contrary. A finding must be made on each fact necessary to reach the conclusions of law on which the order is based;

(3) Conclusion(s) of law - applications of the controlling law to the facts found and the legal results arising therefrom;

(4) Order - the action taken by the agency as a result of the facts found and the legal conclusions arising therefrom.

(5) A citation of the statutes under which the order may be appealed.

Stat. Auth.: ORS Ch. 183  
Hist.: IAG 14, f. & ef. 10-22-75; IAG 4-1979, f. & ef. 12-3-79; IAG 1-1981, f. & ef. 11-17-81; JD 2-1986, f. & ef. 1-27-86

#### **Default Orders**

**137-03-075** (1) When the agency has given a party an opportunity to request a hearing and the party fails to make a request within a specified time, or when the agency has set a specified time and place for a hearing and the party fails to appear at the specified time and place, the agency may enter a final order by default.

(2) The agency may issue an order of default only after making a prima facie case on the record. The record may be made at an agency meeting, at a scheduled hearing on the matter or, if the notice of intended action states that the order will be issued or become effective upon the failure of the party to timely request a hearing, when the order is issued.

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(3) If the notice of intended action contains an order that is to become effective unless the party requests a hearing, the record shall be complete at the time of the notice of intended action.

(4) The record may consist of oral (transcribed, recorded or reported) or written evidence or a combination of oral and written evidence. When the record is made at the time the notice or order is issued, the agency file may be designated as the record. In all cases, the record must contain substantial evidence to support the findings of fact.

(5) When the agency has set a specified time and place for a hearing in a matter in which only one party is before the agency and that party subsequently notifies the agency that the party will not appear at such specified time and place, the agency may enter a default order, cancel the hearing, and follow the procedure described in sections (2) and (4) of this rule.

(6) When a party requests a hearing after the time specified by the agency, but before the agency has entered a default order, the agency may grant the request or make further inquiry as to the existence of the reasons specified in subsection (7)(a) of this rule, for the request being tardy. If further inquiry is made, the agency may require an affidavit to be filed with the agency. The agency shall enter an order granting or denying the request as described in subsection (7)(e) of this rule.

(7)(a) When a party requests a hearing after entry of a default order, the party may request to be relieved from the default order only on grounds of mistake, inadvertence, surprise, or excusable neglect.

(b) The request shall be filed with the agency, and a copy delivered or mailed to all persons and agencies required by statute, rule, or order to receive notice of the proceeding, within a reasonable time. If the request is received more than 75 days after delivery or mailing of a copy of the order of default to the party or the party's attorney, it shall be presumed that such a request is not timely. This presumption may be rebutted by evidence showing that the request is reasonably timely.

(c) The request shall state why the party should be relieved from the default order.

(d) The agency may make further inquiry, including holding a hearing, as it deems appropriate.

(e) If the request is allowed by the agency, it shall enter an order granting the request and schedule a hearing in due course. If the request is denied, the agency shall enter an order setting forth its reasons for such denial.

(8) The agency shall notify a defaulting party of the entry of a default order by delivering or mailing a copy of the order as required by ORS 183.330(2).

Stat. Auth.: ORS Ch. 183  
Hist.: JD 2-1986, f. & ef. 1-27-86

**Reconsideration and Rehearing**

**137-03-080** (1) A party may file a petition for reconsideration or rehearing of a final order with the agency within 60 days after the order is served. A copy of the petition shall also be delivered or mailed to all parties and other persons and agencies required by statute, rule, or order to receive notice of the proceeding.

(2) The petition shall set forth the specific grounds for reconsideration or rehearing. The petition may be supported by a written argument.

(3) A rehearing may be limited by the agency to specific matters.

(4) The petition may include a request for stay of a final order if the petition complies with the requirements of OAR 137-03-090(2)(f) through (i).

(5) The agency may consider a petition for reconsideration or rehearing as a request for either or both. The petition may be granted or denied by summary order and, if no action is taken, shall be deemed denied as provided in ORS 183.482.

(6) Any member of an agency's governing body may move for reconsideration or rehearing of an agency final order within 60 days after the order is served. Reconsideration or rehearing shall be granted if approved by the governing body. The procedural effect of granting reconsideration or rehearing on an agency's own motion shall be identical to the effect of granting a party's petition for reconsideration or rehearing.

(7) Reconsideration or rehearing shall not be granted after the filing of a petition for judicial review, except in the manner provided by ORS 183.482(6)

(8) A final order remains in effect during reconsideration or rehearing until changed.

(9) At the conclusion of a reconsideration or rehearing, an agency must enter a new order, which may be an order affirming the existing order.

Stat. Auth.: ORS Ch. 183  
Hist.: IAG 14, f. & ef. 10-22-75; IAG 17, f. & ef. 11-25-77; IAG 1-1981, f. & ef. 11-17-81; JD 2-1986, f. & ef. 1-27-86

**Contested Cases -  
Stay Proceedings**

**Request for Stay**

**137-03-090** (1) Any person entitled to judicial review of an agency order who files a petition for judicial review may request the agency to stay the enforcement of the agency order that is the subject of judicial review.

(2) The stay request shall contain:

(a) The name of the person filing the request, identifying that person as a petitioner and the agency as the respondent;

(b) The full title of the agency decision as it appears on the order and the date of the agency decision;

(c) A summary of the agency decision; and

(d) The name, address, and telephone number of each of the following:

(A) The petitioner;

(B) All other parties to the agency proceeding. When the party was represented by an attorney in the proceeding, then the name, address, and telephone number of the attorney shall be provided and the address and telephone number of the party may be omitted.

(e) A statement advising all persons whose names, addresses and telephone numbers are required to appear in the stay request as provided in subsection (2)(d) of this rule, that they may participate in the stay proceeding before the agency if they file a response in accordance with OAR 137-03-091 within ten days from delivery or mailing of the stay request to the agency;

(f) A statement of facts and reasons sufficient to show that the stay request should be granted because:

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(A) The petitioner will suffer irreparable injury if the order is not stayed,

(B) There is a colorable claim of error in the order, and

(C) Granting the stay will not result in substantial public harm.

(g) A statement identifying any person, including the public, who may suffer injury if the stay is granted. If the purposes of the stay can be achieved with limitations or conditions that minimize or eliminate possible injury to other persons, petitioner shall propose such limitations or conditions. If the possibility of injury to other persons cannot be eliminated or minimized by appropriate limitation or conditions, petitioner shall propose an amount of bond or other undertaking to be imposed on the petitioner should the stay be granted, explaining why that amount is reasonable in light of the identified potential injuries.

(h) A description of additional procedures, if any, the petitioner believes should be followed by the agency in determining the appropriateness of the stay request;

(i) An appendix of affidavits containing all evidence (other than evidence contained in the record of the contested case out of which the stay request arose) upon which the petitioner relies in support of the statements required under subsections (2)(f) and (g) of this rule. The record of the contested case out of which the stay request arose is a part of the record of the stay proceedings.

(3) The request must be delivered or mailed to the agency and on the same date a copy delivered or mailed to all parties identified in the request as required by subsection (2)(d) of this rule.

Stat. Auth.: ORS Ch. 183

Hist.: JD 6-1983, f. 9-23-83, ef. 9-26-83; JD 2-1986, f. & ef. 1-27-86

**Request for Stay - Motion to Intervene**

**137-03-091** (1) Any party identified under OAR 137-03-090(2)(d) desiring to participate as a party in the stay proceeding may file a response to the request for stay.

(2) The response shall contain:

(a) The full title of the agency decision as it appears on the order;

(b) The name, address, and telephone number of the person filing the response, except that if the person is represented by an attorney, then the name, address, and telephone number of the attorney shall be included and the person's address and telephone number may be deleted;

(c) A statement accepting or denying each of the statements of facts and reasons provided pursuant to OAR 137-03-090(2)(f) in the petitioner's stay request.

(d) A statement accepting, rejecting, or proposing alternatives to the petitioner's statement on the bond or undertaking amount or other reasonable conditions that should be imposed on petitioner should the stay request be granted.

(3) The response may contain affidavits containing additional evidence upon which the party relies in support of the statement required under subsections (2)(c) and (d) of this rule.

(4) The response must be delivered or mailed to the agency and to all parties identified in the stay request within

ten (10) days of the date of delivery or mailing to the agency of the stay request.

Stat. Auth.: ORS Ch. 183

Hist.: JD 6-1983, f. 9-23-83, ef. 9-26-83; JD 2-1986, f. & ef. 1-27-86

**Request for Stay - Agency Determination**

**137-03-092** (1) The agency may allow the petitioner to amend or supplement the stay request to comply with OAR 137-03-090(2)(a) through (e) or (3). All amendments and supplements shall be delivered or mailed as provided in OAR 137-03-090(3), and the deadlines for response and agency action shall be computed from the date of delivery or mailing to the agency.

(2) After the deadline for filing of responses, the agency shall:

(a) Decide upon the basis of the material before it; or

(b) Conduct such further proceedings as it deems desirable; or

(c) Allow the petitioner within a time certain to submit responsive legal arguments and affidavits to rebut any response. Petitioner may not bring in new direct evidence through such affidavits. The agency may rely on evidence in such affidavits only if it rebuts intervenor evidence.

(3) The agency's order shall:

(a) Grant the stay request upon findings of irreparable injury to the petitioner or a colorable claim of error in the agency order and may impose reasonable conditions, including but not limited to, a bond or other undertaking and that the petitioner file all documents necessary to bring the matter to issue before the Court of Appeals within a specified reasonable period of time; or

(b) Deny the stay request upon a finding that the petitioner failed to show irreparable injury or a colorable claim of error in the agency order; or

(c) Deny the stay request upon a finding that a specified substantial public harm would result from granting the stay, notwithstanding the petitioner's showing of irreparable injury and a colorable claim of error in the agency order.

(4) Nothing in OAR 137-03-055 or in 137-03-090 to 137-03-092 prevents an agency from receiving evidence from agency staff concerning the stay request. Such evidence shall be presented by affidavit within the time limits imposed by OAR 137-03-091(3). If there are further proceedings pursuant to OAR 137-03-092(2), the agency staff may present additional evidence in the same manner that parties are permitted to present additional evidence.

Stat. Auth.: ORS Ch. 183

Hist.: JD 6-1983, f. 9-23-83, ef. 9-26-83; JD 2-1986, f. & ef. 1-27-86

**Request For Stay - Time Frames**

**137-03-093** (1) Unless otherwise agreed to by the agency, petitioner, and respondents, the agency shall commence any proceedings instituted pursuant to OAR 137-03-092(2) within 20 days after receiving the stay request.

(2) Unless otherwise agreed to by the agency, petitioner, and respondents, the agency shall grant or deny the stay request within 30 days after receiving it.

Stat. Auth.: ORS Ch. 183

Hist.: JD 2-1986, f. & ef. 1-27-86

**OREGON ADMINISTRATIVE RULES**  
**CHAPTER 137, DIVISION 4 - DEPARTMENT OF JUSTICE**

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**DIVISION 4**

Stat. Auth.: ORS Ch. 183  
Hist.: IAG 14, f. & ef. 10-22-75

**MODEL RULES OF PROCEDURE  
APPLICABLE TO  
MISCELLANEOUS PROVISIONS**

**Unacceptable Conduct**

**137-04-010** A presiding officer may expel a person from an agency proceeding if that person engages in conduct that disrupts the proceeding.

Stat. Auth.: ORS Ch. 183  
Hist.: IAG 1-1981, f. & ef. 11-17-81; JD 6-1983, f. 9-23-83, ef. 9-26-83;  
JD 2-1986, f. & ef. 1-27-86

**Repealing Existing Rules**

**137-04-000** All existing Model Rules heretofore adopted are repealed. Such repeal, however, does not affect nor impair any act done, right acquired, or duty imposed prior to the effective date of these rules.

**Calculation of Time for Service**

**137-04-020** [IAG 1-1981, f. & ef. 11-17-81;  
Repealed by JD 2-1986, f. & ef. 1-27-86]

Jim,

A possible option, if you are interested, would be to require the Department to keep accurate cost records and return any excess. This could help address the difference between the company which brings in a fully researched, excellent analysis and the company which continually needs to be told to go back and produce more info. on this or that issue.

(Under SB 138 (PCB incinerator) the concept of a fee charge up front with a return if not used was established.)

BALL, JANIK & NOVACK  
ATTORNEYS AT LAW  
ONE MAIN PLACE  
101 S.W. MAIN STREET, SUITE 1100  
PORTLAND, OREGON 97204-3274  
TELEPHONE (503) 228-2525  
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ROBERT S. BALL  
STEPHEN T. JANIK  
KENNETH M. NOVACK  
JACK L. ORCHARD  
JACOB TANZER  
SUSAN M. QUICK  
WILLIAM H. PERKINS  
CHRISTOPHER W. ANGIUS  
BARBARA W. RADLER  
MICHAEL C. WALCH  
SARAH J. RYAN  
DAVID A. URMAN  
SUSAN NELSON HOWARD  
BRENDA M. FITZGERALD  
LAURIE A. BENNETT

May 14, 1987

COPY FOR YOUR  
INFORMATION

State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
RECEIVED  
MAY 14 1987

OFFICE OF THE DIRECTOR

Mr. James Petersen  
Chairman  
Environmental Quality Commission  
835 N.W. Bond  
Bend, Oregon 97701

Re: Alternative Landfill Site for Metropolitan Portland

Dear Mr. Chairman:

This firm represents Tidewater Barge Lines and Wastech, Inc. The purpose of this letter is to request that we be placed on the agenda of the EQC meeting scheduled for May 29, 1987, for 10 minutes to inform the Commission of the existence of an alternative solid waste disposal plan for the metropolitan Portland area. It is our hope that you would find this information useful in determining your mandate to Metro after deciding between the Bacona Road and Ramsey Lake sites.

The concept of the Tidewater/Wastech proposal is similar to that presented to you earlier by Waste Management, but it has some distinctive qualities which should be of interest to the Commission. After maximum recycling, Tidewater proposes to barge unrecycled waste in sealed containers on existing barge traffic to the Port of Morrow, where it would be transported by truck to a 600+ acre site 16 miles south of Boardman and just east of the Boardman bombing range. We believe the proposal has great environmental and economic benefits. It will use existing facilities and a transport system which is already in place. Morrow County land use ordinances allow a landfill as a conditional use. Consequently, our project could be on line to relieve the St. Johns landfill as early as January 1, 1989.

BALL, JANIK & NOVACK

Mr. James Petersen  
May 14, 1987  
Page Two

A preliminary application for landfill site approval has been filed with DEQ. It was based upon public need from Morrow County and from Clark County, Washington for landfill. DEQ staff returned the preliminary application with no adverse comment. Tidewater has engaged engineers to develop additional environmental data for submission of a more detailed application in early June. We also intend to apply in early June to the Morrow County Court for a conditional use permit.

Particularly in light of EQC's apparent wish to allow maximum flexibility for Metro to explore alternatives to the local sites, and also because of our clients' experience in California (e.g. with the Mountain View Landfill), we believe a brief informational presentation to the Commission would be helpful to it in formulating its site selection order. We would also be happy to present the project during the public forum period.

Yours very truly,

Jacob Tanzer

JT/dp

cc: Mr. Fred Hansen  
Mr. Steve Greenwood  
Mr. Ernie Schmidt

16.99.72



## Department of Environmental Quality

811 S.W. SIXTH AVENUE, PORTLAND, OREGON 97204 PHONE: (503) 229-5696

### MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Comments in Response to Greg Brown's May 20, 1987 Letter  
(Helvetia Mountaindale Coalition)

The following comments are in response to a May 20, 1987 letter prepared by Mr. Greg Brown of the Helvetia Mountaindale Preservation Coalition, concerning the Commission Member visits to the Cathcart Landfill in Snohomish County, Washington. In his letter, Mr. Brown contends that the Cathcart and Bacona Road landfill sites are very dissimilar and that a direct comparison of these two sites is inappropriate. The Department agrees that there are important differences between the two sites which make a direct comparison inadvisable, but has prepared this response in order to answer some questions that may have been raised by information presented in his letter.

The Cathcart Landfill was not selected as a tour site solely because of similarities to the proposed Bacona Road site, although, as Mr. Brown noted, similarities do exist. The Cathcart site was selected as a tour site primarily because it is the landfill nearest to Portland where an example of a flexible membrane liner system and other modern landfill technologies in a forested, upland site could be observed first-hand by the EQC members. It is important to note that the Cathcart liner (a single 30 mil PVC/Hypalon liner) is clearly inferior to the double composite HDPE liner system that is proposed for the Bacona Road site.

The geologic/hydrogeologic conditions described by Mr. Brown were for the adjacent, yet-to-be constructed landfill, not the site visited by the EQC members. In fact, it is the Department's understanding that the existing Cathcart Landfill visited by the EQC is constructed directly in fractured bedrock, and that this bedrock is so near the surface that blasting and ripping with heavy equipment were required in order to construct the site. The Bacona Road site is also underlain by fractured bedrock, but unlike Cathcart, there are thick sections of alluvial deposits or soil that overlie the bedrock, and provide an added level of groundwater protection.

The local groundwater discharge condition that was cited by Mr. Brown as a positive factor at the Cathcart Landfill, is also present at the Bacona Road site. The potential for affecting deeper groundwater flow systems exists at both sites, but at Cathcart the nearest downgradient groundwater users are much closer to the site.



Memo: Environmental Quality Commission  
May 28, 1987  
Page 2

Although the Department is not totally familiar with all of the characteristics of the Cathcart site, Mr. Brown's comments concerning differences in climate, the proximity to urban services, and transportation factors appear to be generally accurate. The proposed methods for dealing with difficult weather conditions and for providing adequate access, leachate treatment, fire protection, etc. at the Bacona Road site are described in the Final Feasibility Study.

In conclusion, the Department would like to stress the following points:

1. The Cathcart Landfill provides a nearby example of some of the modern landfill technologies proposed for the Bacona Road and Ramsey Lake sites.
2. The Cathcart Landfill is different from the Bacona Road site, but many similar problems are present at both sites, i.e., groundwater and surface water protection, odor reduction, fire prevention, etc.
3. The proposed mitigation measures for these problems at the Bacona Road site are, for the most part, far superior to those in place and being used at the Cathcart Landfill.

Fred Hansen

Steve Greenwood:m  
SM1063  
229-5782  
May 28, 1987

**THE FINLEY BUTTES LANDFILL**

**Background Paper**

**May, 1987**

**THE FINLEY BUTTES LANDFILL**  
**-- AN OVERVIEW --**

The proposed Finley Buttes Landfill in Morrow County, Oregon offers an innovative approach to the solid waste disposal needs of river-system communities whose own landfills are nearing full capacity. Working with Morrow County citizens who support its development, the Finley Buttes Landfill proposal is an alternative to the controversial landfill sites currently being studied in the greater Portland metropolitan area. The proposal sets forth a very systematic and logical plan:

(1) Household and commercial solid waste collected from river-system communities will be taken to their local transfer stations for ultimate disposal at the Finley Buttes Landfill in Morrow County.

(2) At the transfer stations, this waste is sorted for recycling. Anything that cannot be recycled is compacted into sealed metal containers, eliminating problems concerning odor, leakage, debris or visual impact.

(3) These sealed containers are then transported by truck to loading docks at designated river ports and placed on barges. Because these barges accompany other regularly scheduled shipments up or down the Columbia River, few - if any - additional trips are required.

(4) When the barges arrive at the Port of Morrow, the sealed containers are lifted from the barges and placed directly onto semi-trailer trucks which haul them to the Finley Buttes Landfill.

(5) At the landfill, the containers are tipped and emptied. They will be cleaned at the landfill prior to their return trip to the Port of Morrow.

(6) Finally, the empty containers are returned to the Port of Morrow for pickup and shipment back to the transfer stations.

This highly efficient and cost-effective process accomplishes a number of important goals: It provides for maximum recycling and recovery of solid waste before it is disposed of at the landfill. Shipment of the solid waste utilizes and expands existing facilities. It uses a site ideally suited for landfill operations. This integrated and comprehensive approach makes the Finley Buttes Landfill proposal a very viable solution to the region's solid waste disposal needs.

## THE FINLEY BUTTES LANDFILL

### -- ITS BENEFITS --

#### **The Finley Buttes Landfill will provide many regional benefits:**

- It creates a new landfill for solid waste in a remote location at a time when numerous communities face imminent closure of their own facilities because they are nearing full capacity.

- It utilizes a processing and disposal method designed to achieve maximum recovery and recycling efficiency, from simple sorting to the potential for sophisticated processes such as cogeneration of energy.

- It is designed to maximize the use of existing transfer, recycling and river transport facilities, thereby minimizing the need for new or additional sites.

- The Finley Buttes Landfill has the potential and capacity to service the solid waste disposal needs of a number of communities along the Columbia-Snake River system, including the greater Portland metropolitan area and Clark County, Washington, for well over 20 years.

- The project is capable of being in operation by the end of 1988 or in early 1989. These timelines coincide with the imminent closure of the St. John's Landfill in Portland and the Lichner Landfill in Clark County, Washington.

- The proposal provides an alternative to landfills in the sensitive wetland areas west of the Cascade Mountains by transporting it to the Finley Buttes Landfill site in the semi-arid climate of central Oregon where there are no potential leachate or water pollution problems.

- The Finley Buttes Landfill proposal is an economical means of solid waste disposal for river-system communities. The low cost of transportation to the to the Finley Buttes Landfill site more than offsets the expensive construction and operation costs associated with landfills west of the Cascade Mountains.

**Finley Buttes Landfill will bring many benefits to Morrow County:**

- Ultimately, it will enable the Port of Morrow to reach and then expand its full-use potential.

- It will bring a new industry, jobs and revenues to Morrow County. If, for example, Clark County, Washington was the only river-system community to utilize the Finley Buttes Landfill for its disposal needs, 12 to 15 new jobs will still be created for unloading and loading, trucking, and landfill operations. Royalties to Morrow County would amount to \$90,000 per year based upon 50 cents per ton of solid waste. Based on current Port container handling rates, revenues to the Port of Morrow would be approximately \$480,000 annually. A multiplier effect will be the benefit for support businesses such as retail services, fuel and equipment suppliers, and housing expansion. Additions such as these to the local economy all serve to expand the County's tax base.

If use of Finley Buttes Landfill is expanded to service other river-system communities as well, including the entire Portland Metropolitan Area, the economic benefits to Morrow County can increase dramatically. For example, based on the 50 cents per ton rate, royalty fees to Morrow County would reach \$450,000 per year. Benefits to the Port of Morrow could reach \$1.5 million per year. Approximately 30 - 50 new jobs could be generated with these larger scale operations. At an average yearly income of \$20,000, between \$600,000 and \$1,000,000 in additional wages would be introduced into Morrow County with these new jobs.

**THE FINLEY BUTTES LANDFILL**  
**-- THE SITE AND ITS OPERATION --**

**The Finley Buttes Landfill location:**

The landfill will be located at the Finley Buttes area of Morrow County, Oregon. The actual site is approximately 16 miles south of Boardman and 20 miles southwest of Hermiston. It is one mile east of Bombing Range Road, a paved, two-lane county road.

**The technical merits of the Finley Buttes Landfill site:**

The site is naturally suited for landfill use. Both the geology of the area and semi-arid climate provide an ideal operational setting. Preliminary studies of the Finley Buttes Landfill site by project engineers and preliminary review by the Oregon Department of Environmental Quality indicate "no obvious faults" in its feasibility as a landfill location, initiating more in-depth engineering studies.

**The aesthetic merits of the Finley Buttes Landfill site:**

The landfill site will not be visible from any public-use areas. While it is centrally located near Hermiston, Boardman and Heppner, the closest public-use area is Bombing Range Road -- one mile west of the site. Landforms resembling the local terrain with indigenous vegetation will be created where needed at the site to screen the landfill from view on Bombing Range Road.

(more)

**On-site litter control and environmental protection at the Finley Buttes Landfill:**

The landfill will be designed and operated in strict compliance with Federal EPA, State of Oregon and Morrow County regulations. On a daily basis, solid waste will be covered by a six-inch layer of soil. The working portions of the landfill will be fenced to prevent the blowing of debris. Environmental protection and monitoring will be implemented in accordance with approved design and operational requirements.

**Prevention of litter during shipment to the Finley Buttes Landfill:**

All waste barged to the landfill will be in sealed metal containers which will eliminate any problems concerning odor, leakage, debris or visual impact.

**The type of solid waste disposed of at the Finley Buttes Landfill:**

No hazardous wastes will be disposed of at the Finley Buttes Landfill. The Finley Buttes Landfill is intended only for the disposal of typical residential and commercial solid waste. The State of Oregon and U.S. Government have strict guidelines regulating the disposal of wastes which prohibit the disposal of hazardous wastes in sanitary landfills such as Finley Buttes. The receiving transfer stations will be operated in compliance with these regulations, thereby preventing the disposal of hazardous wastes at the Finley Buttes Landfill.

**The size of the Finley Buttes Landfill site:**

The Finley Buttes Landfill will be approximately 600 acres in size.

(more)

**The transportation route to the landfill via Port of Morrow:**

For fifty weeks of the year, Tidewater Barge Lines will barge the sealed containers to the Port of Morrow docks on the Columbia River. At that point, the sealed containers will be transferred onto trailers and trucked to the Finley Buttes Landfill site for disposal. During the two weeks of the year when the Columbia River locks are closed for maintenance and repairs, it is expected that the sealed containers will be transported to the Port of Morrow by rail and then trucked to Finley Buttes.

**Truck routes from the Port of Morrow to the Finley Buttes Landfill:**

The semi-trailer trucks carrying the sealed containers to the landfill site will not pass a single residence or near any developed locales. They will leave the Port of Morrow's property and access I-84 on a Port of Morrow highway interchange. They will travel east to Bombing Range Road and then south to Finley Buttes. There they will then turn east and drive for one mile along the landfill's all-weather access/entry road to reach the actual landfill. All roads upon which these trucks will travel were designed and built for heavy-duty loads; there should be no adverse impacts on these roads.

During the several weeks per year when Spring "break-up" occurs, a 10-ton load limit is imposed upon Bombing Range Road. During these periods, an alternate access routes have been researched and will be utilized.



## THE FINLEY BUTTES LANDFILL

### -- ITS SPONSORS --

The Finley Buttes Landfill proposal has been submitted by a locally owned and operated company, Tidewater Barge Lines, which will handle the shipment of solid waste to the Port of Morrow.

Tidewater is the largest barge line serving the Columbia-Snake River system. Its customer base includes major oil companies, chemical handlers, distributors, paper companies, steamship agents and brokers, grain exporters and agricultural co-ops. Products transported by Tidewater barges include grain, timber, construction materials, cement, asphalt, bulk liquids, fertilizers and a wide variety of containerized loads.

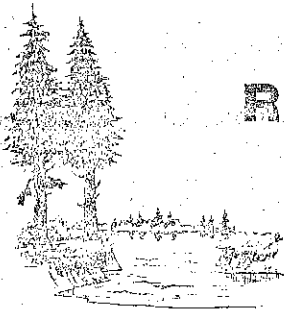
Tidewater has an excellent record of service and has earned a solid reputation for its contributions to local communities and to the region as a whole. Its sensitivity to and understanding of the needs of local businesses and property owners has formed long-standing relationships of mutual respect.

Tidewater has retained Wastech, Inc. to operate the Finley Buttes Landfill. Wastech has an excellent reputation and vast experience in solid waste facilities management.

Wayne Trehitt, company president, has over 24 years experience in solid waste management throughout the United States and Western Canada. He was instrumental in the development, design and operation of the San Francisco - Shoreline Regional Park Landfill transfer system in California. He was general manager of Solid Waste Engineering & Transfer Systems, which operated the San Francisco transfer station, the world's largest transfer facility and first major integrated transfer and recycling center in California.

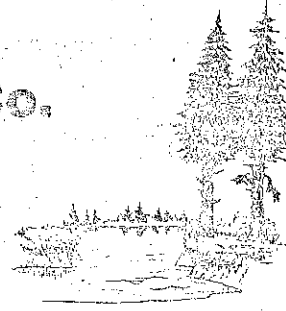
Merle Irvine is Wastech's executive vice president. His extensive career in Oregon includes positions as Director of the Solid Waste Department of the Metropolitan Service District, Director of Public Works for the City of West Linn and Design Engineer for the City of Lake Oswego.

Wastech operates the Oregon Processing and Recovery Center in Portland, Oregon, one of the Northwest's premiere recycling facilities, and the Clackamas Transfer & Recycling Center in Oregon City, Oregon.



# River Bend Landfill Co.

P. O. Box 509  
McMinville, Ore. 97128



May 26, 1987

Water & Solid Waste Division  
Dept. of Environmental Quality

RECEIVED  
MAY 27 1987

Mr. Michael Downs  
DEQ Headquarters Room 4  
811 SW 6th Ave.  
Portland, OR 97204

Dear Mike:

I am in receipt of your "A Chance to Comment" announcement on the proposed charges for the landfill permits. Coupled with the billing on our landfill where the fees were doubled, you can bet I have reactions--all negative! I've tried to contact you on the phone numerous times but you were unavailable. Frankly, I hope your proposals are met with the most vigorous opposition possible!

I have considered myself a friend of the Department. I helped to draft the regulations which transferred waste jurisdiction from the Board of Health. I think our track record speaks for itself as landfill operators. You also know that our pursuit of support for the needed functions of the Department has been unwavering in the cities, counties, and yes, even on state-level decision making arenas. I know something about landfill engineering costs--having cited two new ones since 1978. I am grateful for the low cost funding made available to construct Riverbend Landfill and for the freedom I have had to speak frankly and openly with you and others about landfill problems and reasonable, doable, and environmentally safe solutions.

When the legislature refused to give the Department money to do the functions required of you, I fought for adequate budgets through influential legislators. I opposed "users fees" as improper means of obtaining revenues unless there is a specific service rendered. Governor Atiyeh repeatedly rejected legislative proposals that would have violated that concept. With every effort to assess users fees came the "its only pennies" reasoning. If you look at the St. Johns landfill costs, you will find that the sum of the "users fees now are three times as much as the costs of operating the landfill--and I've had enough!

I think the proposal is outrageous and without justification. The Department's function in reviewing a landfill proposal does not require you to do the engineering--only to review it. You don't have to write the book only read it! The proposing company will have done both the geological and hydrological engineering, the design plans, the soil and water balance

studies, etc., etc., and you will need to only approve what other competent engineers and professionals have studied, planned, and drafted. I repeat--you only need to read the book not write it!

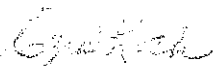
It is my understanding that you have exceeded your site search budget by a considerable amount of money. I am at loss to understand how you can propose to cover your excess spending on site exploration at the Bacona Road and Ramsey Lake sites by unfairly assessing charges against private proposals where the proposers have done all of the site engineering necessary to be granted permits. It is my judgement that your policy is counter-productive and only serves to deter the private sector role rather than enhance it.

I'm not just a little concerned about the possible down stream effects as well. Once you put your foot in the door on users fees (and you have) there is nothing to stop you from assessing whatever you think you need on new fills (per your proposal) or on existing fills. You have demonstrated conclusively that there is no correlation between the assessments you make and the service you provide. Our so-called Annual Compliance Fee was increased from \$8,000 to \$13,000 and the services cut in half. We have yet to receive any services for the \$1900 recycling implementation fee which you doubled this year to \$3,800. In as much as our program was the model from which Senate Bill 405 was written and had been "implemented" at least two years ahead of the assessment, even the title mis-represents the actual purpose of the fee.

The cost of waste disposal is already too high. Neighborhood accumulations and road-side dumping mar the entire metropolitan area. We don't need to add unwarranted costs from DEQ to the stream of unwarranted costs imposed by METRO over the years.

If, indeed, your operating funds are inadequate to meet your operational costs, the legislature should recognize that and make the necessary provisions. I would be happy to assist any way that I can.

Sincerely yours,

  
Ezra Koch, President  
Riverbend Landfill Co., Inc.

C: Sen. Tony Meeker  
Rep. Stan Bunn

FH

HELVETIA/MOUNTAINDALE PRESERVATION COALITION INC.  
Rt. 1 Box 507  
Hillsboro, Oregon 97124

Dept. of Environmental Quality  
811 S.W. 6th Ave.  
Portland, Oregon 97204

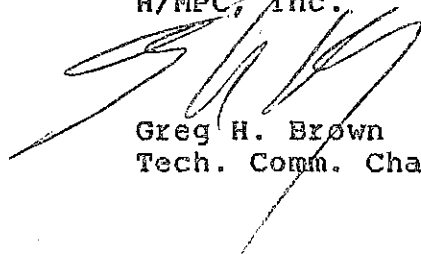
May 20, 1987

Gentlemen:

Enclosed please find our written comments concerning the site visit by the Environmental Quality Commission to the Cathcart Landfill.

Copies for each member of the EQC are enclosed. Please distribute these copies to the members of the EQC.

Yours truly,  
H/MPC, Inc.



Greg H. Brown  
Tech. Comm. Chair

GHB/mm  
Enc: 6  
CC: E.J. Sullivan, Atty

MEMO



Director  
DEPARTMENT OF ENVIRONMENTAL QUALITY

5/26

Fred:

Arno called. In reference to the letter you and the Commission received from the Bacon Road people, he asked that 662 staff prepare a response to the letter. He asked that staff call Cathcart and ask them about the points raised in the letter.

I called Steve Greenwood and asked him to prepare that for Friday's meeting.

Tina

*Please be sure we have response to be distributed - at breakfast. Let me distribute it.*

Hazardous & Solid Waste Division  
Dept. of Environmental Quality  
**RECEIVED**  
MAY 21 1987

*Mailed to EQC 5/21 KP*

FH

HELVETIA/MOUNTAINDALE PRESERVATION COALITION INC.  
Rt. 1 Box 507  
Hillsboro, Oregon 97124

Dept. of Environmental Quality  
811 S.W. 6th Ave.  
Portland, Oregon 97204

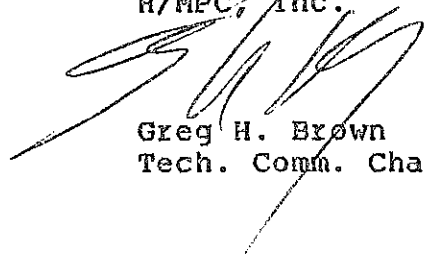
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Yours truly,  
H/MPC, Inc.



Greg H. Brown  
Tech. Comm. Chair

GHB/mm  
Enc: 6  
CC: E.J. Sullivan, Atty

Hazardous & Solid Waste Division  
Dept. of Environmental Quality  
**RECEIVED**  
MAY 21 1987

HELVETIA/MOUNTAINDALE PRESERVATION COALITION INC.  
Rt. 1, Box 507  
Hillsboro, Oregon 97124

Dept. of Environmental Quality  
811 S.W. 6th Ave.  
Portland, Oregon 97204

May 20, 1987

RE: Cathcart Landfill

Gentlemen:

During the week of May 11th, several members of the Environmental Quality Commission visited the Cathcart Landfill, located in the Seattle, Washington area. As we understood it, this landfill was selected because of its similarity to the proposed Bacona Landfill.

While there are indeed similarities, the two sites are far from identical. Major environmental and practical differences exist between the two sites. The purpose of this letter is to point out some of the more obvious differences.

The similarities that do exist are basically superficial. Both sites are depressions or slumps in the local topography, which drain to one end of the site. Both sites have downgradient water users and both sites are located in non-urban areas.

The dissimilarities can be summarized in the following categories:

1) Geological/Natural Groundwater protection:

The subsurface characteristics of the Bacona site can best be characterized as extremely complex with many unknowns. The Sweet-Edwards report included in the draft site report states that the Bacona area is underlaid by a variety of geological formations with varying, and in many places unknown, permeability.

The new Cathcart site, immediately adjacent to the existing site, is underlain by defined layers of Recessional Outwash, Vashon Till, Advance Outwash, and Bedrock. (Sweet-Edwards & Assoc., Final Geotechnical Report, Snohomish County Landfill, 8/21/86) The thick layer of Vashon Till acts as an aquiclude confining groundwater within the lower layers. The Advance Outwash and Sandstone Bedrock act as aquifer Discharge areas with significant artesian (positive) water pressures. (Ibid) To put this in to laymen's terms, water is coming up out of the aquifer at Cathcart.

On the other hand, the Bacona site acts as a local, intermediate and (potentially) regional Recharge area. (Sweet & Edwards Draft Site Report) Again, in laymen's terms, water is going into the aquifer at Bacona.

2) Climatological Differences:

The Cathcart site receives approximately 45" per year of precipitation, virtually none of which is in the form of Snow. Bacona is rated as receiving over 60" per year, and reportedly receives over 110" per year, a significant portion of which is in the form of Snow. The implications on total and peak instantaneous leachate volumes are obvious. You may remember the 7' snowfall pictures which we presented to you on April 21st.

The Bacona site is in an extreme wind area (siting Criteria #190). The Cathcart site is not in such an area. The implications on fire control are obvious.

3) Proximity to Urban Services:

While it is true that the Cathcart site is in a semi-rural area, fire protection, wastewater treatment facilities, adequate roads and potential alternative water supplies for downgradient users are in the immediate vicinity. Bacona has none of these services immediately available. Further, the leachate from the Cathcart site is being disposed of by a "friendly" agency, rather than by an agency which will be subjected to considerable political pressure to refuse Bacona's leachate.

The concept that Cathcart's wooded setting is comparable to Bacona's forestry zone is barely worthy of comment. The economic and environmental damages wrought by a major fire in the Bacona area are obvious

4) Transportation Factors:

The economics of transporting garbage to the Cathcart site are considerably different than the Bacona site. The Cathcart site is located adjacent to adequate roads which are not subject to the ice and snow conditions which prevail at Bacona. Further, the transportation distances from source to site are considerably different between the two sites.



Environmental Quality Commission  
May 20, 1987  
Page 3

5) Area Served:

The Cathcart landfill is serving the area on which it is inflicted. As you are aware, this is not the case at Bacona.

This letter is not intended to serve as a complete comparison analysis of the subject sites, but only as an illustration of the glaring differences. It would be a major error to rationalize that, because Cathcart is capable of functioning as an environmentally acceptable landfill, Bacona could be also operated as such.

Yours truly,  
H/MPC, Inc.

Greg H. Brown  
Technical Comm. Chairman

GHB/mm  
CC: J. Peterson  
A. Denekke  
S. Buist  
M. Bishop  
W. Brill  
E.J. Sullivan

File:cthcrt.dum

# NORTH PORTLAND CITIZENS COMMITTEE

P  
C  
C

7508 N. Hereford  
Portland, Oregon 97203  
(503) 248-4524

NEW ADDRESS:  
1200 N. LOWLAND  
PORTLAND, OR 97217

May 19, 1987

James Petersen, Chair  
Oregon Environmental Quality Commission  
c/o 835 NW Bond Street  
Bend, OR 97701

Dear Mr. Petersen:

The Ramsey Lake Coalition has developed a response to questions raised by the EQC on April 22. As I stated in my letter of May 4, many of your concerns about the Ramsey Lake site are the same as ours:

- o Permits are not obtainable for this environmentally sensitive site.
- o Permit and site development problems would extend the opening of a new landfill well past the closure of the St. Johns Landfill.
- o Estimated costs of Ramsey Lake are double those at Bacona Road for an optimistic site life of only 15 years, one third that of Bacona Road.
- o DEQ's own economic analysis says that thousands of jobs would be lost if this site, uniquely suited for heavy industry, is sacrificed for a short term landfill.
- o Siting the landfill at Ramsey Lake would renege on promises made over 15 years ago by DEQ and others that a landfill in North Portland would be "phased out" once an "alternate location" was found.

The attached materials are the Coalition's responses to the questions raised. We have met with DEQ staff and its consultants to make certain that "apples vs. oranges" comparisons are not being made. These meetings have proved to be very constructive.

To summarize our responses:

1. Cost estimate disparities.

CH<sub>2</sub>M Hill and Port of Portland consultants are in agreement on significant cost items. We understand that CH<sub>2</sub>M Hill's estimated cost of Ramsey Lake site development will be increased substantially as a result of further engineering analysis. Attached material details the efforts undertaken to make the cost estimates consistent.

2. Economic factors in the EQC decision.

EQC must consider economic factors, as well as environmental ones in the decision. SB 662 requires consideration of economics and the federal permit process outlines specific information which must be included in an Environmental Impact Statement. Failure to give full consideration to these issues would seriously flaw the process.

We believe that common sense dictates expanded consideration of the economic development impacts, even at this late stage of the process. We realize that the importance of industrial development to the community is not well understood by DEQ's environmentally-oriented staff. It is unfortunate that this otherwise positive emphasis on environmental concerns has placed the EQC in a no-win situation with regard to the much broader issues of an urban area. The narrowing of the choices by staff does not, however, eliminate the EQC's responsibility to make a decision which includes all the issues. The EQC should place the same importance on economic factors as on environmental and technical considerations.

Adequate economic analysis would include use of LCDC's economic areas of concern, Corps of Engineers regulations on EIS preparation, Division of State Lands fill/removal regulations, and EPA regulations.

3. State and Federal Permits.

The site does not have a "reasonable assurance" of receiving permits as required by SB 662. Development of this site would be impossible within the time frame required to replace the St. Johns Landfill. Other alternatives offer much greater assurance of permits and timely development.

4. Promises to close St. Johns Landfill.

The facts show clearly the intent to develop Ramsey Lake for industry and enhanced recreation. Within the same plans, a commitment is made to close the St. Johns Landfill. This closure is clearly within the context of a series of plans for the whole area, which do not include an additional landfill site. L.B. Day, then director of DEQ, was a member of the Task Force which recommended the plan for the North Portland Peninsula in 1972. The actions of those involved in North Portland development have been guided by this plan. The Port's industrial activities, the City's closure of the St. Johns Landfill, and the protection of Smith and Bybee Lakes are all based on the regional decision making that this plan represents. DEQ must honor the commitment of its former director in a similar spirit. We suggest that EQC members closely examine these plans and the history of decisions and that they discuss the issues with legislators and other leaders involved over the last 15-20 years.

5. Similarity between St. Johns Landfill and the Ramsey Lake proposal.

The land use similarities are obvious from earlier comments, but environmental similarities were not well understood by the EQC. A very real similarity is that the above-grade profile of a landfill on a flat area ensures that storm water and side-slope leachate ends up in the Columbia Slough or adjacent wetlands, regardless of liner technology used.

6. Use of incinerator ash for fill.

Further research does not clear away the uncertainties surrounding the use of ash-filled areas for industrial development. The foundation suitability of the materials is extremely variable and obviously unknown for this site. A very important factor is whether or not the ash is considered a hazardous material. If it is, the land is considered unmarketable by real estate experts. Even if it isn't, the need to maintain a liner, gas collection, and leachate system would prevent its use for anything but outside storage. Such uses do nothing to mitigate the extreme loss of jobs which would result from a landfill.

7. Economic Impact Issues.

Attachments to this letter provide more detail on this issue. In summary:

- o The CH<sub>2</sub>M Hill and QED studies agree on all major points, and both predict serious harm to the region and the State. CH<sub>2</sub>M Hill says 3,285 direct jobs lost; QED estimates 2,100-4,230.
- o The CH<sub>2</sub>M Hill report, however, considers loss of jobs to Clark County to be an acceptable alternative to Oregon jobs. CH<sub>2</sub>M Hill also ignores the well-accepted multiplier effect of direct job losses, leading to indirect losses of up to 17,000 jobs.
- o The importance of Rivergate land is well documented in the attachments. The importance of industrial uses to the Portland economy should not be underestimated.
- o There are no replacement sites in Oregon. Hayden Island is restricted to marine-related industrial uses by permit conditions. The cost of development makes it a longer-term project, up to 20 years before land is available for even these restricted uses.

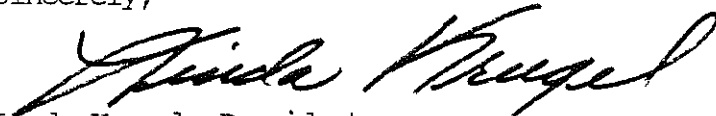
James Petersen  
May 19, 1987  
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Please review the attachments carefully. We hope we have addressed your concerns. I would like to offer the assistance of any member of the Ramsey Lake Coalition in further detailing of any of the issues.

In closing, I would like to raise one very sensitive issue which has recently become rumor. We have heard that DEQ staff philosophically believes that further industrial growth in Portland is undesirable and must be restricted. If you believe that such attitudes are affecting the landfill siting process, I ask you to have an open public discussion. I do not believe that either this philosophy or one which requires Portland to "take care of its own garbage" are criteria contained within or envisioned by SB 662.

Thank you for your willingness to listen.

Sincerely,



Linda Krugel, President  
North Portland Citizens Committee

Enclosures

B10:ch

cc: Governor Neil Goldschmidt  
Environmental Quality Commission Members  
Fred Hansen, DEQ  
Steve Greenwood, DEQ  
Rebecca Marshall, Facilities Siting Advisory Committee  
Roger Smith, EDD  
Ramsey Lake Coalition Members

EOC QUESTIONS ABOUT RAMSEY LAKE

1. What is the reason for the disparity in engineering cost estimates presented by Port and DEQ consultants?

The following memo thoroughly explains the initial disparity between the two engineering cost estimates. As the memo indicates, once common assumptions are made, most of the cost discrepancies disappear.

May 12, 1987

TO: James Petersen, Chairman  
Environmental Quality Commission

FROM: Bill Bach, Land Development Manager  
Port of Portland

MEETING BETWEEN CH2M HILL AND SCS ENGINEERS ON COST ESTIMATES FOR  
RAMSEY LAKE

EQC Chairman Petersen expressed concern over the discrepancies between consultant cost estimates for a landfill at the Ramsey Lake site. At his request, representatives from CH2M Hill, SCS Engineers, Geotechnical Resources, and the Port of Portland met on April 30, 1987. The following addresses the cost differences presented at the EQC hearing, a recommended method of presenting cost summaries in future reports, and some items that will be reflected differently in the final report.

The Port consulting team, headed by SCS Engineering, based its analysis of costs on the Draft Feasibility Report (Section 3 [Conceptual Site Plan] and Section 5), utilizing the same basic conclusions and logic as CH2M Hill.

This memorandum was reviewed by CH2M Hill prior to submission.

Of the 26 line items used for estimating capital cost (found in Table 5-1 on Page 5-4 of the Draft Feasibility Report), the SCS and CH2M estimates differed for six line items:

<u>Item</u>	<u>CH2M Estimate</u>	<u>SCS Estimate</u>
Preload placement	\$8.6 million	\$40.0 million
Underdrain collection	\$1.0 million	\$ 3.1 million
Leak detection	\$0.4 million	\$ 2.5 million
Perimeter storm sewer	\$0.3 million	\$ 3.5 million
Slurry wall	\$3.1 million	\$ 3.9 million
Gas control system	\$0.8 million	\$ 1.3 million

(REFER TO TABLE 1 FOR A COMPLETE LISTING OF ALL 26 LINE ITEMS)

The total of these differences resulted in a discrepancy of \$40 million. With contingencies and other expenses calculated as a percent of total line-item costs, the total difference was \$60.6 million. In general, these differences resulted from:

- o Differences in defining and presenting capital and construction costs versus operating and maintenance costs. (Preload material and gas control issues.)

MEETING BETWEEN CH2M HILL AND SCS ENGINEERS ON COST ESTIMATES FOR  
RAMSEY LAKE

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- o Differences in the depth of base sand and drain material needed beneath and between liners. (Underdrain collection and leak detection issues.) These differences--where SCS captured all costs of preload material placement and construction of a gas control system as capital costs, while CH2M showed part of these costs as capital and the balance as operating costs--accounts for the vast majority of differences in the two estimates.
- o Additional information and requirements used by SCS for storm sewer estimates not available to CH2M.
- o Different views on the need for intermediate slurry walls for phased construction.

The following is a more detailed discussion of the six line items where discrepancies occurred.

Preload Placement

Both engineering teams agreed on the unit cost and preload amounts. The different capital cost estimates resulted from how these costs were allocated. Over time, a total of 10 million cubic yards of preload material will be necessary. At \$4 per cubic yard, this equates to a total of \$40 million.

Costs can be allocated between capital or construction costs and operating or maintenance costs. SCS considered placement of preload soils as a construction expense and included the full cost in its capital estimate. CH2M also considers preload placement as a construction cost, but because construction will be phased, part of the cost of placement was captured in the capital estimate (only the initial placement of preload over the first 30 acres). The balance was reflected in operating costs.

For future estimates, standard definitions for line items will be stated. Costs will be shown year by year as they are incurred, providing a more accurate reflection of what monetary outlays will occur through time. This change in displaying costs should bring the two estimates for this item into parity. (See attached "Recommendations for Final Report Cost Estimates.")

Underdrain Collection System

Consulting teams for CH2M Hill and SCS agreed on the unit costs, but disagreed on the total amount of base sand required under the liner. CH2M's report identified 12 inches of drain material under the bottom



liner, with a trenching system for dewatering. Geotechnical Resources recommended an additional foot of material to allow equipment operation over the subbase and for placement of the liner. The added costs for the additional foot of material is \$2.2 million.

Because the underdrain system is being reviewed in conjunction with a new liner system design, it appears this difference will be addressed in the new liner design. In CH2M Hill's final report, the thickness of drain material will include consideration of the operating surface. The costs will be presented as construction expense and shown as incurred.

#### Leak Detection, Collection, and Removal System

CH2M and SCS, while again agreeing on unit costs, disagreed on the volume of drain material needed between the liners. The CH2M report estimated that 6 inches of drain material would be placed between the liners. SCS recommended an additional foot of material between the liners, resulting in a cost estimate higher by \$2.2 million. SCS considered the additional foot necessary to allow operation of equipment over the top, to better prevent puncture, and to allow placement of the leak detection/collection system.

This cost discrepancy, like that of the underdrain collection system, may no longer be an issue. After discussions at the April 30 meeting, it is our understanding that a new liner system design will be incorporated in the CH2M final report that will address the above-mentioned concerns.

#### Perimeter Storm Sewer

The CH2M report estimated a cost of \$315,000 for a connected storm sewer system pumped to the north. The SCS cost estimate of \$3.5 million was based on rerouting the storm sewer outfall to the south. The SCS estimate incorporated additional information on storm sewer construction costs in Rivergate, along with flow requirements. The resulting \$3.2 million cost discrepancy is a result of information used by SCS which was not available to CH2M when their estimate was made.

CH2M will now reassess their estimate in light of the new information and requirements and incorporate it into their final report.

MEETING BETWEEN CH2M HILL AND SCS ENGINEERS ON COST ESTIMATES FOR  
RAMSEY LAKE

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Slurry Wall

A difference of \$0.8 million between the CH2M and SCS estimates for a slurry wall resulted from a difference in views on the necessity of interior slurry walls. The CH2M estimate of \$3.1 million accounts only for the slurry wall around the perimeter of the landfill area. Since the landfill is to be developed and preloaded in stages, the slurry wall may also have to be constructed in stages. SCS increased the slurry wall estimate to include construction of three intermediate walls running the width of the site to accommodate staged construction of the landfill.

CH2M had independently reviewed the construction process and agrees that interior slurry walls will be necessary. The final report will include the cost for the additional wall. This cost will be reflected as a construction expense, displayed during the time periods in which costs are incurred.

Gas Control System

As in the issue of preload placement, differences in opinion on which costs are capital versus operating resulted in a difference of \$0.6 million between the CH2M and SCS estimates of a gas control system. The CH2M report indicated construction of a horizontal gas collection system within the landfill. The cost reflected in the capital cost estimate was limited to the flare and headers to be installed during the first phase of construction. The cost of laterals and future phases of construction was included as a part of operating costs. SCS considered installation of the system as a construction cost and reflected the entire amount in its capital cost estimate.

For the final report, CH2M and SCS have agreed that a distinction between initial and periodic construction costs will be necessary. Displaying costs over time as they are incurred should better reflect the timing of total construction costs. (Again, refer to "Recommendations for Final Report Costs Estimates.")

It should be noted that the final dollar amounts will vary from those in the draft report, since there will be a major revision in the estimated cost of the liner system, impacting both underdrain and leak detection costs.

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Table 1

## ESTIMATED CAPITAL COST - RAMSEY LAKE LANDFILL SITE

## Alternatives 1 and 2

<u>Description</u>	<u>CH2M Estimated Total Cost (1)</u>	<u>SCS Engr. Estimated Capital Cost</u>
1. Site preparation	\$ 268,000	\$ 268,000
2. Preload placement	8,604,000	40,000,000
3. Bottom lining system	25,728,000	25,728,000
4. Underdrain collection system	960,000	3,122,000
5. Leachate collection pipe sytem	1,200,000	1,200,000
6. Leak detection, collection, and removal system	384,000	2,546,000
7. Leachate pump stations	300,000	300,000
8. Underdrain pump stations	300,000	300,000
9. Off-site storm water lift station	125,000	125,000
10. On-site surface water ditch	128,000	128,000
11. On-site access and haul roads	180,000	180,000
12. Perimeter surface water ditch	140,000	140,000
13. Perimeter storm sewer	315,000	3,500,000
14. Perimeter fence	210,000	210,000
15. Perimeter road	279,000	279,000
16. Perimeter dike	5,098,500	5,098,500
17. Slurry wall	3,060,000	3,930,000
18. Screening berms	450,000	450,000
19. Screening and landscaping	2,795,000	2,795,000
20. Office	135,000	135,000
21. Maintenance shop	225,000	225,000
22. Groundwater monitoring wells	56,000	56,000
23. Gas monitoring wells	300,000	300,000
24. Gas control system	750,000	1,340,000
25. Leachate pre-treatment system	1,800,000	1,800,000
26. Off-site hookup fee	100,000	100,000
Subtotal	\$53,890,500	\$ 94,255,500
Engineering, legal, and administrative (20%)	10,778,100	18,851,100
Construction contingency (30%)	<u>16,167,150</u>	<u>28,276,650</u>
Total (2)	<u>\$80,835,750</u>	<u>\$141,383,250</u>

(1) From Ramsey Lake Draft Feasibility Report, Table 5-1, Page 5-4.

(2) Excludes land acquisition and wetland mitigation.

## RECOMMENDATIONS FOR FINAL REPORT COST ESTIMATES

### Phased Construction Cost Schedule

Construction costs will be presented by item as they would occur, all in 1987 dollars. Nominal construction expenditures will be broken down on an annual schedule, allowing a present value analysis and inclusion of financing costs. Major components of costs should include:

- o Permitting, engineering, and land purchase costs.
- o Initial site preparation and construction costs.
- o Periodic preload construction costs.
- o Periodic landfill construction, including liner and associated systems.
- o Period landfill closure costs.
- o Final closure construction costs.
- o Annual operation, maintenance, and equipment costs.
- o Postclosure annual inspection, operation, and maintenance costs.
- o Metro management, administration, and inspection costs.

Use of the above method of projecting costs should permit projection of a realistic tipping fee. It would also allow a more representative comparison among alternative sites, as well as a comparison of alternative methods of waste disposal.

### Definition of Terms

We recommend that the final report include standard industrial definitions of terms for capital, operating, and maintenance costs. This would provide a clearer understanding of costs for everyone involved. We have attached definitions from the American Association of Cost Engineers' "Cost Engineers' Notebook" as an example.

For a landfill project, capital costs would include those costs associated with the construction and preparation of the landfill site to a point where each phase is ready to receive refuse. Operating costs are those costs associated with processing refuse.

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**COST ENGINEERS' NOTEBOOK**

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- \* **BREAK-EVEN CHART** - a graphic representation of the relation between total income and total costs for various levels of production and sales indicating areas of profit and loss.
- + **BREAK-EVEN POINT (S)** - (1) in business operations, the rate of operations, output, or sales at which income is sufficient to equal operating cost, or operating cost plus additional obligations that may be specified; (2) the operating condition, such as output, at which two alternatives are equal in economy; (3) the percentage of capacity operation of a manufacturing plant at which income will just cover expenses.
- + **BURDEN** - In construction, the cost of maintaining an office with staff other than operating personnel. Includes also federal, state and local taxes, fringe benefits and other union contract obligations. In manufacturing, burden sometimes denotes overhead.
- \* **CAPACITY FACTOR** - a. the ratio of average load to maximum capacity; b. the ratio between average load and the total capacity of the apparatus, which is the optimum load; c. the ratio of the average actual use to the available capacity. Also called Capacity Utilization Factor.
- CAPITAL, BUDGETING** - a systematic procedure for classifying, evaluating, and ranking proposed capital expenditures for the purpose of comparison and selection, combined with the analysis of the financing requirements.
- + **CAPITAL, COST OF** - the weighted average of (1) the after-tax cost of long term debt, (2) the yield on any outstanding preferred stock, and (3) the cost of common equity capital. Usually expressed as a percent.
- CAPITAL, FIXED** - the total original value of physical facilities which are not carried as a current expense on the books of account and for which depreciation is allowed by the Federal Government. It includes plant equipment, building, furniture and fixtures, transportation equipment used directly in the production of a product or service. It includes all costs incident to getting the property in place and in operating condition, including legal costs, purchased patents, and paid-up licenses. Land, which is not depreciable, is often included. Characteristically it cannot be converted readily into cash.
- X \* **CAPITAL, DIRECT** - cost of all material and labor involved in the fabrication, installation and erection of facilities.
- X \* **CAPITAL, INDIRECT** - costs associated with construction but not directly related to fabrication, installation and erection of facilities. Can be broken down into field costs (temporary structures, field supervision) and office costs (engineering, drafting, purchasing and office overhead expenses).
- \* **CAPITAL, OPERATING** - capital associated with process facilities inside battery limits.
- \* **CAPITAL RECOVERY** - a. charging periodically to operations amounts that will ultimately equal the amount of capital expenditure (see Amortization, Depletion, and Depreciation); b. the replacement of the original cost of an asset plus interest; c. the process of regaining the net investment in a project by means of revenue in excess of the costs from the project. (Usually implies amortization of principal plus interest on the diminishing unrecovered balance).
- \* **CAPITAL RECOVERY FACTOR** - a factor used to calculate the sum of money required at the end of each of a series of periods to regain the net investment of a project plus the compounded interest on the unrecovered balance.

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# COST ENGINEERS' NOTEBOOK

CAPITAL, SUSTAINING - the fixed capital requirements to (1) maintain the competitive position of a project throughout its commercial life by improving product quality, related services, safety, or economy, or (2) required to replace facilities which wear out before the end of the project life.

- \* CAPITAL, TOTAL - sum of fixed and working capital.
- \* CAPITAL, VENTURE - capital invested in technology or markets new at least to the particular organization.
- + CAPITAL, WORKING - the funds in addition to fixed capital and land investment which a company must contribute to the project (excluding startup expense) to get the project started and meet subsequent obligations as they come due. Includes inventories, cash and accounts receivable minus accounts payable. Characteristically, these funds can be converted readily into cash. Working capital is normally assumed recovered at the end of the project.

CAPITALIZED COST - a. the present worth of a uniform series of periodic costs that continue for an indefinitely long time (hypothetically infinite). Not to be confused with a capitalized expenditure; b. the value at the purchase date of the first life of the asset of all expenditures to be made in reference to this asset over an indefinite period of time. This cost can also be regarded as the sum of capital which, if invested in a fund earning a stipulated interest rate, will be sufficient to provide for all payments required to maintain the asset in perpetual service.

- \* CASH COSTS - total cost excluding capital and depreciation spent on a regular basis over a period of time, usually one year. Cash costs consist of manufacturing cost and other expenses such as transportation cost, selling expense, research and development cost or corporate administrative expense.

CASH FLOW - the net flow of dollars into or out of the proposed project. The algebraic sum, in any time period, of all cash receipts, expenses and investments. Also called cash proceeds or cash generated.

CASH RETURN, PERCENT OF TOTAL CAPITAL - ratio of average depreciation plus average profit, to total fixed and working capital, for a year of capacity sales. Under certain limited conditions, this figure closely approximates that calculated by profitability index techniques where it is defined as the difference, in any time period, between revenues and all cash expenses, including taxes. The sum of net profit after tax and the depreciation deduction used in calculating net profit.

- \* COMPOUND AMOUNT - the future worth of a sum invested (or loaned) at compound interest.
- \* COMPOUND AMOUNT FACTOR - a. the function of interest rate and time that determines the compound amount from a stated initial sum; b. a factor which when multiplied by the single sum or uniform series of payments will give the future worth at compound interest of such single sum or series.
- \* COMPOUND INTEREST - a. the type of interest that is periodically added to the amount of investment (or loan) so that subsequent interest is based on the cumulative amount; b. the interest charges under the condition that interest is charged on any previous interest earned in any time period, as well as on the principal.

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- \* LINEAR PROGRAMMING - refers to mathematical techniques for solving a general class of optimization problems through minimization (or maximization of a linear function subject to linear constraints. For example, in blending aviation fuel, many grades of commercial gasoline may be available. Prices and octane ratings, as well as upper limits on capacities of input materials which can be used to produce various grades of fuel are given. The problem is to blend the various commercial gasolines in such a way that: a. cost will be minimized (profit will be maximized), b. a specified optimum octane rating will be met, and c. the need for additional storage capacity will be avoided.
- \* LOAD FACTOR - a. a ratio that applies to physical plant or equipment: average load/maximum demand, usually expressed as a percentage. Equivalent to percent of capacity operation if facilities just accommodate the maximum demand. b. is defined as the ratio of average load to maximum load.
- \* LOT BATCH - a definite quantity of some product manufactured under conditions of production that are considered uniform.
- \* LOT SIZE - the number of units in the lot.
- \* MAINTENANCE - the expense, both for labor and materials, required to keep equipment or other installations in suitably operable condition. Maintenance does not usually include those items which cannot be expended within the year purchased and must be considered fixed capital.
- \* MANUFACTURING COST - the total of Variable and Fixed or Direct and Indirect costs chargeable to the production of a given product, usually expressed in cents or dollars per unit of production, or dollars per year. Transportation and distribution costs, and research, development, selling and corporate administrative expenses are usually excluded. See also Operating Cost.
- + MAPI METHOD - a. a procedure for replacement analysis sponsored by the Machinery and Allied Products Institute. b. a method of capital investment analysis which has been formulated by the Machinery and Allied Products Institute. This method uses a fixed format and provides charts and graphs to facilitate calculations. A prominent feature of this method is that it explicitly includes obsolescence.
- \* MARGINAL COST - a. the cost of one additional unit of production, activity, or service; b. the rate of change of cost with production or output.
- \* MARGINAL ANALYSIS - an economic concept concerned with those incremental elements of costs and revenue which are associated directly with a specific course of action, normally using available current costs and revenue as a base and usually independent of traditional accounting allocation procedures.
- \* MARKETING - the broad range of activities concerned primarily with the determination of consumer or user demands or desires, both existing and potential; the satisfaction of these demands or desires through innovation or modification; and the building of buyer awareness of product or service availability through sales and advertising efforts.
- \* MARKETING COST ANALYSIS - the study and evaluation of the relative profitability or costs of different marketing operation in terms of customer, marketing units, commodities, territories, or marketing activities. Typical tools include Cost Accounting.

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- + OFFSITES - general facilities outside the battery limits of process units, such as field storage, utilities and administrative buildings.
- X OPERATING COSTS - used interchangeably with Manufacturing Costs but preferred by the non-manufacturing industries, such as mining or computer services.
- \* OPERATIONS RESEARCH - quantitative analysis of industrial and administrative operations with intent to derive an integrated understanding of the factors controlling operational systems and in view of supplying management with an objective basis to make decisions. Frequently involves representing the operation or the system with a mathematical model.

OPPORTUNITY COST - the profits from alternative ventures that are foregone by using limited facilities for a particular purpose.

OPTIMUM PLANT SIZE - the plant capacity which represents the best balance between the economics of size and the cost of carrying excess capacity during the initial years of sales.

- \* ON-STREAM FACTOR - the ratio of actual operating days to calendar days per year.
- + OVERHEAD - a cost or expense inherent in the performing of an operation, i.e., engineering, construction, operating or manufacturing, which cannot be charged to or identified with a part of the work, product or asset and, therefore, must be allocated on some arbitrary base believed to be equitable, or handled as a business expense independent of the volume of production. Plant overhead is also called factory expense.
- + PAYOFF PERIOD - a. regarding an investment, the number of years (or months) required for the related profit or saving in operating cost to equal the amount of said investment. b. the period of time at which a machine, facility, or other investment has produced sufficient net revenue to recover its investment costs.

Most recent practice is to base payout time on an actual sales projection. Also called payout or payback period. It is simple to calculate and can be used for evaluating many projects. It is not satisfactory for comparing projects with different lives or patterns of cost and earnings.

PRESENT VALUE (PRESENT WORTH) - the discounted value of a series of cash flows at any arbitrary point in time. Also, the system of comparing proposed investments which involves discounting at a known interest rate (representing a cost of capital or a minimum acceptable rate of return) in order to choose the alternative having the highest present value per unit of investment. This technique eliminates the occasional difficulty with profitability index of multiple solutions, but has the troublesome problem of choosing or calculating a "cost of capital" or minimum rate of return. Also called Net Present Value but different from Venture Worth.

- \* PRESENT WORTH FACTOR - a. a mathematical expression also known as the present value of an annuity of one; b. one of a set of mathematical formulas used to facilitate calculation of present worth in economic analyses involving compound interest.
- \* PROBABILITY - a basic concept which may be taken either as undefinable, expressing in some way a "degree of belief" or as the limiting frequency in an infinite random series. Both approaches have their difficulties and the most convenient axiomatization of probability theory is a matter of personal taste. Fortunately both lead to much the same calculus of probabilities.



2. How should EQC consider site economic impacts in its decision? Does SB 662 provide guidance? How has DEQ analysis incorporated economic issues so far?

The EQC is required by SB 662 to consider environmental factors plus any other factor which might impact the decision. Although DEQ staff and the Attorney General's office are unsure of the clarity of the requirement, EQC need only look to the next step beyond its own process to find clear guidelines for consideration of economic, socio economic, and other factors. These are contained within the regulations of various federal agencies concerning the preparation of Environmental Impact Statements. Each agency, including the Corps of Engineers and EPA, have developed specific regulations in response to the requirements of NEPA. In turn, each local branch of these agencies have prepared very specific internal memoranda instructing their staff in the preparation of analysis of the wide range of social and economic impacts which occur as a result of a large project such as a landfill.

As the Ramsey Lake site will in certainly require an EIS, all impacts will have to be addressed in that process. The EQC would be irresponsible to make a decision knowing full well that it will face scrutiny in areas not fully addressed by the EQC. If the intent is to make a binding decision, all factors must be included.

DEQ's economic impact analysis to date has not been particularly bad in its scope, however, it has been buried in the back of the reports with no attempt to include the conclusions in any of the summary evaluations of the site. This has occurred in spite of the facility siting Advisory Committee's emphasis on economic development and jobs as a high priority. Jobs are also the number one public issue in Oregon and have been for several years.

DEQ staff are not recognized experts in either economic development, real estate, or industrial park development. Their conclusions have been consistently countered by those of state and local officials, and private sector development people, including their own consultant's report (see answer to question below).

3. Is the Ramsey Lake site permitable? Is there reasonable assurance the site will obtain all necessary state and federal permits, as required by SB 662?

STATE AND FEDERAL PERMIT ISSUES - RAMSEY LAKE

There are three, and possibly four, governmental hurdles that must be cleared before the site can be developed for a landfill. They are:

1. NEPA - Federal environmental impact statement.
2. Corps of Engineers 404 permit (issued after the environmental impact statement is completed).
3. Possibly a NPDES permit if surface runoff or identifiable leachate/pollution sources to Columbia Slough are identified.
4. State of Oregon fill and removal permits.

Given preliminary discussion with state and federal environmental/resource agencies and the Corps of Engineers over the past 6 months items 1, 2 and 4 are accepted as given.

DEQ does not have the time to apply for and execute any of the above permits before a July deadline. Given the statements by Oregon Department of Fish and Wildlife, U.S. Fish and Wildlife, and Audubon Society, an EIS would be a requirement and an Environmental Assessment (EA) would not be acceptable. An EIS would take at least 18 months (more realistically 24 months) and, as a practical matter would have to be completed before any federal permits were issued.

Conclusion: Any acquisition of land by DEQ or Metro prior to the acquisition of state and federal permits would be purely speculative. Give the strong opposition to the project by Oregon Department of Fish and Wildlife and U.S. Fish and Wildlife, the successful completion of an EIS is in question. Further litigation opportunities for review of any EIS/NEPA decision by special interest groups or "injured" parties could protract that process for an additional year or more. A concrete prediction as to the issuance or denial of state of federal permits is not possible, because neither the Oregon Division of State Lands nor the U.S.

Corps of Engineers has unilateral power to issue or deny. The final decision will be a combination of the results of the EIS and the inputs from the resource agencies. If the state or federal agencies raise strong and unified objection, history indicates that the Corps and/or Division of State Lands will not issue permits. Further complicating the issue is the federal 404 permit requirement that there be no viable alternative to siting the landfill in a wetland. Clearly there have been a number of viable alternatives proposed in recent months which will have to be tested against DEQ's selection process. Because the federal process specifically requires a much broader set of tests, it is not likely that the limited process exercised by DEQ could stand the test of any organized opposition. Metro clearly has a long, arduous and complex task ahead before any land acquisition could begin. It should be noted that none of the above conclusions have considered the possibility of litigation of the DEQ decision through the state courts. In our judgement, the DEQ process is sufficiently flawed to invite litigation effort which would, at a minimum, require upgrading of the decision base upon which the 18 sites were reduced to three.

In addition to the above, federal (EPA) proposed new subtitle D criteria would severely restrict landfill siting. These proposed federal regulations, "Part 258: Criteria for owners and operators of Municipal Waste Landfills" are currently being revised from a rough draft. Special areas of note are:

- 258.36 Flood plains (100 year)
- 258.41 Unstable areas
- 258.42 Wetlands
- 258.115 Surface water
- 258.215 Leachate collection system (LCS).
- 258.220 Liner requirements.

If these new criteria become adopted federal policy, it will make justification of a Ramsey Lake landfill very difficult indeed.

4. What promises about permanent closure of the St. Johns Landfill were made by DEQ, the Legislature, Portland City Council, and other bodies?

The most compelling evidence of such promises stems from late 1960's and early 70's planning efforts for the North Portland area. These efforts culminated in a 1972 plan known as "A plan for the North Portland Peninsula." A copy of the text of this plan is attached.

The plan was prepared by a group known as the Columbia Slough Environmental Improvement Task Force made up of:

Mel Gordon, Commissioner, Multnomah County  
Lloyd Anderson, Commissioner, City of Portland  
Col. Paul Triem, Portland District Engineer, Corps of Engineers  
L.B. Day, Director, Oregon Department of Environmental Quality  
Edward Whelan, Commissioner, Port of Portland

The goal of the plan was to create an "integrated land-use plan for the North Portland Peninsula area, designating areas for industrial, commercial, recreational, and open space development to best utilize the existing and potentially enhanced features of the environment."

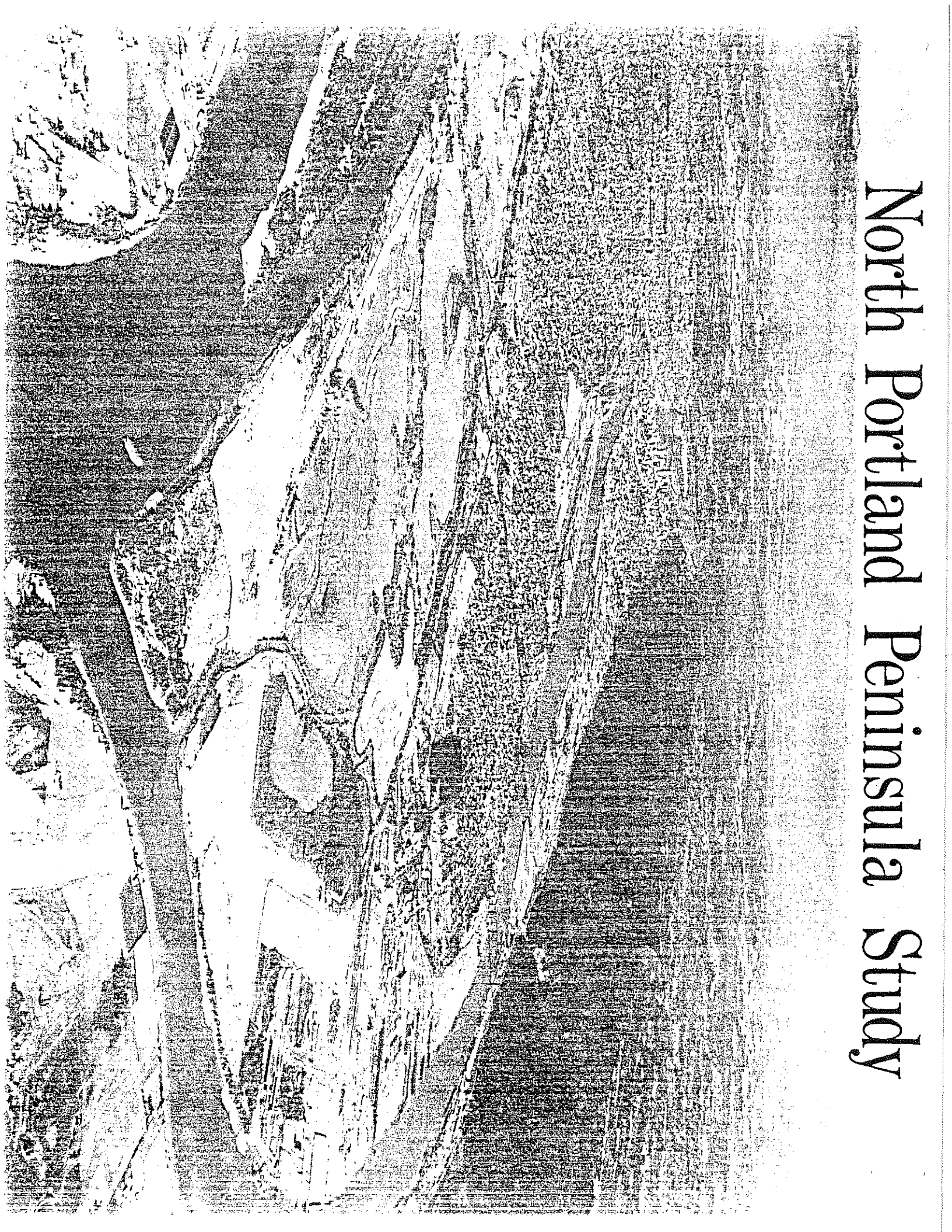
The Goals and Objections section (Page 5) of the plan discusses the need to keep the St. Johns Landfill open for the short term only because no alternative sites existed. Finding an alternative landfill location is referred to in objective IV.B.2., and is clearly consistent with the overall direction the plan gives to the entire area. In the Citizen Priorities section on Page 6, it is clear that a "long-range goal of phasing out the operation" is a high priority for the community, and is reflected by the commitments made by the agencies which signed the plan, including DEQ.

The ensuing years have seen a variety of planning efforts, all based on the agreements made as part of the development of the North Portland Peninsula Plan. Included are the Corps of Engineer's Plan I, which was to have closed the Columbia Slough for flood protection and developed the environmental and recreational potential of the area, and several efforts to develop a Smith and Bybee Lakes Management Plan. All of these efforts assumed the closure of the landfill, and have been based on the regional commitment that this unique and important area would no longer be saddled with the burden of being home to the region's garbage.

The State Legislature was also concerned about continued landfill operations in this location. In 1977, Rep. Jim Chrest introduced, and the legislature passed, H.B. 3192 which prohibited further filling in Smith and Bybee Lakes below the 11 foot contour. This legislation was explicitly aimed at preventing further expansion of the landfill, as the attached material makes clear. (There is even mention in Chrest's testimony of the legislature having closed the St. John's Landfill at one point.) Unfortunately, though H.B. 3192 effectively stopped landfill expansion in Smith and Bybee Lakes, it neglected to address what no doubt seemed like a farfetched scheme at the time, the siting of a landfill next door at Ramsey Lake. In any event, the passage of this legislation by wide margins in both houses indicated the legislature's clear intent and commitment with regard to landfill expansion in this area.



# North Portland Peninsula Study



December 22, 1972

TO: City of Portland  
Multnomah County  
Portland District, U.S. Army Corps of Engineers  
Oregon Department of Environmental Quality  
Port of Portland

WHEREAS the Columbia Slough Environmental Improvement Task Force has completed "A Plan for the North Portland Peninsula," and

WHEREAS the report has been completed with the aid of a Citizens Resource Panel, and the Task Force has held public hearings throughout the course of the study, and

WHEREAS specific design features of the report have not been evaluated through in-depth engineering studies,

NOW THEREFORE BE IT RESOLVED that the Task Force adopts the report in concept, and

BE IT FURTHER RESOLVED that the Task Force recommends that the Commission of the Port of Portland, the Board of Commissioners of Multnomah County, and the Council of the City of Portland also adopt the report in concept at the earliest possible date, and

BE IT FURTHER RESOLVED that, assuming approval in concept by the above bodies,

1. The City of Portland and Multnomah County proceed to prepare, adopt, and implement recreational, transportation, land use and water quality development plans for their respective areas of responsibility.
2. The City of Portland and Multnomah County coordinate their recreational development planning and implementation activities with all appropriate governmental and citizen bodies.
3. The Port of Portland proceed with the development of the Rivergate Industrial District and act as sponsor to the Corps of Engineers for the closure of the Columbia Slough, as part of the lower Columbia Slough flood control plan.
4. The specific design features of the report be considered as initial guidelines in the preparation of engineering design and other studies necessary to final development plans and schedules, and
5. The implementation schedule be similarly treated as a guideline for carrying out the concepts in the report.

Mel Gordon, Commissioner, Multnomah County  
Lloyd Anderson, Commissioner, City of Portland  
Col. Paul Triem, Portland District Engineer, U.S. Army Corps of Engineers  
L. B. Day, Director, Oregon Department of Environmental Quality  
Edward Whelan, Commissioner, Port of Portland

A Plan for

THE NORTH PORTLAND PENINSULA

Prepared By:

THE COLUMBIA SLOUGH ENVIRONMENTAL IMPROVEMENT TASK FORCE

December 1972

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## INTRODUCTION

The following land use plan and report has been developed by the Columbia Slough Environmental Improvement Task Force which recommends that it be adopted by their respective agencies as the official plan for the North Portland Peninsula.

The purpose of this study was to reevaluate land use recommendations presented in the Rivergate North Portland Peninsula Plan, developed by Daniel, Mann, Johnson and Mendenhall in 1967 for the Port of Portland, Multnomah County and the City of Portland for the lower Columbia Slough, Smith and Bybee Lakes and their adjacent lands. Increased environmental awareness and concerns by citizens and public agencies coupled with objections to implementing portions of the DMJM plan generated this study. The entire land use element of the peninsula area has been restudied and a new land use plan developed amending the earlier study.

The plan covers essentially the same area as the Rivergate North Peninsula Plan from Union Avenue to the Willamette River, from Columbia Boulevard to the Columbia River and as far south as Terminal 4 on the Willamette River. The plan developed also illustrates the existing land use patterns in St. Johns and the Swan Island Industrial Park to demonstrate their relationship and interdependence.

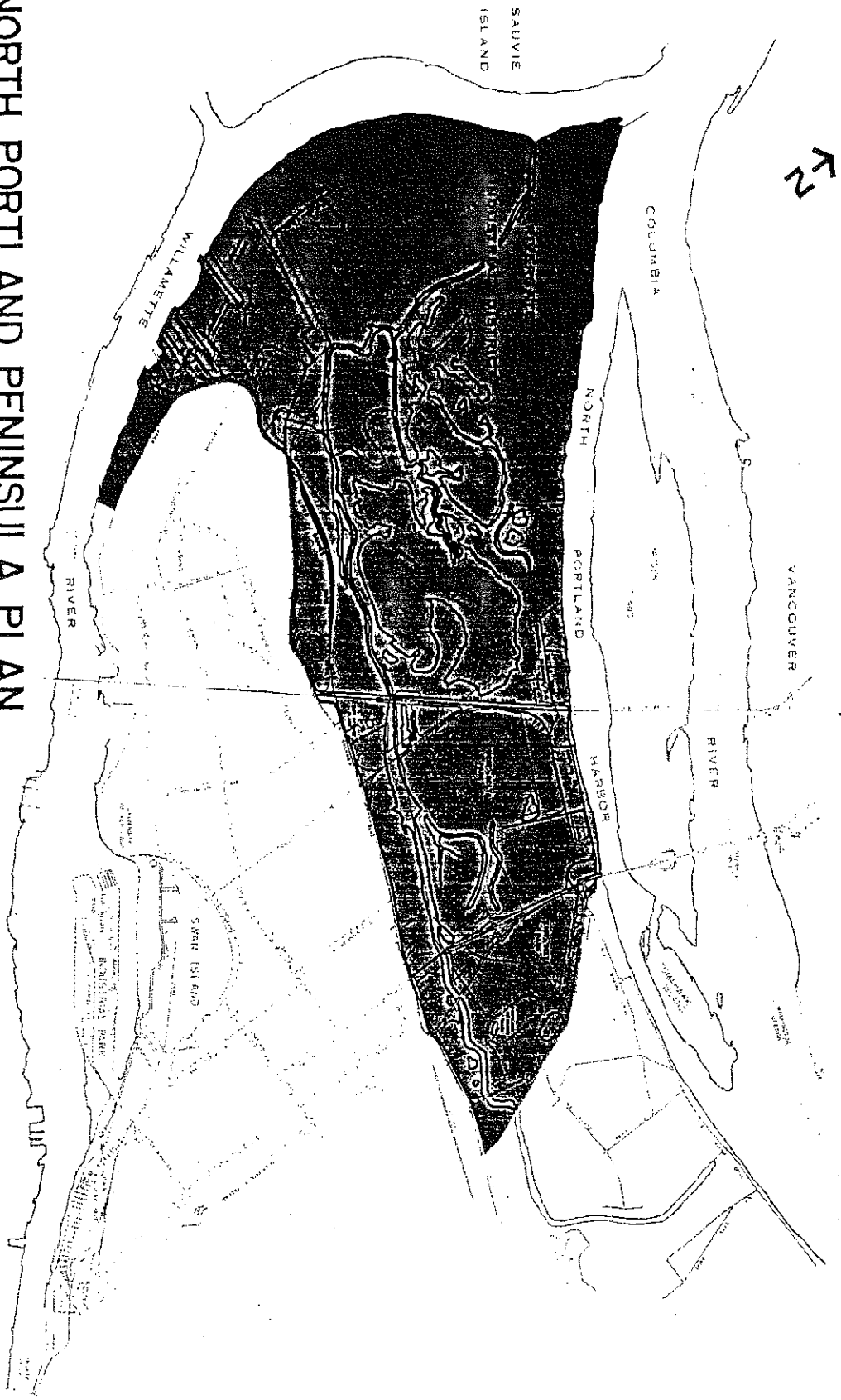
The Columbia South Shore Plan has also been reviewed to ensure that this plan is compatible with land uses adjacent to the upper slough.

The Columbia Slough Environmental Improvement Task Force was formed to direct studies providing for the environmental enhancement of the lower slough and the lakes, and to develop an implementation program for the use of the Slough, the lakes and their adjacent land areas.

The Task Force is composed of Lloyd Anderson, the City of Portland; Mel Gordon, Multnomah County; Ed Whelan, the Port of Portland; L. B. Day, the Oregon State Department of Environmental Quality and Col. Paul Triem, the U. S. Army Corps of Engineers.

The land use plan and implementation program have been prepared by the technical staffs of the involved agencies, under the direction of Keith Hansen and Dave Fredrikson of the Port of Portland, and Arthur J. Schlack of the Multnomah County Planning Commission. The land use plan and implementation program have been subjected to extensive input and review by public agencies, private groups and individuals. Testimony from the participants has been recorded and where possible incorporated into the plan.

**NORTH PORTLAND PENINSULA PLAN**  
STUDY AREA



## GOALS AND OBJECTIVES

Working with the citizens groups, the staff has defined Goals and Objectives for the planning of the appropriate land uses for this area. Two major goals provide a framework for the plan while objectives for each specific type of land use relate those goals to the resources and to the needs of the community.

### GOALS:

Develop an integrated land-use plan for the North Portland Peninsula Area, designating areas for industrial, commercial, recreational, and open-space development to best utilize the existing and potentially enhanced features of the environment.

Manage the natural and economic resources of the area to best serve the needs of the citizens of the Portland Metropolitan area.

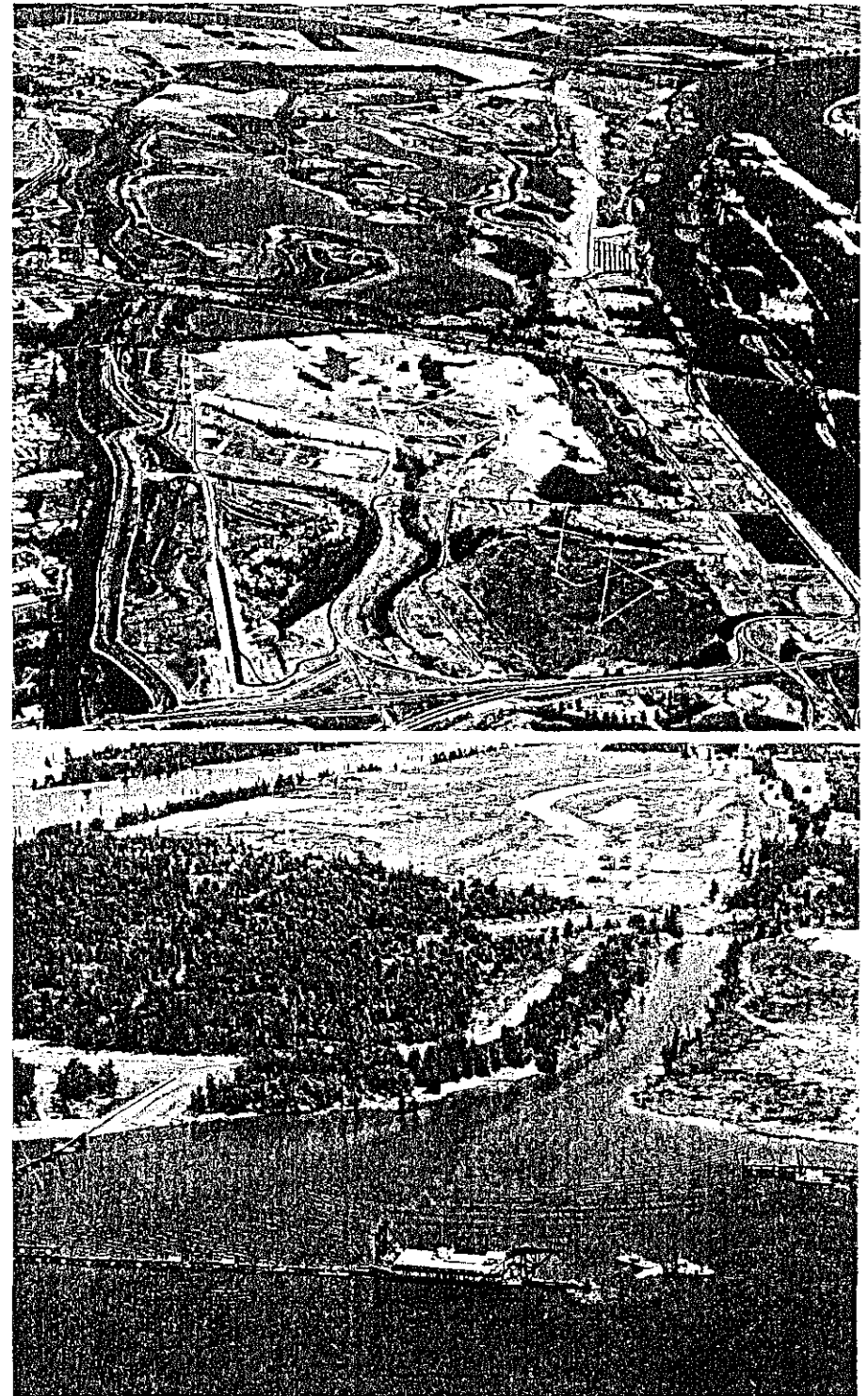
### OBJECTIVES:

#### I. COMMUNITY AND ENVIRONMENTAL

- A. Coordinate the plans for this area with regional land use, transportation and recreation plans.
- B. Preserve and enhance the natural and scenic qualities of the area.
- C. Create a unique community identity for the various use areas within the study boundary.
- D. Maintain the entire length of the Columbia Slough System as an important and necessary drainage way for 54 square miles of watershed in northeast Portland and Multnomah County.

#### II. ECONOMIC (INDUSTRIAL AND COMMERCIAL)

- A. Provide the variety of industrial and commercial opportunities required to maintain Portland's balanced and diversified economy.



### III. RECREATION - OPEN SPACE

A. Utilize the unique natural resources of the area for recreational developments which are appropriate to the area and needed by the community.

B. Preserve the trees and as much of the natural vegetation as is possible along the Columbia Slough banks and perimeters of Smith and Bybee Lakes and enhance other areas by planting trees and shrubs.

C. Develop an open space system with bicycle and hiking trails to link recreational and residential areas.

D. Create a diversity of public and private opportunities to utilize the recreational resources of the study area.



### IV. URBAN SERVICES

#### A. Transportation

1. Design a balanced circulation system which utilizes all available modes of transportation, for movement through and to and from the North Portland area.

2. Recognize the regional transportation plan which the community has adopted.

3. Design transportation elements to minimize environmental and ecological degradation.



#### B. Sanitary Land Fill

1. Recognize that the City of Portland has no short-term alternative to expanding its present sanitary landfill, and that continuation of this operation must relate to the existing operation, respect the existing natural environment and assist in the implementation of the land use plan.

2. Develop a more efficient solid waste disposal system to obtain the maximum reduction in waste volume until improved technology is developed or an alternate location can be found.

3. Develop a master plan for the area's recreational development to utilize the solid waste disposal area.





## V. RESIDENTIAL

Recognize the demands for additional housing units in the North Portland Area created by the industrial development and identify potential areas for expansion of residential land use.

### CITIZEN PRIORITIES:

In analyzing all the testimony, both written and verbal, there are eight basic areas of citizen concern. The goals and objectives state the "what and how" of the problem, the citizens priorities tell the "why." These priorities are not ranked in terms of importance and in some cases may actually be in conflict with each other. This reflects the fact that the people testifying represented different interest groups.

#### A. Costs

1. Develop a plan that is financially feasible and can be phased to assure accomplishment.
2. Recognize the limits of public funds and encourage the development of appropriate facilities by private enterprise.
3. Develop a plan that will require a minimum expenditure of public funds to increase the tax base for the local and state governmental agencies.

#### B. Create a quality environment.

1. Enforce water and air quality standards and noise control.
2. Preserve the natural environment.
3. Create more parks and open space.

#### C. Promote a rational growth policy.

1. Provide a reasonable amount of industrial land to meet justifiable needs.
2. Support a strong and diversified Portland economy.

#### D. Protect public rights.

1. Preserve and develop unique areas for public use.
2. Provide the necessary public access to public areas.
3. Police and maintain recreation and open-space areas.
4. Preserve the existing residential areas.

E. Control sanitary land fill to protect natural areas, but provide a solution to the solid waste disposal problems as an interim measure, with the long-range goal of phasing out the operation.

F. Evaluate needs of special interests groups and the ability to accommodate them.

1. Large power boats
2. Small nonmotorized boats
3. Wildlife habitat
4. Warm water fishing
5. Bicycle trails
6. Private industrial development

#### G. Develop a reasonable transportation system.

1. Provide ability to handle traffic.
2. Increase the transportation options.
3. Utilize alternates to freeways.

#### H. Protect individual rights and property.

1. Protect private and public development from seasonal floods.
2. Preserve private land use and development rights.
3. Maintain Columbia Slough as a navigable waterway.

## RESOURCES AND NEEDS

To translate these written goals to the land use plan it is necessary to describe the resources and to define the needs of the Portland-Metropolitan community.

### NATURAL RESOURCES:

Our study has revealed that there are four major natural resources in the study area: The rivers, the slough, the lakes and the lands surrounding them.

1. The Willamette and Columbia Rivers are both authorized by Congress to have a 40-foot navigation channel (from the mouth of the Columbia to the I-5 Bridge and from the mouth of the Willamette to the Broadway Bridge. These channels have been dredged and are being maintained by the U. S. Army Corps of Engineers. This gives access from the area to ocean trade routes for the majority of the ships using these routes today.

2. The lower Columbia Slough is a relatively narrow, shallow and leisurely meandering reach of water, which currently serves mainly as a drainage canal for the North and Northeast sections of Portland. It ranges from 75 feet to about 150 feet in width and from approximately 5 to 15 feet deep during low water periods. The water elevation ranges from approximately 0 to 21 feet above mean sea level during a calendar year.

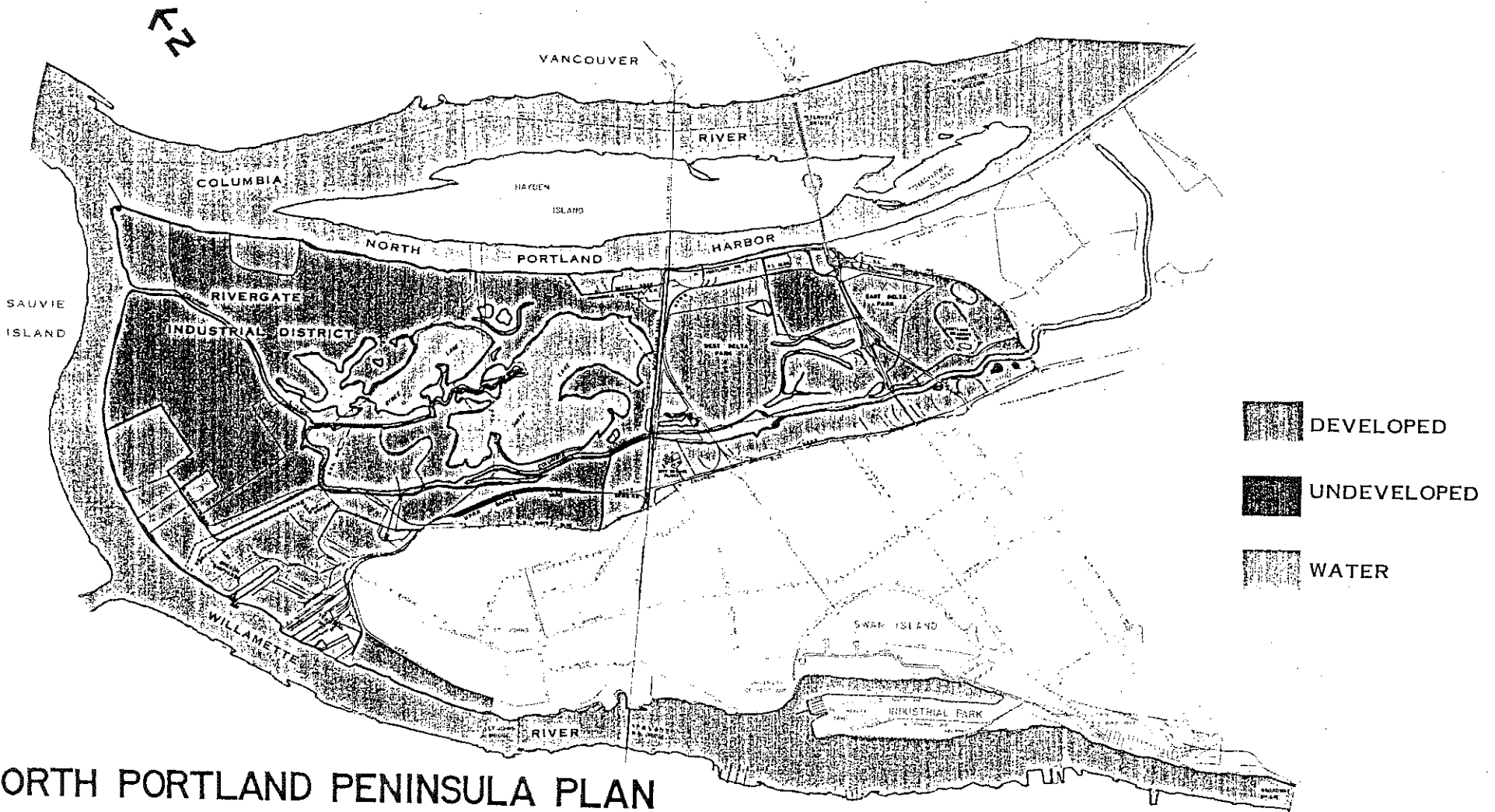
The slough has mud banks throughout its length and these banks have been eroded to an almost vertical slope from 2 to 10 feet high in most places. The bed of the slough is mud with a high concentration of organic matter deposited from both natural and industrial sources over the years. At low water the slough maintains a flow of approximately 70 cubic feet per second. The slough banks have been encroached upon by filling in certain sections by the city at the sanitary land fill site, by private industrial and commercial firms along the slough and by the Port at Rivergate.

3. Smith and Bybee Lakes are shallow flood plain lakes with approximately 1,000 acres of water surface. The bottom elevation of Smith Lake is approximately 7 feet above mean sea level and Bybee Lake is slightly deeper. These lakes have been left in a seminatural state, subject to seasonal flooding and are used as a nesting and resting area for waterfowl. The bottom of both lakes is extremely flat

and the lake area, therefore, varies widely with the water elevation. The lake bottoms are mud and organic material.

4. Although much of the land surrounding these resources is low and subject to seasonal floods, certain areas have been developed. The area south of the Columbia Slough is approximately 80% developed by private industries and city services. The area north of the slough is basically undeveloped; only a few recreational facilities and some limited commercial development are found throughout its length. About 30% of the land in the Rivergate Industrial District has been filled by the Port of Portland.

The vegetation in this area was cleared by the Port in 1967 with only certain selected areas of vegetation remaining. There is minimal development along the northeast corner of Smith Lake.



**NORTH PORTLAND PENINSULA PLAN**  
 BASIC RESOURCES

**MANMADE RESOURCES:**

In addition to the natural resources there are certain manmade facilities that affect the future use of the land.

Transportation facilities will play a major role in the development of this area. Perhaps the most significant element is the 40-foot navigation channel. The amount of land fronting on the channel in the metropolitan area is extremely limited and vitally important to the economy of the City.

A second major element in maintaining Portland's position as a major distribution center is the railroads. The Rivergate area has been cleared for service by four major transcontinental railroads, with service currently being provided by two. Terminal 4 and the industrial area south of the slough are serviced by two railroads.

Ground transportation elements within the study area include the I-5 Freeway to the East with connections on Marine Drive, Columbia Swift Boulevard and Lombard Street. Further proposals include the Rivergate Freeway, the Marine Drive Parkway and the extension and upgrading of existing facilities.

A second type of man-caused change in the area is fill. The City is depositing sanitary land fill along the Columbia Slough, the Port has placed sand fill within the Rivergate Industrial District and private firms are using land fill along the slough.

The sanitary land fill area has severe limitations for future reuse possibilities. Because of its characteristics, it is unsuitable for most types of future construction. Because of the requirement for an impermeable layer of material to be placed over the top of the sanitary land fill anything penetrating that layer (including tap rooted trees) will probably cause leaching problems.

The areas filled by the Port along the Columbia and Willamette Rivers have been filled hydraulically with Columbia River sand and have excellent foundation qualities.

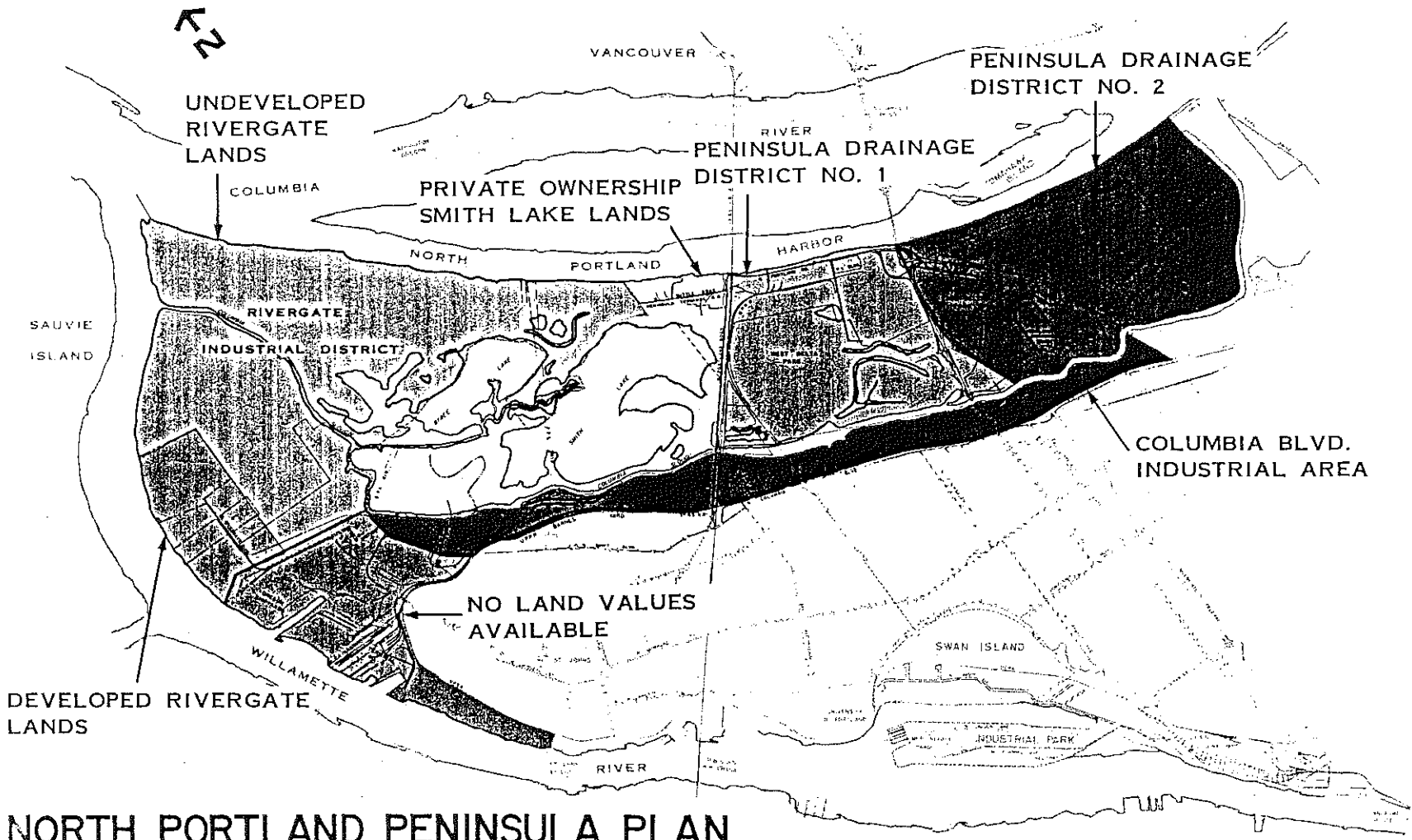
Eastern portions of the study area are surrounded by dikes to create drainage districts and protect these areas from the annual floods. These dikes are maintained by the drainage districts and the Corps of Engineers. The districts are also responsible for pumping out water during the rainy season.

The final manmade resources which affect the land use plan are the existing uses and improvements. Major commitments in terms of land areas include: The industrial development along the south of the slough, the recreational development in Delta Park, the residential areas in St. Johns, the Terminal 4 Marine Development, and the industrial development at Rivergate. Projects under construction include Kelley Point Park and the new container terminal.

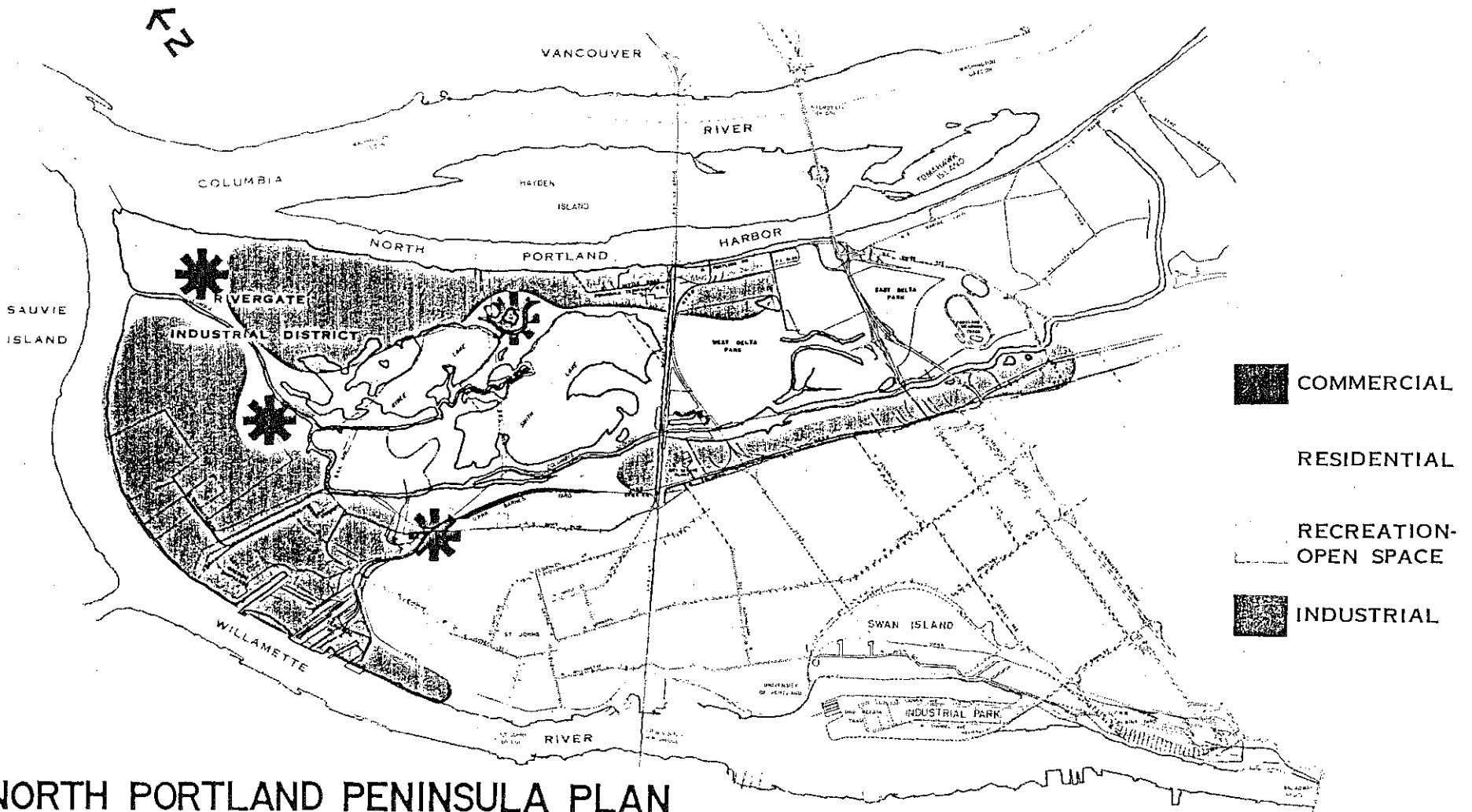
The amount of improvements and value of the land is reflected in the following table of assessed values:

**TABLE 1**

Area Description	Land Value	Improvement Value	Total
Peninsula Drainage District No. 1	\$ 1,128,460	\$ 2,876,350	\$ 4,400,810
Peninsula Drainage District No. 2	\$ 5,909,010	\$ 7,299,100	\$13,202,110
Columbia Boulevard Industrial Area	\$ 4,269,450	\$11,440,080	\$15,709,530
Developed Rivergate Lands	\$ 3,618,059	\$26,335,550	\$29,953,609
Undeveloped Rivergate Lands	\$ 6,966,060	\$ 3,500	\$ 6,969,550



**NORTH PORTLAND PENINSULA PLAN**  
 LAND VALUE AREAS



**NORTH PORTLAND PENINSULA PLAN**  
 CONCEPTUAL LAND USE MAP

## CONCLUSIONS

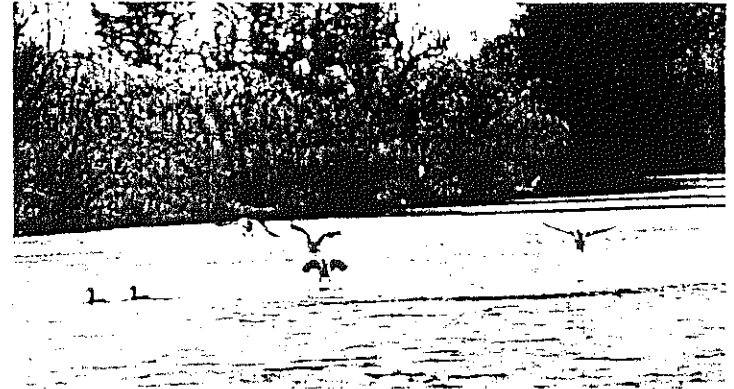
Based on the resources a general land use concept can be developed for appropriate uses within the study boundary.

**Industrial:** Those areas served by the 40-foot channel, the four railroads and the good ground transportation facilities should be developed for industry. Existing fill, flood protection and existing industrial land uses are further reasons for developing certain areas for industry.

**Recreation-Conservation:** Those areas that have unique natural features should be developed for recreation, this includes the water, the significant vegetation and other unique lands. Areas with heavy concentrations of wildlife habitat should also be preserved.

**Commercial:** The location and size of commercial development depends on the market. Within the study area commercial uses should be developed to serve industrial, recreational, and the residential areas.

**Residential:** The location of residents depends on the availability of urban services such as schools, shopping, commercial services, churches, etc. Residential development should either be at a scale to support the development of new services or adjacent to areas that already have them.



## THE COMMUNITIES NEEDS

### THE COMMUNITY'S NEEDS

The second major consideration in developing the plan is defining the needs of the people of Portland which can best be met in this area. These can be divided into five categories: economic, residential, urban services, recreation, and commercial.

#### ECONOMIC

The economic needs of the community must be related to the economic base of both the state and of the Portland area. Oregon's economy is based primarily on exports with the major products being lumber, agricultural and manufactured products. Since Portland is the major port of exit for these products it plays an important role in the State's economy.

The economy of the Portland metropolitan area is based on its diversified industrial base and the fact that it is a major distribution center. These two facts are supported by the attached charts. Portland ranks 17th in the nation as a distribution center, based on the total number of people employed in wholesale trade (see Tables 2 and 3). In terms of a percentage of the population this ranking would be much higher.

Tables 4 and 5 show the diversification of Portland's economy. Table 4 shows the percent of workers in the various industrial classifications.

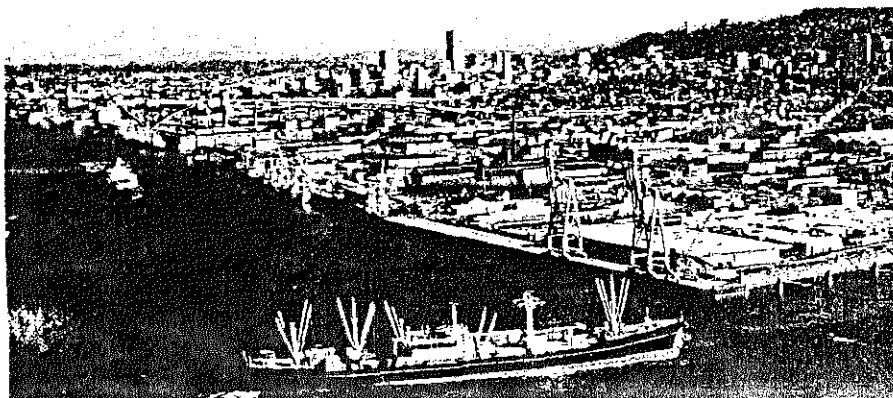


TABLE 2

### MAJOR WHOLESALE CENTERS (Number of People Employed in Wholesale Trade)

1.	New York	169,431
2.	Chicago	88,971
3.	Los Angeles	64,412
4.	San Francisco	39,762
5.	Atlanta	37,682
6.	Dallas	29,909
7.	Philadelphia	27,939
8.	Houston	23,512
9.	Minneapolis	23,006
10.	Boston	22,322
11.	Detroit	20,360
12.	Kansas City	19,769
13.	Newark	19,769
14.	Cleveland	18,435
15.	St. Louis	18,243
16.	Memphis	15,350
*17.	PORTLAND	15,280
18.	Denver	15,077
19.	Charlotte, N.C.	14,204
20.	New Orleans	13,618
21.	Paterson	13,631
22.	Miami	12,530
23.	Cincinnati	12,425
24.	Seattle	11,739
25.	Indianapolis	11,377

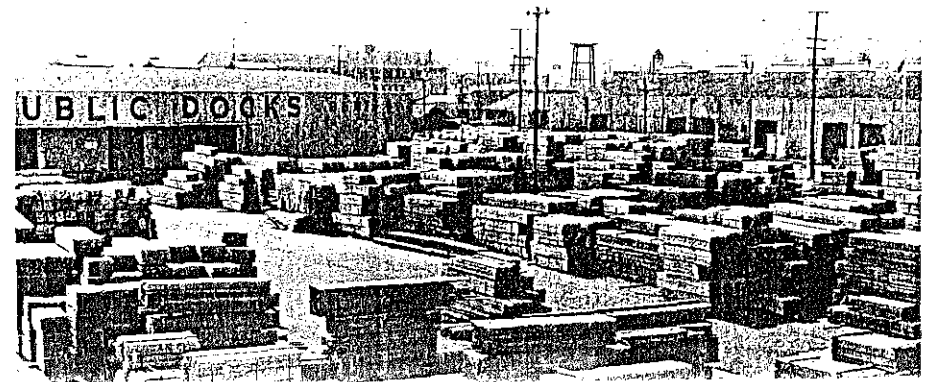




TABLE 3

## WHOLESALE TRADE (\$000,000)

	1958	1967	% Increase
Portland	\$2,470	\$4,894	98.1%
Seattle	\$2,565	\$4,233	65.0%

TABLE 4

PERCENT OF EMPLOYMENT  
BY MANUFACTURING ACTIVITY

	Portland	Seattle
Ordinance & Accessories	0	0.17
Food & Kindred Products	9.79	5.92
Tabacco Manufacture	0	0
Textile Mill Products	2.60	0.10
Apparel	4.40	2.50
Lumber & Wood Products	10.29	4.63
Furniture & Fixtures	3.40	0.72
Paper & Allied Products	8.62	2.40
Printing & Publishing	4.34	3.54
Chemicals & Allied Products	2.36	0.76
Petroleum Refining	0.33	0.13
Rubber & Plastic Products	0.82	0.27
Leather & Leather Products	0.15	0.19
Stone, Clay, Glass & Concrete	1.95	1.82
Primary Metal Industries	7.53	1.53
Fabricated Metal Products	7.96	3.07
Machinery	8.08	3.54
Electronic Machinery	10.39	3.63
Transportation Equipment	9.20	63.20
Prof. Scientific & Control Inst.	2.38	0.24
Misc. Manufacturing Ind.	1.77	0.65
Administrative & Auxiliary	3.64	0.99

TABLE 5

## MANUFACTURING DIVERSIFICATION INDEX

1. Philadelphia, Pa.
2. Lancaster, Pa.
3. York, Pa.
4. Fitchburg - Worcester, Mass.
5. Springfield, Mass.
6. New Haven, Conn.
7. Baltimore, Md.
- \*8. PORTLAND, OREGON
9. Nashville, Tenn.
10. Paterson, N. J.
12. Boston, Mass.
14. Kansas City, Mo.
15. Denver, Colo.
16. St. Louis, Mo.
18. Los Angeles, Calif.
21. San Francisco, Calif.
27. Minneapolis, Minn.
30. Chicago, Ill.
43. Atlanta, Ga.
58. New York, N. Y.
99. Phoenix, Ariz.
119. Spokane, Wash.
127. Detroit, Mich.
168. Seattle, Wash.

The diversified character of Portland's economy can best be illustrated by the fact that no one industrial classification accounts for more than 11% of the total employment, while 63% of the workers in Seattle were employed in one industry. In terms of the nation, Portland's economy ranks as the 8th most diversified.

Research on the demands for industrial land by the Battelle Institute in 1965 made the following projections. During the period of 1960-1990, there will be a demand in the SMSA for an additional 2800 acres of industrial land. Approximately 1000 acres will be heavy industries having a water orientation. The Battelle Report also

identified a maximum projected growth that could result in a doubling of the demand for land. The basic population projections in the Battelle study have proven to be accurate, although changes in technology and an increased growth of service industries have slowed the percent of growth in manufacturing employment. The sale of land to Oregon Steel Mills and the development of Terminal 6, a container

operation, reflect two circumstances where large waterfront acreages that were not anticipated by the Battelle study have reduced the total available supply of waterfront land. The Battelle Study projected the total land demand for industrial, commercial and public uses at Rivergate to range from 2,735 to 4,005 between 1960 and 1990 (see Table 6).

TABLE 6

POTENTIAL DEMAND FOR LAND AT RIVERGATE, 1960-1990

(Acres)

ADDITIONAL POTENTIAL DEMAND

	Maximum	Probable
Demand for Non-Rivergate Type of Manufacturing Land		
Total	1,800	1,800
Rivergate's Share	1,200	900
Total Demand for Manufacturing Land in the SMSD		2,800
Demand for Rivergate-Type Waterfront Land		1,000
Rivergate's Share of Demand for Rivergate-Type Land		670
Demand for Trucking and Warehousing Land		
Total	1,200	1,200
Rivergate's Share	800	300
Demand for Land for Relocation of Existing Industries		
Total	1,200	1,200
Rivergate's Share	800	500
Total Industrial Demand for Rivergate Land	3,470	2,370
Commercial Land Demand at Rivergate	15	15
Public Areas Land Demand at Rivergate	520	350
Total Demand for Land at Rivergate	4,005	2,735

What does this mean for the Columbia Slough? There are two factors that must be considered. It is the river and the railroads that support Portland's position as a distribution center. It is therefore important that any site which contains these two modes be developed to their maximum potential. The exterior lands at Rivergate fall into this category.

The second factor is the variety of sites available to meet the many requirements of our diversified economy. Different industries require different sites and Portland needs to assure that this variety is available. At the present time Rivergate is the only area in the metropolitan area where there are large 50 to 100 acre industrial sites with waterfront access served by four railroads.

In terms of the supply of industrial land in the region there are other lands zoned "industrial," but these lands do not have the site size, channel access, rail and ground transportation and utilities available at Rivergate.

In developing the kind of primary industry discussed above there are also smaller firms which receive advantages by being located close by. These would include warehousing, fabrication, and small manufacturers who use or supply parts and materials to the larger industries.

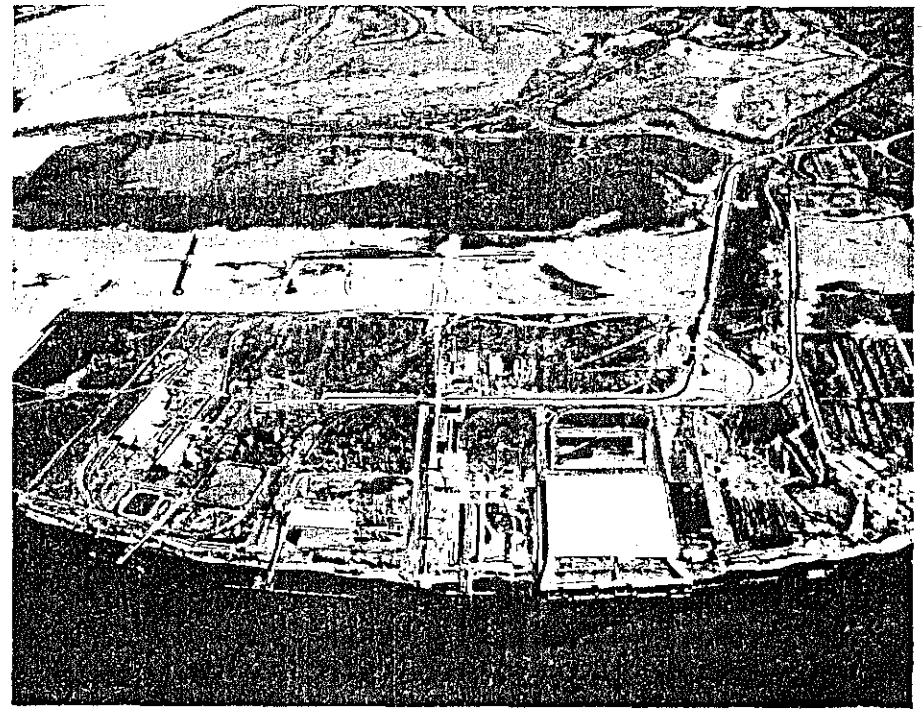
The goal of the Rivergate Industrial District is to provide a diversified industrial base and distribution center for Metropolitan Portland.

As the amount of land at Rivergate to meet these demands is reduced because of pressures for alternate land uses, more selectivity must be used in developing these lands. Certain industries will be forced to locate in other areas.

## RESIDENTIAL

The residential growth pattern in Portland continues to develop in the suburban areas. However, there is some recent renewed emphasis on providing additional housing in the downtown area.

Within the study area the existing heavy industrial development would make it difficult to include any large-scale housing development to alter that trend. There is not sufficient land, buffered from the noise, traffic, and pollution of heavy industry for this type of development.



There is a real need, however, to strengthen the St. Johns area. St. Johns has, through the years, managed to maintain its identity and its community spirit. However, as industry continues to grow in the area there will be increased pressure for more housing. An expansion of the housing area could help to relieve this problem. The area between Barnes Yard and Swift Boulevard is the only sizeable open area still available for the expansion of the housing supply in the St. Johns Area. About one-third of this land is owned by the Union Pacific Railroad with the remainder being existing residential lots. This area easily relates to the availability of urban services (commercial, educational, and cultural) in the established St. Johns community.

## URBAN SERVICES

There are a number of urban services related to the metropolitan area in the study area. The Portland Sewage Treatment Plant is located between Columbia Boulevard and the Slough. This plant is currently undergoing expansion and change from primary to secondary treatment. Future plans may include tertiary treatment.

There are also several major power line easements crossing the area. These lines, on towers approximately 150 high cross both the Willamette and Columbia Rivers and are located in the vicinity of Bybee Lake. There are two major substations located close to the west entrance of Rivergate. Other smaller substations are located as needed by specific users.

There are three major facilities located or proposed to be located in the areas that have been the subject of considerable discussion. These are the City Sanitary Landfill, the proposed Rivergate Freeway, and the authorized navigation channel on the Columbia Slough.

The Rivergate Freeway is a part of the regional 1990 transportation plan developed by the Portland-Vancouver Metropolitan Transportation Study and adopted by the Columbia Region Association of Governments, and the local units of government. This plan is a regional system to handle the traffic volumes projected through 1990. Although transportation technology is in a state of change and challenge, this plan is based on land use studies, origin-destination studies, and computer modeling. It is not possible in the course of this study to drastically alter that regional transportation system. To drop a major facility without a study of the entire system would be irresponsible. Even if the area were not fully developed, the freeway would still be needed. It has, therefore, been determined that the facility would be shown at this time and the alignment would be the

most compatible with the natural environment. If a decision is reached in the future not to build the freeway, it would of course have an impact on the interior development of Rivergate. Those areas impacted, however, are not scheduled to be developed until the 1985 to 1990 period. The decision on the freeway will be made prior to that time and if not built, the development schedule can be modified to meet a revised land use plan.

The City of Portland sanitary landfill is related to the regional needs for solid waste disposal. Our society has continued over the past years to become more consumption oriented, therefore causing an increase in the amount of solid wastes. At the same time our increasing concern for the environment has begun to limit the sites available for the disposal of this material. Although the city is now managing this operation, the Metropolitan Service District is currently charged with the long-range responsibility for solid waste disposal.

Because of the impermeability of the soils, this area is suitable for a properly administered sanitary landfill. It is anticipated that by 1982 the technology will have been developed to bring about a 90% reduction in volume. If incorporated as part of the Metropolitan Service District - CRAG solid waste plan the land could accommodate the landfill operation through 1985 with a possible extension to 1990. This would require a change in the law which now requires that the operation be closed by 1975.

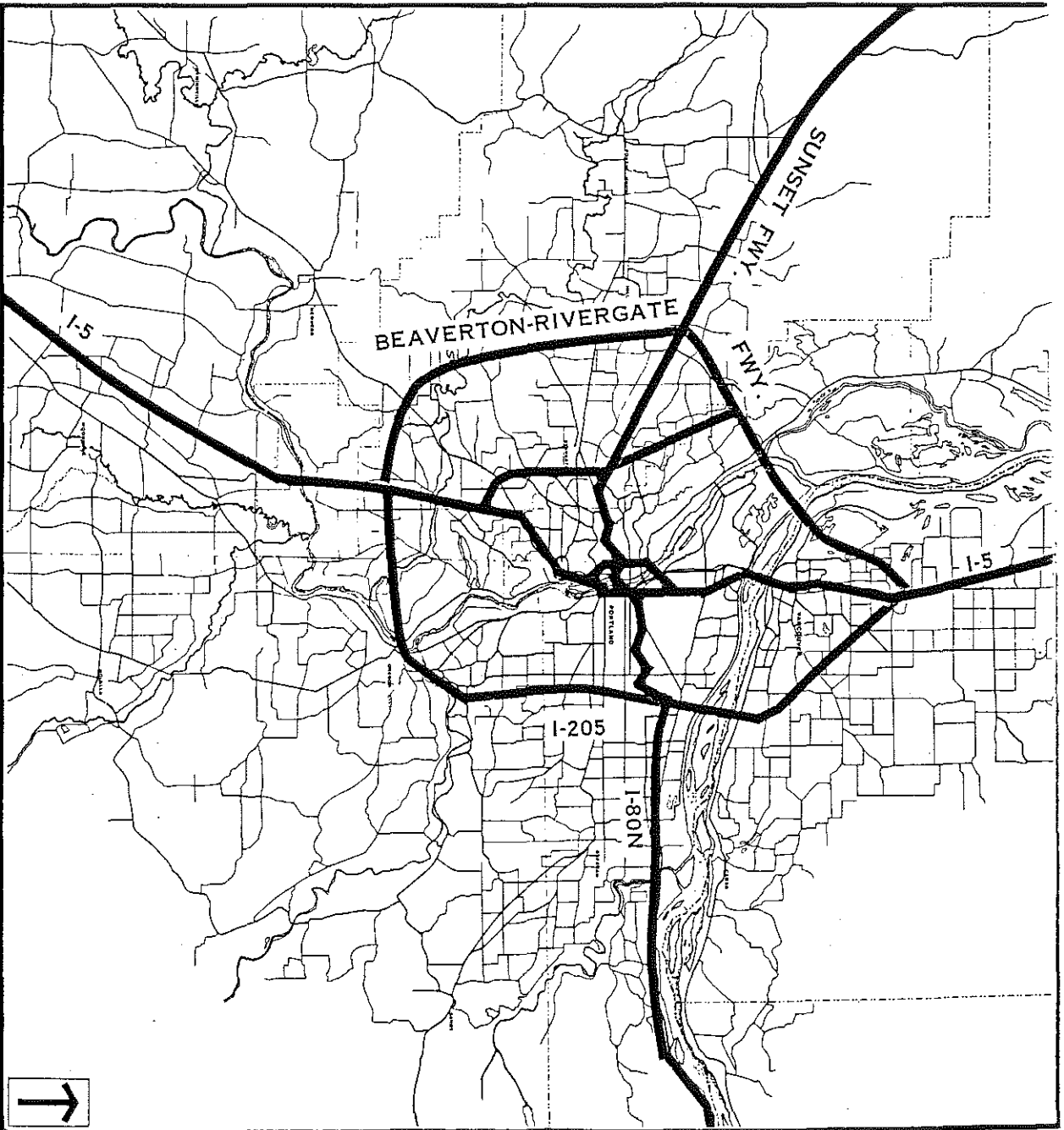
The City Parks Department is currently preparing a recreation master plan to utilize the area after the land fill is completed.

A third controversial facility is the authorized 10 x 100 foot navigation channel for the Columbia Slough. There are about 400 acres of land between the Slough and North Columbia Boulevard which could be served by such a channel. Because of its low elevation, the land adjacent to the slough at Rivergate would require extensive filling or a 15 to 20 foot dike for flood protection. This dike would create engineering and logistics problems for any firm wanting to use the channel for transportation. Lands along the north side of the Slough are committed to recreation development.

The estimated cost of the drainage system to support the navigation channel ranges from \$15 to \$25 million, including the cost of constructing the channel and disposing of the spoils. This construction would require an investment of approximately \$40,000 to \$50,000 per acre of land potentially served by the channel.

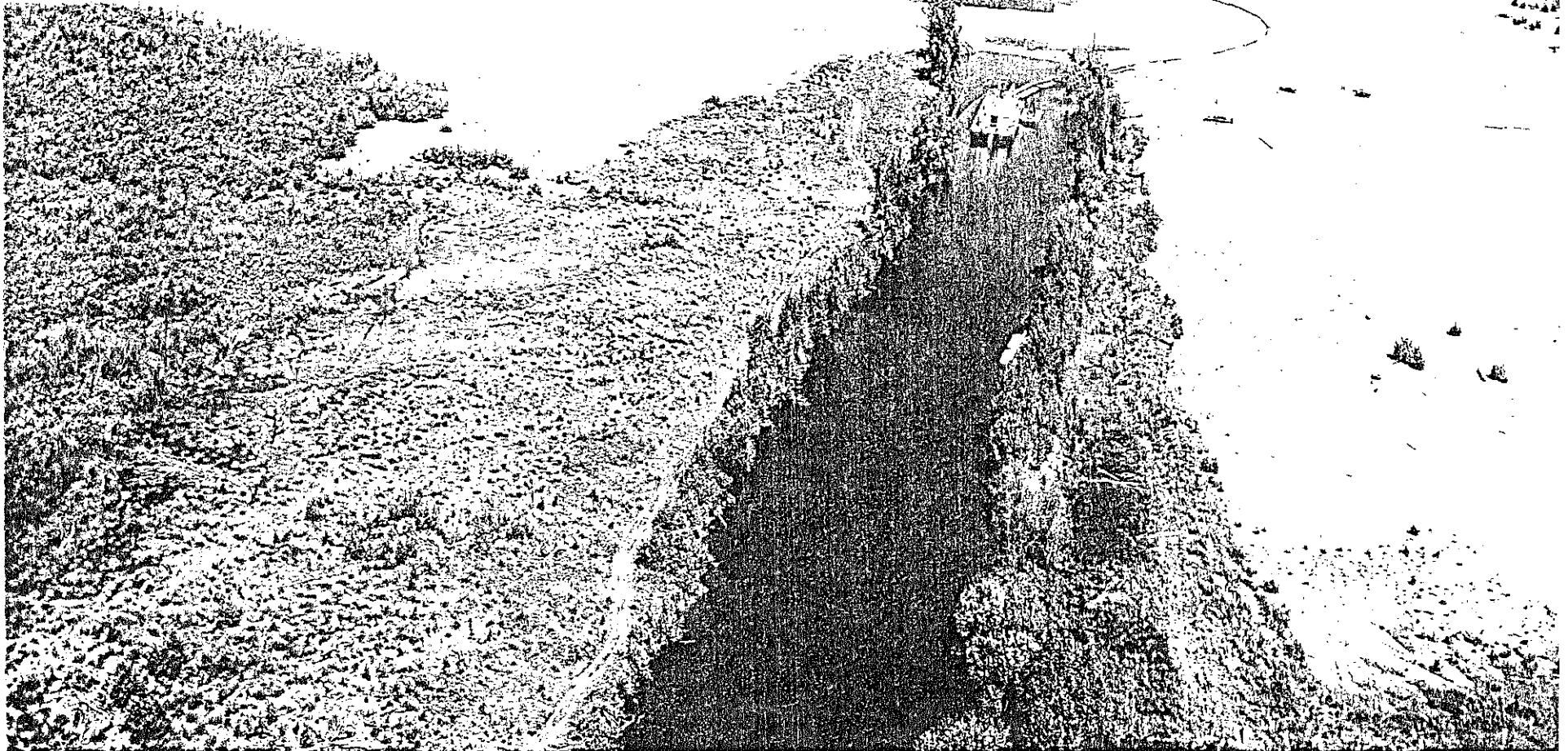
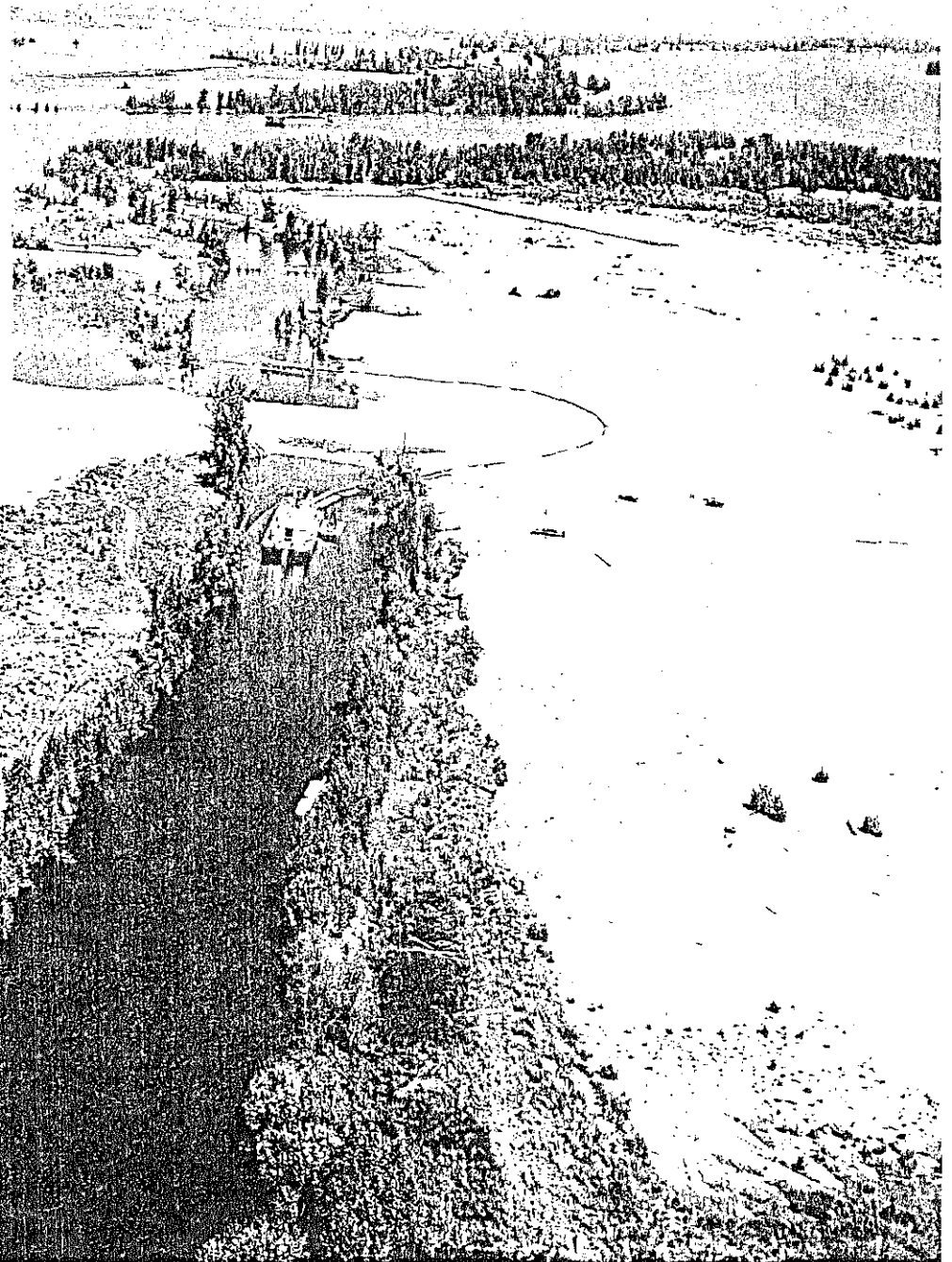
# Regional Transportation Map

- PROPOSED
- APPROVED & COMPLETED



Modern barge technology would find a 10 x 100 foot channel difficult if not impossible to utilize. Modern river and ocean barge operations recommend a channel 15 to 20 feet deep and 200 feet wide.

A new innovation in barge technology is the LASH system where small barges are loaded and unloaded directly onto a larger ship. It has been suggested that these barges could be used by the Columbia Slough industries. These barges, however, hold the equivalent of 15 to 20 containers of cargo. At the present time Portland has very few shippers who generate this volume of cargo at any one time and they deal in a very limited variety of products. The Columbia Slough industries are too small to generate these volumes of cargo. LASH barges would most likely be unloaded at a public terminal and trucked to the various users. The extremely high costs and lack of potential users are the two prime considerations which lead to the omission of a navigation channel in the land use plan.



## RECREATION NEEDS

The Columbia Region Association of Governments recreation and open space plan identifies flood plains and riverbanks areas as open space and recreational resources. They also recommend that unique natural features be developed for recreation. The study area contains all of these features. The City of Portland owns a large portion of the lakes and the recreational lands and, therefore, will play a major role in their development.

Since the area is too far from any residential neighborhood for these lands to serve as neighborhood recreation, the area is better suited to serve regional needs.

The task force and resource panel have identified a number of passive-type recreation uses compatible with the area's unique natural character. These uses include boating, crew racing, fishing, hiking, bicycle paths, bird watching, wildlife habitat, etc. The Game Commission has determined that the Columbia South Shore and Lower Columbia Slough could, with maximum development as a warm water fishery provide in excess of 165,000 annual recreation days. These uses are oriented toward the urban dweller seeking relief from everyday urban pressures.

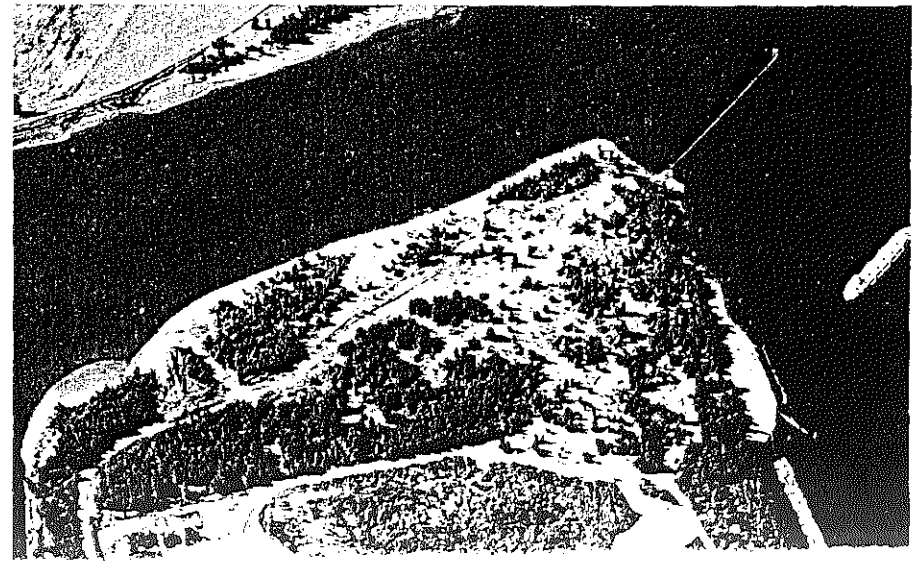
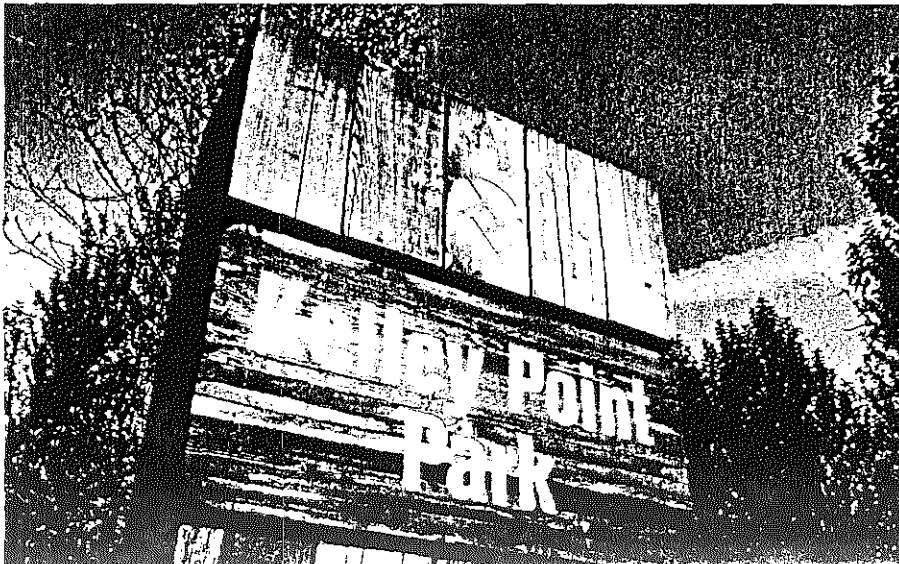
The City of Portland Parks Department on the other hand has identified the area as being isolated from any residential development and large enough to be suitable for nuisance recreation uses such as motorcycles, minibikes, skeet shooting, night lighted ball fields,

outdoor concerts, etc. They have also documented the needs for these services in the community.

The study area, with proper planning, has space for the development of both types of recreation. Because they are not compatible with each other, however, the plan must identify the areas with valuable natural character suitable for passive recreation and isolate these from the noisy or active type of recreation. This can be done through the use of open space, earth mounds, tree plantings, etc. With proper planning, both types of recreation can coexist within the study area.

One additional special interest group that directly affects the land use plan is power boating. Based on State Marine Board statistics there is a documented need for power boating. There is also a need for nonpower boating areas. These two uses are not compatible and need to be separated. While the rivers and other lakes are open to power boating, there is no water area reserved at this time for non-power boats. Since these needs relate to regional requirements for water recreation beyond the scope of the study, the Task Force will ask that CRAG conduct a study of the supply and demand for water-oriented recreation.

Because of the nature of its banks, the Task Force makes a strong recommendation that the slough be retained for nonpower boating. The design of Smith Lake, however, should retain the option for future powerboat racing if the CRAG study determines this is the best place for it.



## LAND USE PLAN

The land use concept is a multiple use plan integrating industrial development and recreation open space land uses with commercial, residential and urban services as required for support. The key to the proper development of the area is the management of the natural resources. Land uses have been selected on the basis of the community needs and the natural and manmade resources of the area. Development of these multiple land uses will require careful management.

## MANAGEMENT

Management of resources falls into several categories, actual control of some, preservation of others and indirect control through the use of standards, criteria, zoning, etc. The successful development of this area will depend on these controls.

Utilization of the land, the slough and the lakes as shown in the plan is dependent upon our ability to manage or control the water elevation within the study area. The slough and the lakes, in their existing state, are of limited value to man or for wildlife habitat. Management of the water levels of the slough and the lakes is required to achieve the goals and objectives of the study, and to realize a majority of the priorities identified through the public input program.

The primary control would be a water level control device constructed approximately 1,000 feet from the mouth of the Columbia Slough and the completion of the perimeter berm. Coupled with the control of the upper Slough, this plan would provide flood protection for the entire North Portland Peninsula and South Shore area.

The water level control device in the Slough would be an earth fill structure with pipes, to allow a gravity flow of water from the Slough to the river during low water. During periods when the river stage is above 9 feet mean sea level these pipes would be closed and the water pumped from the Slough into the river. An integral part of the plan is the pumping of fresh water into the Slough to maintain an increased flow in the Slough during low water periods to enhance the water quality.

There are a number of advantages in a controlled water elevation in the Slough. It would provide additional protection to the existing drainage districts without requiring major expenditures to improve the interior dikes, and would extend flood control to areas not now protected.

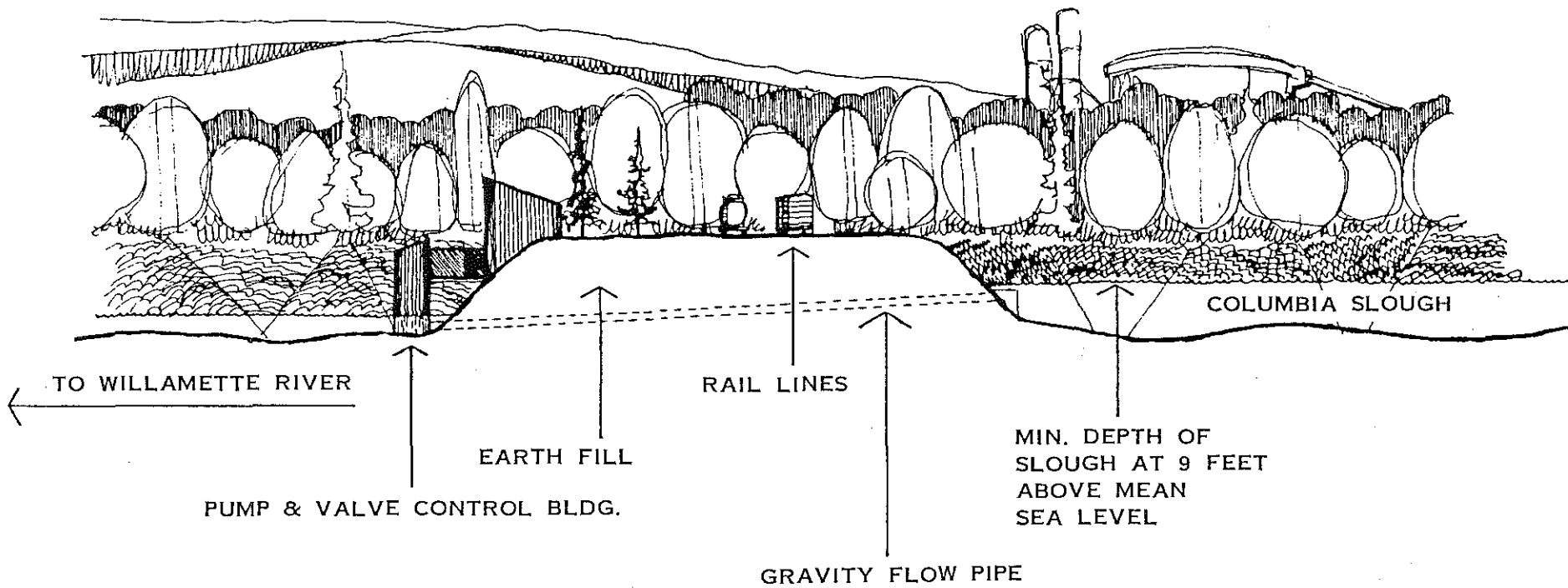
In addition to flood control, management of the water level in the Slough would also increase the recreation potential. The banks could be stabilized to allow vegetation to grow and act as a buffer between the Slough and the existing industrial land uses. The managed waterway would also make it possible to develop a warm water fishery, improved wildlife habitat and an ideal small boat facility.

The Oregon State Department of Environmental Quality and the Oregon Game Commission recommend a minimum depth of nine feet of water in the lakes to provide water quality, manage plant production, and provide for a minimum warm water fisheries habitat. The mean elevation of the lakes is established at 11 mean sea level, establishing the shoreline and minimizing dredging in the lakes to create a variety of water depths and development of a warm water fishery and wildlife habitat. In its present uncontrolled state the shoreline varies as much as 300 to 400 feet during a season, creating large mud flats.

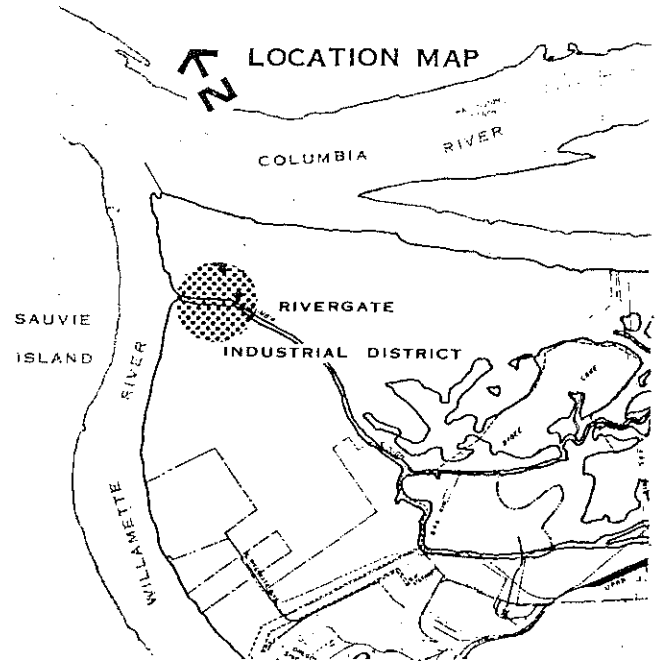
The development criteria list specific controls for each of the other resources. The following section describes the land use plan for each area.







COLUMBIA SLOUGH WATER CONTROL DEVICE CONCEPT  
*(North Elevation)*



## LAND USE AREAS

The major land uses in the plan are industry and recreation. These uses have been located to respond to the basic character of the land. Table 7 gives the approximate number of acres of each land use. The land use plan is not a precise master plan, but a general statement, commitment and guide for the future development of that area. As the area develops the exact boundaries and configuration of the use areas will probably be modified. The following paragraphs give a brief description of the land use areas.

When the Study Area is fully developed there will be a total of 36,000 people employed in the Area. This is an increase of approximately 17,000 over the present figure. By balancing the land uses and density there is an overall density of approximately 6 employees per acre. The lowest density is 1 employee for every 20 acres of recreational land and water, and the highest is 70 employees per acre of research development.

The exterior land at Rivergate, because of the 40-foot channel and its service by four railroads, has been reserved for heavy industrial and

maritime uses. The soil conditions and site sizes in this area make it a valuable resource to support the regional economic base. Industrial development controlled by development and performance standards can be a positive element in the environment.

The Slough which has been the center of much of the controversy is planned as a major element in the land use plan. It forms a link for pedestrians, bicyclists and small boat traffic between recreation areas. Based on a Game Commission recommendation the buffer strip along the south bank of the slough has been narrowed and the land accumulated in a series of miniparks. There will be a minimum 50-foot buffer on the south shore to preserve the natural appearance of the slough. Because of the conflicts with existing industry, the land will be used for a visual buffer only. All public movement along the Slough will occur along the north side in a 150-foot buffer strip. It is recommended that the city and county acquire areas along the slough with major vegetation and develop them for minipark sites. These facilities will give access to the warm water fishery to be developed by the Oregon State Game Commission.

Land Use	Approximate Total Acres	Acres Available for Future Development	Total Future Employment
Recreation	3,107	1,638	155
Residential	125	78	
Commercial	176	140	2,640
Commercial-Recreation	334	30	1,670
Research	22	22	1,540
Light Industry	1,469	563	22,035
Heavy Industry	1,707	1,013	8,535
Total	6,940	3,484	36,575

The lakes and the land around them are also planned as a recreation complex. These resources will be developed to include active, passive and commercial recreation and, where appropriate, commercial development. The basic land forms and lake configuration will be determined by the contour 11 feet mean sea level. Modifications of this contour will occur as the lakes are dredged to increase the depth of the water. These modifications will be in the form of islands and limited shoreline changes. A major recommendation of the plan is the establishment of the lake boundary and basic land forms.

The interior lands at Rivergate are valuable for both recreation uses and industrial development. A compromise has therefore been reached where the lakes and those lands fronting on the lakes have been reserved for recreation and the lands with good soil conditions, good access and marketable for industries related to the waterfront activities have been retained for industry. A further influence in this area is proposed construction of the Rivergate freeway. If the freeway is not constructed, the amount of industrial development will need to be reduced, and this reduction will occur between the Marine Drive Parkway and the Northwest Side of Bybee Lake. As discussed earlier these lands will not be filled until the decision is made to build or not to build the freeway.

It is recommended that the sanitary landfill remain in operation until improved technology is developed or an alternate location can be found. Area has been reserved to accommodate the expansion until 1985 or 1990. This area is being master planned by the City Parks Department as a future active and passive recreation complex. By developing a master plan before the land fill is completed it is possible to contour the fill to fit the recreation uses. Expansion areas have been selected that are open and away from the lakes to minimize destruction of the natural environment.

The industrial area to the south of the Columbia Slough and east of Portland Road has been retained as industry. Attempts will be made through standards, criteria and voluntary agreements to upgrade the area's appearance.

The area west of North Portland Road is basically underdeveloped and subject to change. The exceptions to this are the Union Pacific's Barnes Yard which will remain and perhaps expand, and the industrial development adjacent to North Portland Road. The plan recommends that a major portion of the land between the Rail Yard and the existing Swift Boulevard be developed for residential use. North Swift Boulevard would be relocated behind the railroad yard upon expansion of the residential area.

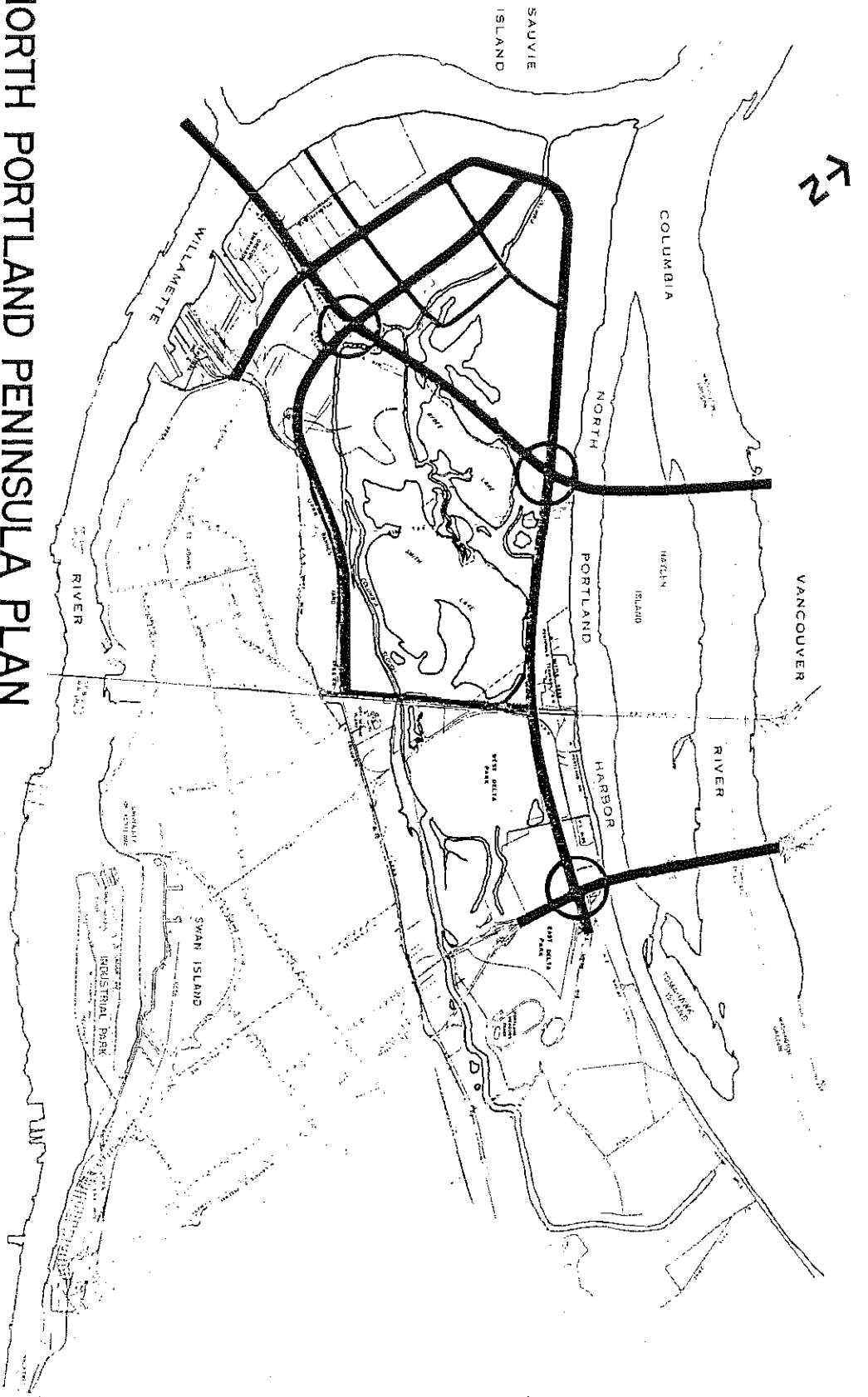
The area between the railroad and the Slough should become a part of the recreation complex. It is possible that a portion of that area could be used for limited sanitary landfill.

## GROUND TRANSPORTATION

The major ground transportation elements include the Rivergate Freeway, the Marine Drive Parkway, a relocated North Swift Boulevard and the interior circulation system at Rivergate.

The need for the Rivergate Freeway has been discussed in an earlier section. There are two freeway interchanges in the Rivergate area, one with Simmons Road and one with Marine Drive. The alignment has been kept as close as possible to the BPA power lines to minimize the impact of two major corridors crossing the area. Since the upper part of Bybee Lake is being preserved that portion of the freeway crossing the lake will be constructed on an elevated structure. The Marine Drive Parkway replaces the traffic capacity of the Whitaker Freeway, proposed in the Portland-Vancouver Metropolitan Transportation Plan, without the environmental problems created by that alignment. It will require a rebuilding of the I-5, Marine Drive, and Union Avenue interchange. The realignment of Swift Boulevard is based on changing the land south of Barnes Yard from industrial to residential development. The relocation of this road will then allow that area to become a part of the St. Johns community. If the land use is not changed then the road could remain in its present alignment to serve the industrial property and act as an edge to the residential area.

The interior Rivergate streets have been designed to serve the properties in the most efficient manner possible. The number of Slough crossings has been kept to a minimum.



# NORTH PORTLAND PENINSULA PLAN

GROUND TRANSPORTATION

## DEVELOPMENT CRITERIA

The following criteria are recommended by the Task Force to control the development of the Slough, lakes and the surrounding land. These criteria should be adopted and enforced by the local agencies.

### I. Columbia Slough Development Criteria

#### A. Water

1. Elevation, from 7 to 9 m.s.l. during summer - with provisions for drawdown drainage ponding of storm during winter.
2. Water quality sufficient to maintain warm water fisheries; auxiliary water will be pumped from the Columbia River into the upper slough.
3. Future unauthorized fills to be removed by parties responsible.

#### B. Bank

1. No fill placed within twenty-five feet of top of bank.
2. No slopes greater than 1 on 4 within 50' of top of bank.
3. Areas within 25' from top of bank planted to natural vegetation plus recommended plant list.
4. No buildings (except in commercial areas) within 50' of top of bank.
5. Pedestrian and nonmotor bikes on the north side of Slough.

#### C. Boating

1. No motorized boating (maximum of 5 hp electric trolling motors).
2. Encourage private concessions for the rental of non-power boats.
3. Develop launching ramps for nonpower boats.

### D. Development of the environment

1. Private groups: Boy Scouts, Girl Scouts; schools; service clubs and conservation groups.
2. Private firms: Voluntary dedication of land, tax deductions for open space, granting of special easements for open space, and deed restriction on sales.
3. Public agencies:
  - a. Federal: Bureau of Outdoor Recreation, Corps of Engineers, Environmental Protection Agency, and Bureau of Sport Fisheries and Wildlife.
  - b. State: State Parks, Oregon State Game Commission, and D.E.Q.
  - c. Local: City of Portland, Multnomah County, and Port of Portland.

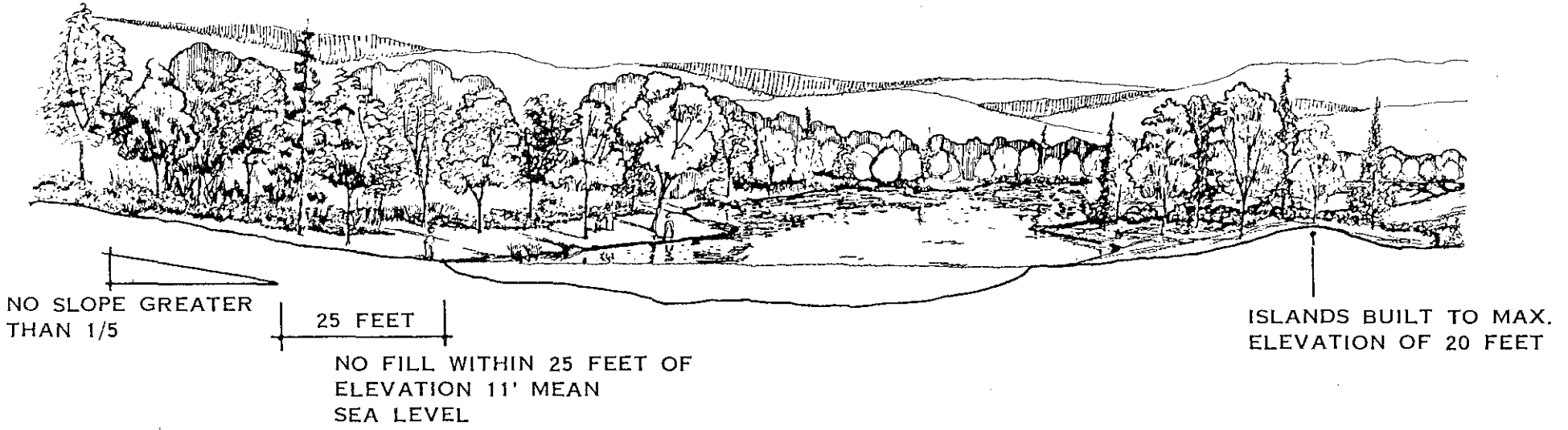
### E. Allowable commercial recreation uses

1. Boat rental and sales
2. Bait and tackle shops
3. Food concessions and restaurants
4. Boat ramps and parking
5. Bike rentals

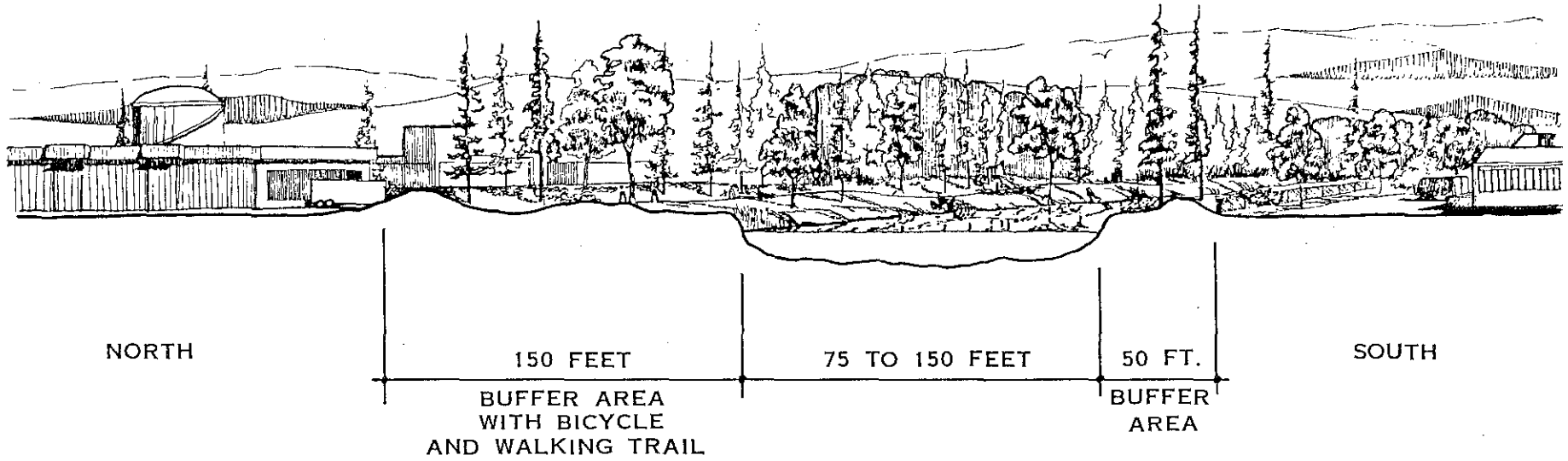
### II. Smith and Bybee Lake Development Criteria

#### A. Water

1. Elevation, plus eleven with control from plus nine to plus twelve feet m.s.l.
2. Water source, auxiliary pumps from Columbia River or from wells.
3. Depth, dredge channels to elevation plus two and create island to elevation plus twenty.



SMITH & BYBEE LAKES DEVELOPMENT CRITERIA



TYPICAL CROSS SECTION OF COLUMBIA SLOUGH

B. Shoreline

1. No fill within twenty-five feet of elevation 11 mean sea level (except for recreational development).
2. No fill slopes greater than 1 on 5 within one hundred feet of waterline at elevation plus eleven m.s.l. except for recreational development.
3. No structures (except in commercial zones) within one hundred feet of bank line.
4. Shoreline plantings to be natural or from recommended list.

C. Boating

1. No motorized boating allowed (except for maximum 5 hp electric motors)
2. Encourage private concessions for the rental of boats
3. Develop launching ramps for nonpower boats
4. Reserve option for future power boat racing in Smith Lake during nonnesting season

D. Development of environment

1. Private groups: Boy Scouts, Girl Scouts; schools; service clubs and conservation groups.
2. Other agencies: Oregon State Game Commission, Parks Departments (State Parks, City of Portland, Multnomah County), Bureau of Outdoor Recreation, Port of Portland, and Bureau of Sport Fisheries and Wildlife.

E. Recreation around lakes

1. Smith Lake (active)
  - a. Picnic area
  - b. Shoreline boat tie up
  - c. Fishing piers

d. Wildlife viewing

2. Bybee Lake (passive)
  - a. No picnic area
  - b. Wildlife viewing
  - c. Hand carried boats (no launching ramps)
3. Both lakes
  - a. Hiking and trails
  - b. Sanitation facilities (set back 100')

F. Commercial uses allowed in development zones

1. Restaurants and food concessions
2. Motels
3. Shops
4. Sail boat moorages

G. Uses allowed in commercial recreation zones

1. Boat repair, rental and sales
2. Bike rentals
3. Bait and tackle shops
4. Boat ramps and parking

## IMPLEMENTATION RESPONSIBILITY

In order for a plan to be meaningful, it must be able to be implemented. A first step in that process is to determine who is responsible for each element of the plan. The following agencies have the responsibilities for these elements.



**AGENCY****RESPONSIBILITY**

Port of Portland

Rivergate Land Development  
Rivergate Utilities  
Rivergate Streets  
Rivergate Lights  
Rivergate Street Landscape  
Kelley Point Park  
Columbia Slough Greenway Lands  
(owned by Port)  
Smith-Bybee Lake Recreational Lands  
(owned by Port)  
Columbia Slough Nonpower Boat  
Moorage at Kelley Point  
Maritime Terminal Development  
Dedication of minipark sites to  
Multnomah County

City of Portland

Delta Park  
Development of Sanitary Land Fill  
Recreation  
Smith-Bybee Lake Recreation  
Minipark acquisition and development  
south of Slough  
Slough recreation  
Slough Greenway on City property  
North Swift Blvd. relocation  
Rezoning of Union Pacific property &  
residential area to residential  
Revise City Comprehensive Plan  
Zoning and other land development  
controls

Multnomah County

Expo Center  
Expo Center Greenway on Columbia  
Columbia Viewpoint near Expo Center  
Develop Columbia Slough Miniparks in  
unincorporated  
Coordinate development of upper and  
lower Slough  
Revise County Comprehensive Plan  
Zoning and other land development  
controls

City, County, and State Highway Dept. Bicycle Funds	Bicycle Paths	City, Port, County	Coordinate development of Smith and Bybee Lake Overall sponsorship and operation of flood control drainage and Columbia Slough flow augmentation
Corps of Engineers	Complete detailed cost benefit analysis of flood control recreation and fish and wildlife enhancement plans Environmental Impact Statement includes Rivergate and South Shore Submit project to Congress Complete dikes, pumping stations, water level control devices, and recreational and wildlife enhancement features	Columbia Regional Assn. of Governments	Study of demand and supply for water-oriented recreation Develop Land Use Policy and Plan Revise Regional Transportation Plan Revise Outdoor Recreation Plan
Drainage Districts	Pumping-out costs and maintenance of dikes and pumps		
Oregon State Highway Dept.	Marine Drive Parkway I-5 Interchanges Rivergate Freeway		
Oregon State Game Commission Bureau of Sport Fisheries & Wildlife	Warm water fishery development and management Lake and Slough habitat development		
Private Firms	Rivergate Industrial development Slough and lake commercial development Columbia Blvd. industrial development Improve riparian areas		
Dept. of Environmental Quality	Water quality standards Air quality standards Noise standards Solid waste disposal standards Monitoring of standards		
CWAPA	Monitoring air pollution standards		
City of Portland- Bureau of Outdoor Recreation	Purchase Smith Lake property and recreation property in Barnes Yard area		
Metropolitan Service District	Develop regional solid waste management plan		

## COLUMBIA SLOUGH IMPLEMENTATION SCHEDULE

The following is a list of the approximate times the proposed improvement will be completed.

### 1973

Action	Responsibility	Cost
Develop sanitary land fill recreation plan.	City	
Construct bicycle paths.	Bike Funds	\$ 200,000
Revise City Comprehensive Plan.	City	
Complete CRAG studies.	CRAG	
Rezone residential area.	City	
Revise County Comprehensive Plan.	County	
Develop environmental standards.	DEQ	
Complete and implement regional solid waste management plan.	MSD - CRAG	

### 1974

Complete flood control and related studies and submit to Congress.	Corps of Engineers	
Complete impact statements.	Corps of Engineers	
Purchase Smith Lake property.	City/BOR	\$ 800,000
Dedicate Slough, greenway and miniparks on Port land.	Port	
Acquire minipark sites on south side of Columbia Slough.	City	\$ 250,000
Relocate North Swift Boulevard	City	\$ 875,000

**1975**

Begin flood control improvements.	Corps of Engineers	\$ 5,696,000
Begin habitat development.	Game Commission	
Dredging Smith and Bybee Lakes.	City, County, Port	\$ 1,000,000
Purchase recreation property between Columbia Slough and Barnes Yard.	City	\$ 900,000
Complete first phase of a sanitary land fill and develop.	City	
Complete Phase II, Kelley Point Park.	Port and Bi-Centennial	

**1976**

Complete flood control improvements.	Corps of Engineers	
Develop warm water fisheries.	Game Commission	
Develop Columbia Slough greenway and miniparks.	City, County, Port	

**1977**

Decisions on Rivergate Freeway.	Oregon State Highway	
Develop Smith and Bybee Lake and Slough recreation areas.	City, County, Port	
Market commercial recreation.	Private industries	

**1978**

Construct Marine Drive Parkway.	Oregon State Highway	\$ 2,500,000
Reconstruct I-5 Interchange.	Oregon State Highway	\$ 10,000,000
Develop Expo Center greenway and viewpoint.	County	

**1979**

Smith Lake commercial development.

Port

**1980**

Complete Rivergate fill.

Port

**1980 to 1990**

Rivergate Freeway.

Oregon State  
Highway

\$236,000,000

**Ongoing Activities**

Coordinate Slough development.

County

Operate drainage pumps.

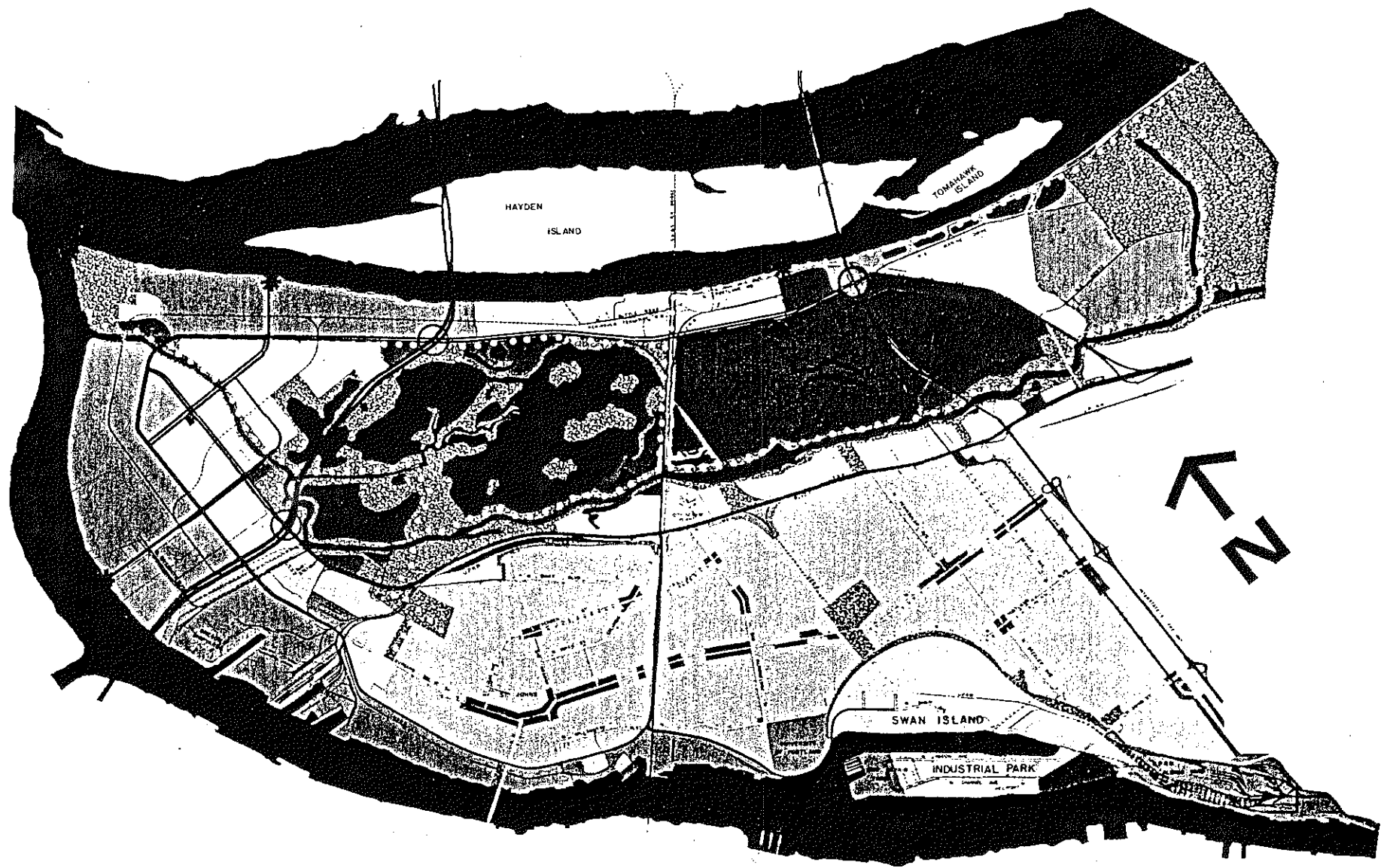
Drainage districts

Rivergate industrial/commercial development.

Port

Develop marine terminals.

Port



land use

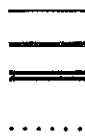
- light industry
- heavy industry
- research
- commercial
- commercial recreation
- passive recreation
- active recreation
- open space
- residential

view points



transp.

- major arterials
- parkways
- freeways
- bicycle and walking trails



# NORTH PORTLAND PENINSULA PLAN

CHAPTER 120, OREGON LAWS 1977  
House Bill 3192

Prohibits Director of Division of State Lands from issuing any permits to fill Smith Lake or Bybee Lake located in Multnomah County below countour line which lies 11 feet above mean sea level as determined by the U.S. Coastal Geodetic Survey Datum.

House Committee on Environment and Energy (Rep. Nancie Fadeley, Chairperson)

March 23, 1977 - Public Hearing/Work Session (Tape #13, Side 1)

Former Representative Jim Chrest, the chief and sole sponsor of HB 3192 presented written testimony to the committee (see attached exhibit).

Howard Galbraith, Steve Roso, Clifford Nelson and Harry Willis, all North Portland/St. Johns area residents spoke in favor of the legislation.

Former Representative Nancy Burrows moved the proposed amendments and passage to the floor with a "Do Pass" recommendation (see attached proposed amendments). The motion passed.

House Floor - Third Reading

April 6, 1977 (Reel 2, Track 2)

Chrest carried the bill on the House Floor. Explained efforts in the past to get similar legislation passed. Reiterated the need to preserve the lakes. Chrest made it clear that HB 3192 would not effect the Division of State Lands' permit to fill 55 acres of Smith Lake (see Exhibit 1 attached to Chrest's testimony before the House E&E Committee.)

Former Representative Ted Bugas requested that the bill be amended to clarify that the Smith Lake in the bill is the Smith Lake in Multnomah County, although he would like the same protection for the Smith Lake in his District.

Former Representative Roger Martin concurred with the desire to save the area but wondered about alternatives. Since Washington County has been unable to come up with a landfill in the last eight or nine years, more and more garbage is being taken to Oregon City and a solution is needed. Former representatives Curt Wolfer, Wally Priestley and Ed Lindquist merely made some humorous comments.

The bill passed the House 53 to 1 (Representative Denny Jones voting no).

Senate Committee on Agriculture and Natural Resources (Sen. John Powell, Chairperson)

April 21, 1977 - Public Hearing/Work Session (Tape 26, Side 2)

See attached minutes

Seante Floor - Third Reading

April 27, 1977 (Tape 25, Side 2)

Former Senator Steve Kafoury carried the bill on the Senate Floor. The tape was of poor quality and barely audible. He was extremely brief.

Senator Bill McCoy spoke in support indicating that the bill would make the St. John's North Portland residents very happy by stopping the fill in that area and commended Chrest for his persistence.

Kafoury made brief closing remarks

The bill passed the Senate 58-1 (Sen. Thorne voting no)

---



- 3-3(H) First reading. Referred to Speaker's desk.  
 3-8 Referred to Social Services  
 6-1 Recommendation: Do pass with amendments.  
 6-3 Second reading.  
 6-6 Third reading. Passed.  
 Ayes, 32--Nays, 25, Achilles, Duff, Gilmour, Grannell, Hanneman, C. Johnson, S. Johnson, Jones, Katz, Lombard, Magruder, Markham, Otto, Richards, Riebel, Rogers, Shaw, Simpson, Stevenson, Sumner, Van Vliet, Whallon, Wilhelms, Wolfer, Yih--Excused, 3, Brogoitti, Dereli, Ragsdale
- 6-7(S) First reading.  
 6-8 Second reading. Referred to Judiciary  
 6-17 Recommendation: Do Pass - amended by House June 1.  
 6-20 Third reading. Passed.  
 Ayes, 21--Nays, 9, Burbidge, Hallock, Hannon, Heard, Kafoury, Meeker, Potts, Smith, President Boe. B. Roberts served notice for possible reconsideration of vote.
- 7-15 Speaker signed.  
 7-18 President signed.  
 7-18 Governor signed.  
 (Chapter 489, 1977 Laws) Effective date, October 4, 1977.

Authorizes counties to increase marriage license fee up to \$10 above amount already prescribed by statute, with proceeds to be used for marriage conciliation services.

- HB 3192 By Representative CHREST --- Relating to water resources.
- 3-3(H) First reading. Referred to Speaker's desk.  
 3-8 Referred to Environment and Energy  
 3-31 Recommendation: Do pass with amendments.  
 4-5 Second reading.  
 4-6 Third reading. Passed.  
 Ayes, 53--Nays, 1, Jones--Excused, 6, Dereli, Fadeley, Grannell, Kinsey, Myers, Whiting
- 4-7(S) First reading.  
 4-11 Second reading. Referred to Agriculture and Natural Resources  
 4-25 Recommendation: Do Pass with Amendments as amended by House March 31.  
 4-27 Third reading. Passed.  
 Ayes, 27--Excused, 1, Thorne--Attending Legislative Business, 2, Burbidge, Heard
- 4-28(H) House concurred in Senate amendments and repassed measure.  
 Ayes, 58--Absent, 1, Davis--Excused, 1, Shaw
- 5-3 Speaker signed.  
 5-3 President signed.  
 5-5 Governor signed.  
 (Chapter 120, 1977 Laws) Effective date, 90 days after session ends.

Prohibits Director of Division of State Lands from issuing any permits to fill Smith Lake or Bybee Lake located in Multnomah County below contour line which lies 11 feet above mean sea level as determined by United States Coastal Geodetic Survey Datum.

- HB 3193 By COMMITTEE ON JUDICIARY (at the request of Professor H. Jay Folberg; Nancy J. Alexander; Miles J. Novy, M.D.; Senator W. Brown) --- Relating to artificial insemination.
- 3-4(H) First reading. Referred to Speaker's desk.  
 3-8 Referred to Judiciary  
 6-13 Recommendation: Do pass with amendments, be printed engrossed and be placed on Consent Calendar.  
 6-17 Second reading.  
 6-20 Third reading. Passed.  
 Ayes, 49--Nays, 7, Duff, Jones, Magruder, Priestley, Rogers, Wilhelms, Wolfer--Absent, 2, Katz, Kulongoski--Excused, 2, Frohnmayer, Martin
- 6-20(S) First reading.  
 6-21 Second reading. Referred to Judiciary  
 6-30 Recommendation: Do Pass with amendments to the A-Engrossed bill.  
 7-1 Third reading. Passed.  
 Ayes, 26--Nays, 4, Hannon, Meeker, Smith, Thorne
- 7-4(H) House concurred in Senate amendments and repassed measure.

- Ayes, 53--Nays, 6, Duff, Jones, Rogers, Sumner, Wilhelms, Wolfer--Excused for business of the House, 1, Magruder
- 7-19 Speaker signed.  
 7-21 President signed.  
 7-26 Governor signed.  
 (Chapter 686, 1977 Laws) Effective date, October 4, 1977.

Establishes procedures for donating sperm and performing artificial insemination. Requires written request for and consent to artificial insemination by woman and, if married, her husband. Requires performing physician to (*maintain permanent*) file record of request and consent with State Registrar of Vital Statistics when child is born if donor is not woman's husband.

Establishes legal status and rights of children conceived by artificial insemination. Classifies performance of artificial insemination by unlicensed physicians or without written request or consent or donation of sperm by unhealthy donors as Class C misdemeanors.

- HB 3194 By Representative ROGERS --- Relating to motor vehicle registration; amending ORS 481.155.
- 3-10(H) First reading. Referred to Speaker's desk.  
 3-15 Referred to Transportation  
 6-7 Recommendation: Do pass with amendments.  
 6-9 Second reading.  
 6-10 Third reading. Passed.  
 Ayes, 52--Nays, 1, Yih--Excused, 7, Blumenauer, Byers, Gardner, Hanneman, C. Johnson, Katz, Kulongoski
- 6-13(S) First reading.  
 6-14 Second reading. Referred to Trade and Economic Development  
 6-24 Recommendation: Do Pass - amended by House June 7.  
 6-25 Carried over to June 27 Calendar.  
 6-27 Third reading. Passed.  
 Ayes, 24--Nays, 4, Fadeley, Hallock, Isham, Powell--Attending Legislative Business, 2, Potts, Ripper
- 7-18 Speaker signed.  
 7-20 President signed.  
 7-26 Governor signed.  
 (Chapter 687, 1977 Laws) Effective date, October 4, 1977.

Requires nonresident owners of motor vehicles gainfully employed and operated in this state to have vehicles registered [*within 30 days after having become either employed within state or state resident*] to extent that foreign country, state, territory or federal district of his or her residence grants like exemptions and privileges as are granted by laws of this state.

- HB 3195 By Representative OTTO --- Relating to labor; creating new provisions; and amending ORS 660.006, 660.010, 660.135, 660.155 and 660.162; and declaring an emergency.
- 3-11(H) First reading. Referred to Speaker's desk.  
 3-15 Referred to Labor  
 5-31 Recommendation: Do pass with amendments, be printed engrossed.  
 6-2 Second reading.  
 6-3 Third reading. Passed.  
 Ayes, 48--Excused, 2, S. Johnson, Whallon--Excused for business of the House, 10, Cherry, Frohnmayer, Grannell, Kulongoski, Lindquist, Lombard, Magruder, Martin, Myers, Mr. Speaker.
- 6-6(S) First reading.  
 6-7 Second reading. Referred to Labor, Consumer and Business Affairs  
 6-22 Recommendation: Do pass.  
 6-23 Third reading. Passed.  
 Ayes, 20--Absent, 2, Fadeley, M. Roberts--Excused, 1, Wingard--Attending Legislative Business, 7, W. Brown, Hanlon, Kafoury, Powell, Smith, Thorne, Wyers
- 7-15 Speaker signed.  
 7-18 President signed.  
 7-18 Governor signed.  
 (Chapter 490, 1977 Laws) Effective date, July 18, 1977.

Deletes certain exceptions to applicability of apprenticeship and training law for licensed trade and occupations. [*Requires appointment of alternate members for trade, craft or industrial occupation of local joint committees and authorizes alternate to become active member*

PRESENTATION TO THE  
HOUSE ENVIRONMENT & ENERGY COMMITTEE  
ON HB3192 BY REPRESENTATIVE JIM CHURCH

HSE.  
Environment and Energy  
HB 3192  
March 23, 1977  
Exhibit B  
page 1 of 20

HB3192 IS THE LATEST EPISODE IN A LONG STORY ABOUT THE SAINT JOHN'S LANDFILL. IT WOULD PROHIBIT THE DIVISION OF STATE LANDS FROM ISSUING ANY MORE PERMITS TO FILL THE WATERS OF SMITH OR BYBEE LAKES SO THAT THEY MAY BE PRESERVED FOR RECREATIONAL USE AND A WILD LIFE HABITAT.

FOR MANY YEARS THE RESIDENTS OF NORTH PORTLAND HAVE BEEN DEALING WITH THE PROBLEMS ARISING FROM THE LANDFILL. SINCE THE 1960'S EVERY ONE OF MY PREDECESSORS HAS INTRODUCED A BILL OR OTHER WISE ATTEMPTED TO DEAL WITH THIS SITUATION. AT ONE TIME THE LEGISLATURE PASSED A BILL CLOSING THE LANDFILL. THIS BILL WILL NOT DO ANYTHING AS DRASTIC AS THAT AND WILL, IN FACT, PERMIT SOME FURTHER EXPANSION. I INTRODUCED THIS BILL IN 1975. IT PASSED THE HOUSE BUT THEN DIED IN THE SENATE. THE THREAT TO SMITH AND BYBEE LAKES BECOMES MORE PRONOUNCED EACH YEAR. THEREFOR I BELIEVE THAT THE LEGISLATURE MUST ACT DURING THIS SESSION TO PRESERVE THESE TWO SENIC AREAS.

THE DISPOSAL OF SOLID WASTE IS A REGIONAL PROBLEM WHICH AFFECTS THE ENTIRE METROPOLITAN AREA. THE METROPOLITAN SERVICE DISTRICT HAS PROPOSED A SOLID WASTE RECYCLING PROGRAM WHICH I STRONGLY SUPPORT. THAT PROPOSAL INVOLVES CONTINUED USE OF THE SAINT JOHN'S LANDFILL FOR THE NEXT FEW YEARS. THE CITY OF

PORTLAND'S DEPARTMENT OF PUBLIC WORKS HAS RECEIVED A PERMIT FROM THE DIVISION OF STATE LANDS TO FILL 55 ACRES OF SMITH LAKE. (SEE EXHIBIT #1) THEY HAVE ALSO RECEIVED AUTHORIZATION FROM EVERY OTHER RELEVANT STATE AGENCY. (SEE EXHIBITS #'S 2,3 & 4) HOWEVER THE FEDERAL ENVIRONMENTAL PROTECTION AGENCY HAS REFUSED TO ISSUE A PERMIT. (SEE EXHIBIT #5) THE CITY OF PORTLAND AND OTHERS CONCERNED ARE ATTEMPTING TO PERSUADE THE E.P.A. TO RECONSIDER ITS DECISION. IF THEY ARE SUCCESSFUL, HB3192 WILL PERMIT THIS 55 ACRE AREA TO BE FILLED.

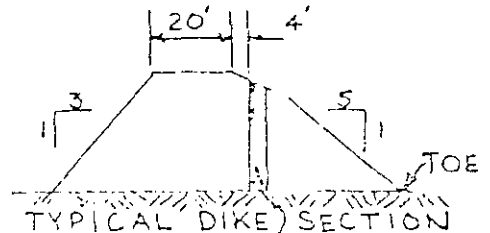
I HAVE ASSEMBLED, FOR THE COMMITTEE'S INFORMATION, A NUMBER OF PHOTOGRAPHS WHICH I TOOK IN THE SMITH AND BYBEE LAKE AREA. THEY SHOULD HELP DEMONSTRATE THE NATURAL SENIC BEAUTY OF THESE WETLANDS. IN ADDITION THE DIVISION OF STATE LANDS HAS PREPARED A MAP OF THE AREA. I WOULD LIKE TO DRAW THE COMMITTEE'S ATTENTION TO THE NUMEROUS LAKES IN THE AREA WEST OF BYBEE LAKE. THEY NO LONGER EXIST. SMITH AND BYBEE LAKES, TOGETHER WITH THEIR SURROUNDING WETLANDS, REPRESENT THE FEW HUNDRED ACRES OF SENIC LAND WHICH REMAIN OUT OF THE TWO THOUSAND WHICH ONCE COMPRISED MOST OF THE PENINSULA AREA. MOST OF THIS AREA HAS BEEN FILLED DURING THE LAST TEN YEARS.

BH3192 REPRESENTS OUR LAST CHANCE TO PRESERVE THESE REMAINING WETLANDS AND LAKES FOR FUTURE GENERATIONS. THERE ARE THOSE WHO WOULD LIKE TO COMPLETELY FILL THE LAKES. I HOPE THAT WE CAN STOP THIS DESTRUCTIVE ENCROACHMENT ON THESE SENIC AREAS AND EVENTUALLY RESERVE THEM FOR RECREATION AND A WILDLIFE HABITAT.

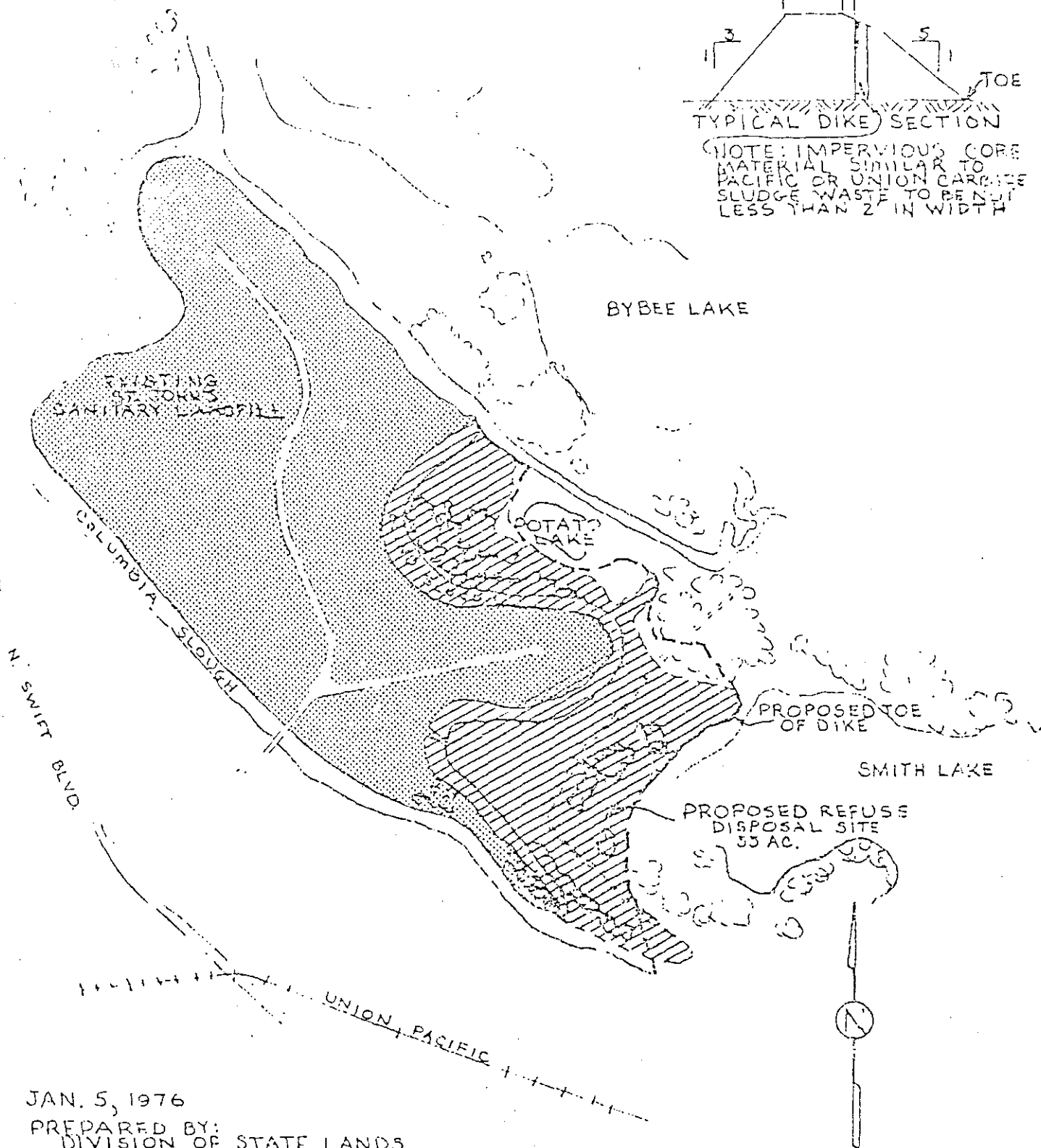
# PERMIT APPLICATION FOR REFUSE DISPOSAL SITE

## CITY OF PORTLAND

SCALE 1" = 1000'



NOTE: IMPERVIOUS CORE MATERIAL SIMILAR TO PACIFIC OR UNION CARBIDE SLUDGE WASTE TO PENETRATE LESS THAN 2" IN WIDTH



JAN. 5, 1976  
PREPARED BY:  
DIVISION OF STATE LANDS

----- Revised proposed use of Dike 8-23-76

STATE OF OREGON  
Division of State Lands  
1445 State Street  
Salem, Oregon 97310  
Phone: 378-3805

EXHIBIT 1

Expires: 10-6-77

Annual Review: 10-6-77

FILL PERMIT NO. 2222

CITY OF PORTLAND, DEPARTMENT OF PUBLIC WORKS

is hereby authorized to fill in a waterway of the State as described in the attached copy of his application, subject to the special conditions listed on Attachment "A" and to the terms and conditions expressed in said attached application.

This permit is granted under the provisions of ORS 541.605 et seq. The permit merely expresses assent of the State to the work proposed and does not eliminate the necessity of obtaining rights of way and permission of the owners of the lands upon which work is to be performed. All operations shall be in conformance with Oregon Administrative Rules, Chapter 334; Standards of quality for Public Waters of Oregon.

The Division reserves the right to review the terms of this permit annually and, upon review, to amend or cancel this permit when conditions or revised standards require such action.

for /s/ Eugene R. Schmitz  
William S. Cox, Director

October 6, 1976

Date

ATTACHMENT "A"

Special Conditions for Fill Permit No. 2222

1. The operation shall be conducted in a manner that will prevent any turbidity increase when background turbidity is 30 JFU's or less, or more than a 10% increase when background turbidity is more than 30 JFU's.
2. The operation shall be conducted behind a berm sufficient to isolate the operation from the free flowing stream.
3. Waste materials and spoils shall be placed behind previously constructed berms; berms to be constructed during low flow periods.
4. Woody vegetation shall be retained where possible.
5. The lake side of the dike shall be seeded or planted with grass and/or legumes and shrubs and trees.
6. The completed dike is to be constructed as per application.
7. This permit is issued conditional upon plan approval by the Dept. of Environmental Quality.
8. The Division of State Lands retains the authority to temporarily halt or modify the project in case of excessive turbidity or damage to natural resources.

October 6, 1976

APPLICATION FOR REMOVAL OR FILL PERMIT  
(ORS Chapter 511.005 et seq)

(Please Print)

1 Applicant's Name City of Portland, Department of Public Works  
Address 400 S.W. 6th Ave. Telephone 248-4103  
City Portland State Oregon Zip Code 97204

2 Project Supervisor's Name Mike Lindberg  
Address 400 S.W. 6th Ave. Telephone 248-4103  
City Portland State Oregon Zip Code 97204

3 Property Owner's Name City of Portland  
Address 400 S.W. 6th Ave. Telephone 248-4103  
City Portland State Oregon Zip Code 97204

4 Will the project be removal  fill  combination  riprap

5 Will your fill consist of rock  gravel  sand  silt  other  XX  
Will your removal consist of rock  gravel  sand  silt  other

6 Volume of fill material required: annually 1,000,000 total project Fill 2,936,020 cu.yd.  
Volume of removal required: annually \_\_\_\_\_ total project \_\_\_\_\_

7 Name of waterway affected by project Columbia Slough  
a. Tributary of Willamette-Columbia Rivers.  
b. River mile 102-103 Section 36 & 25 Township 2 N Range 1 W  
& 30 2 N 1 E  
c. County Multnomah  
d. Popular local description of project location: St. Johns Landfill  
9363 N. Columbia Blvd, Portland, Ore.

8. What is the purpose of your project? Construct Sanitary Landfill and Necessary Dikes.

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OCT 30 1975  
DIVISION OF STATE WORKS

9. Describe your proposed operation (attach additional sheet if necessary):

Construct 25-foot Dikes with Outer (Easterly) Toe  
conforming closely to 11-foot Mean Seal Level Contour Line, Portland Datum.  
Garbage Fill back of Dike will NOT EXCEED 55 feet MSL final elevation.

10. Where will you place dredge spoils, if any? Within Dikes on Garbage Fill.

11. When will project start? July 1, 1976 Be completed? January 1, 1980

12. What does the project site look like at the present time? Farm Land returning to overgrowth.

13. What steps do you plan to take to restore area to its natural condition? Area Filled  
will be contoured for Recreational Development.

14. Please provide a location map (U.S.G.S. Quadrangle, Metsker map, Assessors map, or BLM map), and plan and cross section drawings of the project site showing the following information (minimum scale of plan and cross section—1" = 100 ft.):

- a. The specific location of the proposed project relative to the water body. Direction of water flow must be noted.
- b. The location of bankfull stage, or in an estuary, the line where significant upland vegetation ceases to grow because of frequent inundation.
- c. The location of the Ordinary Low Water line or in estuaries, the Mean Low Tide line.
- d. Pertinent property boundaries.
- e. Spot elevations or contours if available. Reference datum must be noted.
- f. The location of Ordinary High Water or Mean High Tide, whichever is appropriate.

Signed Mike Lindberg  
Mike Lindberg

Title Public Works Administrator

Date 12-23-75

*W/LP*

Attach the following items:

- Maps as requested in Item 14, Filing fee according to schedule
- Corps of Engineers Public Notice, or list number
- Letter from Planning Agency if required by Rule 85-205





December 23, 1975

DEPARTMENT OF  
PUBLIC WORKS  
CONNIE M. CREADY  
COMMISSIONER

Division of State Lands  
1445 State Street  
Salem, Oregon 97310

Attention: Mr. Stanley F. Hamilton

Subject: Expansion of St. Johns Landfill - Portland, Ore.

Gentlemen:

Attached is an application for a permit to expand St. Johns Landfill on property owned by the City of Portland.

Enclosed are:

- (1) A vicinity map showing the subject property.
- (2) The detail plan of the expansion - Portland MSL Datum.
- (3) A copy of the City Council and City Planning Commission action by Ordinance.
- (4) A list of neighbors of the project.
- (5) A topographical map showing the present operation site with expansion area to east.

On the topographical map the upland vegetation ceases to grow above the 6-foot contour line. During flood stage, water will exceed the 19-foot contour.

If Columbia Slough water levee is controlled, high water will not exceed the 11-foot MSL contour, Coast and Geodetic Datum.

The expansion plan is developed on Portland Datum.

The Filing Fee will be mailed under separate cover.

Very truly yours,

MIKE LINDBERG  
Public Works Administrator

WBC:bc *WBC*  
Encls.

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DEC 26 1975  
DIVISION OF STATE LANDS



December 9, 1975

DEPARTMENT OF  
PUBLIC WORKS  
CONNIE McCREADY  
COMMISSIONER

FROM: Ernest Bonner  
Planning Director

OFFICE OF  
PUBLIC WORKS  
ADMINISTRATOR

TO: Mike Lindberg  
Public Works Administrator

400 SW SIXTH AVE  
PORTLAND, OR. 97204

SUBJECT: Plan for Implementing City Ordinance No. 140592  
Revocable Permit for Expanding St. Johns Landfill.

The attached plan for locating the proposed dikes necessary to implement Ordinance No. 140592, which grants a revocable permit for Expansion of the St. Johns Landfill, has been reviewed.

This plan meets the conditions of the ordinance as follows:

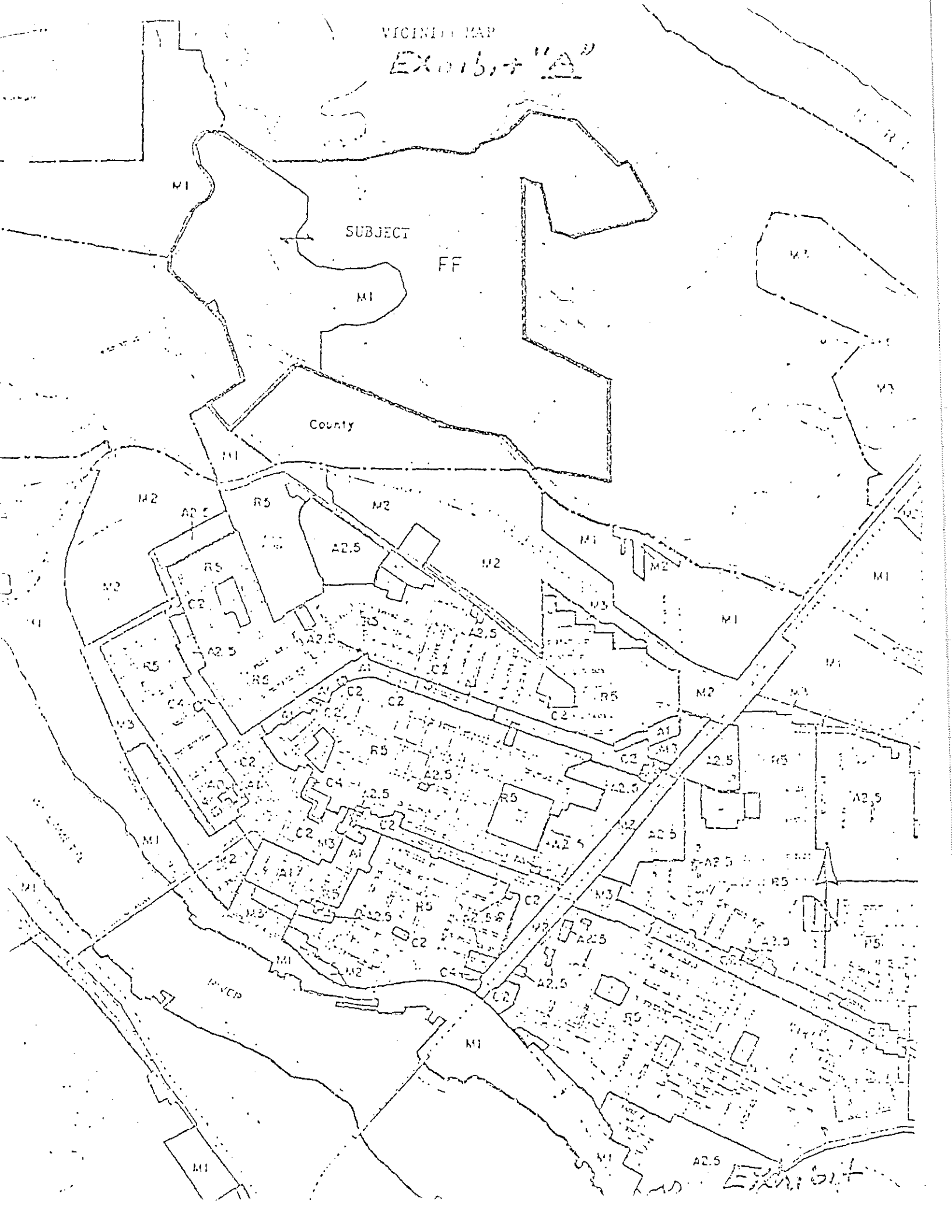
- a. The plan is in substantial compliance with the "Finger Bay" concept and the shore line conforms as closely as possible to the 11-foot Mean Seal Level Portland Datum.
- b. It will allow development of about 40 acres for refuse disposal and it is estimated that this will allow the continuation of St. Johns Landfill to about January 1, 1980, if refuse is placed at a depth of 45 feet on the available 40 acres.
- c. The detail of the dike preserves the wildlife area of "Potato" and "Twin" lakes near North Slough.

This office concurs with the proposed dike location.

ERNEST BONNER, Planning Director  
Bureau of Planning

WBC:bc  
Attachment

EXHIBIT "A"



ENVIRONMENTAL IMPACT  
STATEMENT - SUMMARY SHEET

EXPANSION OF ST. JOHNS LANDFILL - 1976

Nature of this Report: To formulate an environmental impact assessment of the proposed sanitary landfill expansion.

Sponsor: Office of Public Works Administrator, 400 S.W. Sixth Avenue, Portland, Oregon 97204; Contact: Bureau of Refuse Disposal, Mike Lindberg, Public Works Administrator.

Type of Proposed Action: Expansion of present solid waste landfill operation to provide a safe method of sanitary disposal for the City's solid waste into an additional 50 acres of City-owned property and includes dikes and fill area.

Summary of the proposed Action: A landfill to dispose of mixed solid waste from the City of Portland would be extended immediately to the east of the present operating area.

The site development is compatible to objectives of the regional solid waste management program, which embraces resource recovery and further extends the site's usefulness and life. It is also compatible to wildlife habitat enhancement and observation as proposed by the Oregon Wildlife Commission and Army Corps of Engineers recreation development alternatives. The key to successful program development in either case appears to be establishing a definable shoreline not susceptible to annual inundation and a means to create deeper water areas.

The proposed action would result in the following:

1. A more definable west shoreline for Smith Lake.
2. Means of public access through controlled park facility development for the purposes of shoreline picnicking, fishing, boating and wildlife observation.
3. Preservation of present woodland habitats and riparian zones adjoining North Slough and Columbia Slough.
4. A source of disposal for unstable organic sediments dredged from Smith Lake in order to enhance water quality and natural uses.
5. Use of landfill practices which eliminate degradation of water quality in Lower Columbia Slough or its tributaries.

Environmental Impacts Which Cannot Be Avoided:

1. Wildlife habitats, notably open grassland will be reduced in the immediate area.
2. Approximately 50 acres of previously used farmland which has developed a natural overgrowth of grasses and small trees will be disturbed by development and use until about January 1, 1980.



DEPARTMENT OF  
ENVIRONMENTAL QUALITY

EXHIBIT 2

1234 S.W. MORRISON STREET • PORTLAND, ORE. 97205 • Telephone (503) 229-5358

January 13, 1977

BERT W. STRAUB  
GOVERNOR

Director  
Division of State Lands  
1445 State Street  
Salem, Oregon 97310

SUBJECT: Corps of Engineers P.N. 071-OYA-2-002041  
City of Portland, Columbia Slough, Fill

Dear Sir:

The Oregon Department of Environmental Quality hereby certifies that the above subject project will comply with the applicable provisions of Title 33, United States Code, Sections 1311, 1312, 1316 and 1317 -- i.e., there is reasonable assurance that it will not violate applicable water quality standards.

RECEIVED  
JAN 14 1977  
DIVISION OF STATE LANDS

Sincerely,

WILLIAM H. YOUNG  
Director

*for Ellen D. Conrad*  
Glen D. Carter, Supervisor  
Water Quality Program  
Development Section

GDC:elk

cc: U. S. Environmental Protection Agency (Portland)  
Oregon Department of Fish and Wildlife



MULTNOMAH COUNTY OREGON

DIVISION OF PLANNING AND DEVELOPMENT  
2115 SE MORRISON  
PORTLAND, OREGON 97214  
(503) 248-3591

COUNTY COMMISSIONERS  
DON CLARK, Chairman  
DAN MCCREE  
ALICE CORRETT  
DEBRA BUSHNAN  
MEL GORDON

February 11, 1977

Division of State Lands,  
1445 State Street  
Salem, Oregon 97310

EXHIBIT 3

RE: Comments on Proposed Fill  
Request No. 071-OYA-2-002041

Dear Sir:

Multnomah County Division of Planning and Development has no objections to the proposed fill of Blind Slough and adjacent areas by the City of Portland, as described under the Corps of Engineers permit request number 071-OYA-2-002041. The subject property is located within the Portland City Limits and is similar to proposals supported by the County in previous studies of the North Portland Peninsula area.

The County would also like to repeat its opposition to any further expansion into Smith Lake as is shown in Figure 4 of the Corps of Engineers Preliminary Environmental Assessment. Past studies have stressed the need to retain Smith Lake at its present size and configuration (using the 11-foot M.S.L. elevation for the shoreline as suggested in the Preliminary Environmental Assessment) for maximum public benefit. Until such time as further information is presented which indicates the need for landfill expansion is of greater public value than the loss of wildlife habitat, recreation potential, and scenic value, Multnomah County Division of Planning and Development will oppose expansion beyond the present 11-foot M.S.L. contour line.

Sincerely,

MULTNOMAH COUNTY  
DIVISION OF PLANNING AND DEVELOPMENT

Martin R. Cramton, Jr., A.I.P.  
Director

RECEIVED  
FEB 14 1977  
DIVISION OF STATE LANDS

MRC/DB/jb

cc: U.S. Corps of Engineers/City of Portland

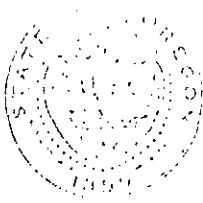
IV. Area Has No Plan, But Has A Compliance Schedule

This project and its related land use implications must be coordinated and consistent with local efforts to develop a comprehensive plan for Multnomah County and to reach compliance with the state-wide land use goals. The County has adopted a schedule and work program for reaching compliance with the state-wide goals which should be recognized in coordination of this project with the jurisdiction. Consideration of the relationship between state-wide goals #6 (Air, Water and Land Resources Quality), #8 (Recreational Needs) etc. and the project should receive special attention. In addition, the applicant should make every effort to ensure that the project makes use of recognized citizen and agency involvement programs established by the local jurisdiction in accordance with the state-wide land use goals.

2/8/77

EH:cg





February 28, 1977

ROBERT W. STRAUB  
GOVERNOR

EXHIBIT 4

District Engineer  
Corps of Engineers  
U. S. Army  
Portland District  
P. O. Box 2946  
Portland, OR 97208

Att: A. J. Heinenan, Chief  
Navigation Division

Ref: PN 071-OYA-2-002041 (Columbia Slough - Fill)

Dear Sir:

I approve the project subject to the conditions outlined in Material Fill Permit No. 2222 issued by the Division of State Lands.

The State Historic Preservation Office has stated that the berm and fill sites for this project should be surveyed beforehand by a competent professional in order to assess possible impact to any cultural resources. Please contact that office for further information.

On January 13, 1977, the Department of Environmental Quality certified there was reasonable assurance that the project, as described, would not violate applicable water quality standards.

Sincerely,

Governor

RSB:ph

cc: City of Portland  
Division of State Lands  
Department of Environmental Quality  
Department of Fish and Wildlife  
U. S. Fish and Wildlife Service

7-24-77



REGION X  
1200 SIXTH AVENUE  
SEATTLE, WASHINGTON 98101

PLEASE TO  
ATTN OF: Mail Stop 521

DEC 23 1975

EXHIBIT 5

Mr. A. J. Heineman  
Chief, Navigation Division  
Portland District, C/E  
P. O. Box 2345  
Portland, Oregon 97203

RECEIVED  
DEC 27 1975  
DIVISION OF STATE LANDS

RE: 071-OYA-2-002041 - City of Portland

Dear Mr. Heineman:

We have reviewed the above referenced public notice concerning an application for a permit under the provisions of Section 404 of the Federal Water Pollution Control Act Amendments of 1972 to fill approximately 55 acres of wetlands with solid waste.

The guidelines developed by the Secretary of the Army and EPA under Section 404(b) of the Act specify that we should avoid activities that significantly disrupt the chemical, physical and biological integrity of aquatic systems. We believe this proposal represents a significant reduction of wetlands in this area. Further, considering the general guidance and importance placed on wetlands under 40 CFR 230.4-1(a) and 230.5(a), and the more specific considerations stated in 230.5(b)(4), (8) and (10), we can not approve of the issuance of this permit.

If there are any questions concerning our review of this permit application, please contact Duane Karna at (206) 442-1352. For information concerning our solid waste management requirement, please contact Stan Jorgensen at (206) 442-1260.

Sincerely,

*Ronald A. Lee*

for Lloyd A. Reed  
Acting Chief, Water Compliance  
and Permits Branch

cc: USEWS  
NMFS  
ODEQ  
ODFW  
ODSL  
Applicant

# House Bill 3192

Sponsored by Representative CHREST

## SUMMARY

The following summary is not prepared by the sponsors of the measure and is not a part of the body thereof subject to consideration by the Legislative Assembly. It is an editor's brief statement of the essential features of the measure as introduced.

Prohibits Director of Division of State Lands from issuing any permits to fill waters of Smith Lake or Bybee Lake.

NOTE: Matter in bold face in an amended section is new; matter [*italic and bracketed*] is existing law to be omitted; complete new sections begin with SECTION.

## A BILL FOR AN ACT

1  
2 Relating to water resources.

3 Be It Enacted by the People of the State of Oregon:

4 SECTION 1. Section 2 of this Act is added to and made a part of ORS 541.605 to  
5 541.665.

6 SECTION 2. Notwithstanding any provision of ORS 541.605 to 541.665 to the  
7 contrary, after the effective date of this 1977 Act, the Director of the Division of State  
8 Lands shall not issue any permit to fill <sup>THOSE</sup> ~~the~~ waters of Smith Lake or Bybee Lake <sup>WHICH</sup>  
ARE SITUATED WITHIN A CONTINUOUS LINE WHICH LIES 11 FEET  
ABOVE THE MEAN WATER LEVEL THEREOF.

Legislative Council

3/23/77

PROPOSED AMENDMENTS TO HOUSE BILL 3172

In line 8 of the printed bill, delete "the" and insert "those" and in the same line delete the period and insert ", which are situated within a continuous line which lies 11 feet above the mean water level thereof."

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HB 3192

AMENDMENTS

On page 2 of the printed bill, line 8, after "fill" delete "the waters of" and in the same line, delete the period after "Lake" and insert " below the contour line which lies eleven(11) feet above mean sea level as determined by the 1947 adjusted United States Coastal Geodetic Survey Datum."

SENATE COMMITTEE ON AGRICULTURE & NATURAL RESOURCES

MINUTES

April 21, 1977

1:50 p.m.

Hearing Room A  
State Capitol

Tape 26  
Side 2

Members Present: Sen. John Powell, Chairman  
Sen. Mike Thorne, Vice Chairman  
Sen. Walter Brown  
Sen. Charles Hanlon  
Sen. Stephen Kafoury  
Sen. Robert Smith  
Sen. Jan Wyers

Staff Present: Charles Kinsey, Committee Administrator  
Annetta Mullins, Committee Assistant

Witnesses: Rep. Jim Chrest  
Bruce Williams, Or. Thoroughbred Breeders Assoc.  
Rick Taylor, Oregon Thoroughbred Breeders  
Dwight Butt, Oregon State Fair  
George Dewey, President, Multnomah Kennel Club  
Joe MacInearnery, Oregon Racing Commissioner  
William Reagan, Oregon Racing Commission  
Lawrence Hunt, Portland attorney representing

0040 CHAIRMAN POWELL called the meeting to order at 1:50 p.m. and instructed the clerk to call the roll.

HB 3192 W/House Amends. - Relating to the filling of Smith and Bybee Lakes

0049 REP. JIM CHREST, Sponsor of HB 3192 appeared in support of HB 3192 as amended by the House. He stated Smith and Bybee Lakes are in North Portland right on the peninsula at the confluence of the Willamette and Columbia Rivers. It is an area known as the Rivergate Industrial Area. They have been trying for years to prevent the expansion of the landfill and to save what is left. It will give them a chance to seek federal funds which they have almost gotten a couple of times to set the area aside as a wildlife preserve and then for passive recreation. It has a lot of potential but if we keep filling it in it is going to be gone. It is a very unique area. It would push for passive development, passive recreation, with no racing motor boats as some people would like, but canoeing, fishing, etc. Saving the area has large support but obviously he wouldn't have the bill in if there were total support.

The bill has been amended in the House and he would propose one more amendment. It came out in the debate in the House that there is a Smith Lake in Clatsop County. There may be a Smith Lake in Eastern Oregon, too. They are not sure. So he would suggest

Tape 26  
Side 2

one further amendment to line 8 to include "in Multnomah County" after the last "Lake".

0138 SEN. SMITH moved that HB 3192 be further amended, in line 8, after the second "Lake" insert "in Multnomah County".

There were no objections to the motion and Chairman Powell declared the amendment ADOPTED.

0218 SEN. KAFOURY moved that HB 3192 W/House Amendments dated March 31, as amended by the committee, be sent to the Floor with a DO PASS recommendation.

0220 The clerk called the roll with Sens. Hanlon, Kafoury, Smith, Wyers and Chairman Powell voting AYE. Sens. Brown and Thorne were excused.

0222 CHAIRMAN POWELL declared the motion CARRIED.

Sen. Kafoury will lead discussion on the Floor.

SB 138 - Relating to racing

0257 BRUCE WILLIAMS, an attorney in Salem and President of the Oregon Thoroughbred Breeders Association, stated he has been associated with thoroughbred racing and also with breeding throughbreds for many, many years. He has been acquainted with the integral part of the Oregon State Fair and horseracing.

As far as this particular bill, historically for many years from the date of the paramutual enactment in the early 1930's the State Fair was allowed to race alone and without the competition of any other racing in the State of Oregon. He urge that with the importance of our State Fair to the Oregon scene as a whole and also to the city of Salem and because of the integral financial dependence that the State Fair has upon the horseracing at the Oregon State Fair he urges the passage of this bill which would allow and be of great benefit to the Oregon Thoroughbred Breeding industry, exclusive of quarter horses, which now actually amounts to about \$1.8 million per year to the General Fund. That is from horse racing alone and also as a multi-million industry which is growing in numbers each year.

SB 165 - Relating to racing

0287 MR. WILLIAMS stated they do urge passage of SB 165. They feel this is a step forward. It will improve horse racing and after all horse racing is a revenue producing body.

0298 SEN. SMITH asked Mr. Williams if he would mind too much if we restored the language in lines 29 and 30 on page 2 of SB 138.

0301 MR. WILLIAMS stated he would not and that is the way he thinks it should be.



5. Technical testimony presented at the Ramsey Lake hearing suggested there was no significant difference between environmental impacts for the St. Johns Landfill and the proposed expansion area (Ramsey Lake). What data substantiates this point?

The extensive experience of those testifying at the Ramsey Lake hearing led them to state that there were real concerns about potential environmental impacts similar to those of the St. Johns Landfill. The first point is that liner systems are still a new and evolving technology. The experience that the experts such as SCS Engineers have had, however, with landfill liners leads them to conclude that trying to use a liner system in a very wet and compressible soil situation like Ramsey Lake would very likely result in liner failure. Liners are simply not designed to be used in this kind of situation. With liner failure a virtual certainty, the leachate will almost certainly enter the environment as it is now doing at St. Johns.

The second point is that due to the similar above-grade profiles of the two landfills, and the similar capping systems to be used for both, there will very likely be similar potential for pollution from leachate seeps and runoff into the Slough. Both landfill designs have steep side slopes, which cause serious erosion problems during storms. Seeps do exist in the sides of St. Johns Landfill now and leachate is entering the Slough and surrounding wetlands from these sources. Again, even "state of the art" clay caps may be subject to design and operational failures.

The problem is not necessarily that these systems are all predicted to fail, although evidence indicates that some of the protection systems inevitably will. The most important point is that, as even CH<sub>2</sub>M Hill's experts will agree, Ramsey Lake is a very difficult place to site a modern landfill. The site's characteristics make designing an adequate protection system a virtually impossible task. CH<sub>2</sub>M Hill has had to go to extreme technical measures, such as 10,000,000 c.y. of preload, to even make the site seem developable. Even these measures may prove to be unworkable in the field, given the untried nature of some of them. The basic question the EQC should be asking is "how much risk are we willing to take that the proposed technical solutions to these problems will work and not only put the environment at risk but waste a great deal of the public's money?"

6. Can land filled with incinerator ash be marketed and developed for industrial plants?

### Construction Over Ash

The report offers three alternative site development plans for the Ramsey Lake site. Alternatives 1 and 2 place the landfill bottom at elevation 10 msl, well below the 100 year flood level of 27.3 msl and below existing groundwater levels on the site. In both these alternatives, a dewatering system and a double-lined landfill are proposed. The major difference between Alternatives 1 and 2 is a 600 ft wide strip along North Lombard Street to be reserved for future development in Alternative 2. This strip, when combined with a buffer strip adjacent North Lombard Street, will provide an 800 ft wide area totally some 118 acres. Site life for this alternative has been estimated at 17.7 years in the report.

The report proposes the 600 ft strip receive only incinerator ash and associated cover soil. The resulting fill, totaling some 20 ft in thickness, is deemed in the report as potentially suitable for development in a manner similar to other existing developments in the Ransey Lake vicinity.

There are a number of issues posed by this development plan. These are enumerated below:

1. The foundation characteristics of compacted incinerator ash are unknown. The ash materials are heterogeneous, will be delivered to the site in a relatively uncontrolled manner, and will be placed using typical landfill equipment. Without careful control of moisture content and placement procedures (compactive effort), the foundation characteristics may be largely unpredictable and highly variable. When combined with the acknowledged compressibility of the underlying soil materials, we question use of the ash fill area for structures unless they are properly founded on piles, or otherwise designed to accomodate expected differential and total settlement in the ash fill.
2. Although the report is correct in stating that ash would not likely result in significant production of landfill gas, the ash fill will directly abut the refuse fill. The porous nature of ash will not impede LFG migration into the ash from the adjacent landfill. Without a barrier to gas flow, or a special LFG migration control system installed at the ash-refuse interface, we would expect significant migration of LFG into the ash fill area, thereby posing a potential fire or explosion hazard to the proposed developments.

3. The quantities and characteristics of leachate to be generated in the ash fill are unknown. Experience with leachate generation in ash fills is minimal. Limited data suggests that the treatment of ash fill leachates may require different processes than those selected for ordinary municipal waste landfill leachates. Whereas municipal waste leachate is characterized as acidic with a high organic content, incinerator ash leachate has a high pH, low in organic content, and high in metals.

If solid wastes and ash are mixed in the landfill, leachate will reflect the combined nature of the two materials. Treatment of the separated waste streams, as might be the case with Alternative 2, has not been adequately addressed in the report.

4. There is currently considerable uncertainty with respect to the future regulatory climate for incinerator ash. The U.S. Environmental Protection Agency's (EPA) position has been that fly ash and bottom ash from municipal waste incinerators found to be hazardous must be managed as hazardous wastes. Further, that it is the legal obligation of incinerator facility operators to determine whether their ash waste stream is hazardous. The Environmental Defense Fund (EDF) has recently (March 1987) released information claiming that "representative" samples of ash obtained from 30 municipal waste incinerators around the county do not pass the EPA extraction procedure for hazardous waste, and contained very high levels of certain toxic materials. Cadmium and lead levels were cited as two metals of particular concern.

In late March 1987, the House Subcommittee on Transportation, Tourism and Hazardous Materials held hearings on municipal waste incinerator ash. At that hearing, EPA indicated that the Agency is now studying the hazardous waste test protocols to see if they are suitable for testing ash, and that new regulations governing municipal waste incinerator facilities would be offered later this year.

Although it is likely the regulatory stance toward incinerator ash will be resolved prior to startup of an incinerator facility in the metropolitan Portland area, the regulatory uncertainty combined with the technical questions regarding contraction on ash fill, raise significant questions on the viability of the Alternative 2 site development plan.

The proposal would allow interest to be assessed on types of response costs that are delineated in the regulations.

The proposed rule would require that a claim be presented within three years of the discovery of a loss and its connection with the release in question, or three years after the date on which final regulations are issued.

The proposed rule also would create new responsibilities for Indian tribes and require notification of trustees in cases of discharges that might injure natural resources of concern to the trustees.

The proposed regulation is silent on procedures for filing a claim for natural resource damages and assessment costs against superfund. The department said that rules for that purpose have been issued by the Environmental Protection Agency and that it would amend its rules to conform to any action EPA may take (Dec. 20, 1985, p. 1623).

Comments on the proposed changes should be sent by May 18 to David Rosenberger, CERCLA 301 Project, Room 4354, Department of Interior, 1801 C St. N.W., Washington, D.C. 20240. For additional information, contact Rosenberger at the above address; telephone (202) 343-1301.

### Energy

#### HODEL SEEKS DRILLING IN ALASKA WILDLIFE AREA TO WARD OFF GROWING DEPENDENCE ON FOREIGN OIL

Interior Secretary Donald P. Hodel recommended to Congress April 20 that the coastal plain of Alaska's Arctic National Wildlife Refuge be opened to oil and gas leasing as a way of limiting the growing U.S. "dependence on unstable sources of foreign oil."

Hodel told a press conference that the coastal plain of the refuge is considered by geologists to be "the most outstanding onshore frontier area for prospective major oil discoveries in America. Estimates range between 600 million and 9.2 billion barrels of recoverable oil, the latter nearly equal to the Prudhoe Bay field, which currently supplies almost one-fifth of U.S. domestic production."

He said the exploration, development, and production could be done in an "orderly and sensitive way" without adverse effects on the environment. His recommendation was based on one made by the Interior Department's Fish and Wildlife Service Nov. 24 to open the 1.5 million-acre coastal plain on the northern tip of the refuge to full oil and gas leasing (Current Developments, Nov. 28, 1986, p. 1253).

Congress must approve the recommendation before leasing can begin. Two bills concerning the Arctic refuge have been introduced, representing "exact polar opposites," according to a subcommittee staff member.

HR 39, introduced by Rep. Morris K. Udall (R-Ariz) and co-sponsored by 77 House members, would permanently designate the plain as wilderness and bar drilling. HR 1082, introduced by Rep. Don Young (R-Alaska) and 67 others, would put in place Hodel's recommendation.

Dan Beard, staff director for the House Interior and Insular Affairs Water and Power Subcommittee, told BNA April 20 that it was a "difficult issue" that could entail a year of congressional hearings and reports.

Environmentalists have said the department's oil estimates are inflated and fail to indicate that geologists predicted only a 19 percent chance of finding any "economically recoverable" oil on the plain (Dec. 26, 1986, p. 1464).

Although the draft report on oil and gas drilling in the refuge recommended full leasing, it raised several concerns about the effects drilling and production may have on wildlife, particularly the 180,000-head Porcupine caribou herd that uses the coastal plain as a calving area.

In his announcement, Hodel said the portion of the report that warned drilling could cause a "population decline and change in distribution of 20 to 40 percent of the herd" was struck from the final report because it was incorrect and was included in the report because of an "editing error."

### Groups React

The Arctic Slope Regional Corp. and several industry groups, including the 29-member Coalition for American Energy Security, issued prepared statements applauding the decision and urging quick development. The corporation, which is controlled by native Americans who favor development, owns 92,000 acres of the coastal plain.

The Alaska Coalition, which comprises 14 environmental groups that oppose development, accused the department of "changing the facts to fit preordained conclusions" and said political appointees "have contorted and distorted the findings of the field biologists to fit their whims."

Audubon Society President Peter A. A. Berle said in a prepared statement released April 20 that the Reagan Administration's "lack of a coherent energy strategy" and "strong opposition to energy conservation" was making the nation more dependent on Middle East oil and "environmentally destructive domestic oil production in ecologically sensitive areas."

For more information or copies of the report, contact Noreen Clough, Fish and Wildlife Service, Division of Refuges, Room 2343, 18th and C Sts. N.W., Washington, D.C. 20240; telephone (202) 343-4313. Comments on the report should be sent to Director, Fish and Wildlife Service, Division of Refuges, at the above address.

### Hazardous Waste

#### NEW EPA DATA ON WASTE FACILITY LINERS TO AFFECT FINAL MINIMUM TECHNICAL STANDARDS

The final minimum technical requirements for hazardous waste management facilities will be affected by new data collected by the Environmental Protection Agency on liners and leachate collection systems, according to a staff member in the agency's Office of Solid Waste.

Kenneth Skahn, an environmental engineer in the EPA Land Disposal Branch, told BNA April 21 that the new data suggest that composite liners are superior to compacted soil liners in preventing leachate migration and that they appear to enhance leak detection system performance.

Minimum technology standards for hazardous waste management facilities proposed last year under the 1984 Resource Conservation and Recovery Act amendments would require double liners and leachate collection and detection systems and permit use of a composite or compacted soil double liner (Current Developments, April 4, 1986, p. 2161).

A composite liner consists of a flexible membrane top layer and a bottom layer of another flexible membrane over compacted soil or clay. The compacted soil liner also has a flexible membrane top layer, but the bottom layer is composed only of compacted soil or clay at least three feet thick. Leak detection and collection systems would be situated between layers in both liner types.

EPA said April 17 that it is seeking public comment on new data showing that composite liners are superior in some ways to compacted soil liners (52 FR 12566).

EPA also released draft documents containing detailed technical guidance for designing, building, and operating single and double liners and leachate collection systems.

Skahn said public comments on the data may influence technical guidance offered in the draft documents as well.

Comments on the EPA data or draft guidance documents may be sent until June 1 to Docket Clerk, RCRA Docket (S-212) (WH-562), EPA, 401 M St. S.W., Washington, D.C. 20460; specifying Docket No. 87-DLRN-FFFFF.

Copies of the two draft guidance documents, *Draft Minimum Technology Guidance on Single Liner Systems for Landfills, Surface Impoundments, and Waste Piles—Design, Construction, and Operation* (EPA/530-SW-85-013); and *Draft Minimum Technology Guidance on Double Liner Systems for Landfills and Surface Impoundments—Design, Construction, and Operation* (EPA/530-SW-85-014), may be obtained from Skahn, Office of Solid Waste (WH-565E), at the above EPA address.

The new data, *Background Document on Bottom Liner Performance in Double-Lined Landfills and Surface Impoundments* (EPA/530-SW-87-013), also may be obtained from Skahn at the above address.

For more information, call the RCRA/Superfund Hotline, toll free, (800) 424-9346; in Washington, D.C., (202) 382-3000. For technical information, contact Skahn at (202) 382-4654.

### Air Pollution

#### NEW STANDARDS PROPOSED FOR COKE OVENS USED AT IRON, STEEL MANUFACTURING PLANTS

New and existing wet-coal charged coke ovens used in iron and steel manufacturing would have to meet new air emissions standards under a proposal announced by the Environmental Protection Agency April 21.

EPA designated coke oven emissions as hazardous air pollutants under the Clean Air Act in 1984 (Current Developments, Sept. 14, 1984, p. 755). It estimated that new standards would reduce the incidence of cancer among the approximately 40 million people who reside within 50 kilometers of coke ovens from 6.9 deaths per year under current controls to about four deaths per year.

The rule would apply to 134 wet-coal charged batteries in 43 plants, which account for 85 percent of domestic coke production, EPA said. The cost of compliance with the regulation is estimated at \$19 million per year.

Coke oven emissions contain several known carcinogens, including benzo(a)pyrene, arsenic, and benzene. Studies have shown that coke oven workers are at significantly higher risk of contracting cancer of the respiratory tract, kidney, and prostate, EPA said.

The proposed regulation will be published soon in the *Federal Register*. For more information, contact Bob Kellam, Pollutant Assessment Branch, Strategies and Air Standards Division (MD-12), EPA, Research Triangle Park, N.C. 27711; telephone (919) 541-5645.

### Air Pollution

#### 20 STATE PROGRAMS SAID SEEKING TO ADOPT 'PLANTWIDE' DEFINITION OF STATIONARY SOURCE

About 20 states are seeking to revise their air regulatory programs to include a "plantwide" definition of stationary source that would reduce the number of facilities subject to new source review under the Clean Air Act, according to an Environmental Protection Agency official.

The agency hopes to prevent emission increases by requiring states to assure that using the definition will not hinder their ability to attain Air Act standards, Gary McCutchen,

chief of the new source review section in EPA's Office of Air Quality Planning and Standards in Research Triangle Park, N.C., told BNA April 21.

The plantwide approach defines an air pollution "source" under the Act as an entire plant rather than a piece of process equipment within a plant.

The definition, proposed by EPA in 1981, would allow firms to expand or modernize without meeting lowest achievable emission rates, obtaining emission offsets, or meeting other requirements by reducing the number of plant modifications subject to new source review under the Air Act (Current Developments, Oct. 16, 1981, p. 741).

The U.S. Supreme Court upheld the EPA plantwide definition in 1984 against claims by environmental groups and others that the approach would allow increases in emissions in areas not expected to meet deadlines for attaining national ambient air quality standards (*Chevron U.S.A. Inc. v. NRDC Inc.*, 21 ERC 1049; June 29, 1984, p. 371).

In a Feb. 27 memorandum to regional EPA offices, the agency provided guidance on assessing state applications for revising their Air Act implementation plans to include the plantwide definitions.

The memorandum reaffirmed EPA's 1981 policy limiting adoption of a plantwide source definition by states that rely on emission reductions projected under a "dual" source definition to meet attainment deadlines under an approved implementation plan. According to the memorandum, states would have to prove they still could meet attainment deadlines using a plantwide rather than a dual source definition.

Under the dual source definition, emissions from each physical or operational plant change are accounted for individually, without regard to reductions elsewhere at the plant. The dual source definition requires new source review and permitting for most plant additions or modifications.

The memorandum said states that do not have fully approved implementation plans and may not be able to meet attainment deadlines for certain pollutants also may adopt a plantwide source definition under certain circumstances. A switch to the plantwide definition can be approved in such states if the state shows it is making "reasonable efforts" to adopt and submit a complete plan for "reasonable further progress" in attaining Air Act standards on time.

### Research

#### SAB ADVISES IMPROVEMENTS IN EPA METHODS OF ASSESSING MUNICIPAL INCINERATOR HEALTH RISK

Improvements are needed in the methodology being prepared by the Environmental Protection Agency for evaluating the health risks of emissions and residues generated by municipal solid waste incinerators, according to the agency's Science Advisory Board.

In a report submitted to EPA Administrator Lee M. Thomas April 9, the SAB Subcommittee on Municipal Waste Combustion said the agency's proposed methodology for incinerators is a "considerable improvement" over other EPA multi-media risk assessment methodologies.

However, several areas in the health assessment methodology need to be altered or improved before it can be expected to provide adequate support for EPA to develop policy and regulations for waste incinerators, the panel said.

For example, the panel said EPA should not use data from an incinerator in Hampton, Va., to represent existing incinerators. The Hampton facility, old and of a design no longer widely used, will yield a "gross overestimation of emissions from new incinerators," the panel said.

To evaluate a more complete range of source and emission characteristics for proposed and existing incinerators, the panel recommended that the agency develop a variety of scenarios, including one that takes into account use of best available control technologies.

Many major data gaps exist with regard to chemical identity, toxic potential, and total environmental burden of incinerator emissions, making assessment of risk posed by the technology difficult to predict, the subcommittee said.

The SAB panel voiced several other criticisms of the EPA methodology, including its failure to use data from incinerators that employ best available emission control technology for validating models used to predict health risks.

The panel said EPA should re-evaluate its separate treatment of particulate and gaseous emissions and their fate and consider use of best available kinetics modeling in predicting degradation in soil of contaminants generated by municipal incinerators.

EPA also should investigate in more detail human exposure to toxic compounds that may result from landfilling incinerator ash, revise its "maximally exposed individual" concept, and re-evaluate plant exposure, the panel said.

Copies of the report may be obtained from Cheryl Bentley, SAB (A-101S), EPA, 401 M St. S.W., Washington, D.C. 20460; telephone (202) 382-2552.

### Drinking Water

#### EPA PROPOSES TREATING PARA-DICHLOROBENZENE AS HUMAN CARCINOGEN SUBJECT TO MCLG OF ZERO

The Environmental Protection Agency proposed April 17 to regulate para-dichlorobenzene in drinking water as a probable human carcinogen, with a maximum contaminant level goal (MCLG) of zero and a maximum contaminant level (MCL) of 0.005 milligrams per liter.

EPA also is seeking comment on the evidence used to reclassify the substance. If after considering public comment the agency determines that para-dichlorobenzene is a "group C" compound with limited evidence of carcinogenicity, rather than a probable human carcinogen, the final MCLG and MCL will be set at 0.075 mg/l (52 FR 12876).

An MCLG is an unenforceable health goal set at a level at which there is no known adverse health effect, EPA said. An MCL is an enforceable standard for a drinking water contaminant that must be set as close to the MCLG as is technically feasible through use of "best technology, treatment techniques, and other means which are available, taking costs into consideration."

In 1985 EPA issued a final recommended maximum contaminant level, now known as an MCLG, of 0.75 mg/l for para-dichlorobenzene and proposed an MCL of 0.75 mg/l (Current Developments, Nov. 15, 1985, p. 1252).

The latest proposal is based on a recent draft report by the National Toxicology Program, which said carcinomas formed in rats and mice that were administered para-dichlorobenzene, an insecticide and air deodorant.

EPA also requested public comment on whether it should in some cases let utilities provide consumers point-of-use devices or bottled water before granting a variance or exemption from standards for volatile organic chemicals. These alternatives would be allowed until central treatment systems could be installed. EPA said this proposal would be especially useful for small public drinking water systems.

A hearing has been set for May 4, 1987, from 9:00 a.m. to 12:00 p.m. at EPA's Conference Center, Room 3, Waterside Mall, 401 M St. S.W., Washington, D.C.

Comments should be sent by May 18, 1987, to p-DCB Comment Clerk, Criteria and Standards Division, Office of Drinking Water (WH-550), EPA, 401 M St. S.W., Washington, D.C. 20460. For more information, contact Joseph Cotruvo, director, Criteria and Standards Division, at the address above; telephone (202) 382-7575. For information on the hearing, contact Teresa Malone, same address and telephone number.

### Surface Mining

#### HOUSE PASSES BILL TO END TWO-ACRE EXEMPTION, ALLOW STATES TO SET UP RECLAMATION TRUST FUND

A bill eliminating the two-acre exemption from the Surface Mining Control and Reclamation Act and amending the Act to allow states to retain up to 10 percent of annual reclamation funds after SMCRA expires passed the House April 21.

HR 1963, sponsored by Reps. Dick Cheney (R-Wyo), Ron Marlenee (R-Mont), Nick Joe Rahall (D-WVa), and Morris K. Udall (D-Ariz), took but two weeks to move through the lower chamber.

One portion of the bill allows states to keep up to 10 percent of their annual allocation from the federal abandoned mine land reclamation fund in a special trust fund to be used for reclamation projects after 1992, SMCRA's expiration date. The second portion removes part of the law that exempts mining operations covering fewer than two acres from SMCRA's permitting and reclamation requirements.

The two-acre exemption had broad support from the Department of Interior, the coal industry, and environmentalists. The exemption has been much abused, particularly in Kentucky and Virginia, and often criticized (Current Developments, April 10, p. 2086).

### Air Pollution

#### AGENCIES CHALLENGE EPA, STATE POSITION ON CFC REDUCTIONS ON EVE OF GENEVA MEETING

The Office of Management and Budget and several other federal agencies have questioned whether stratospheric ozone depletion poses enough of a human health threat to warrant strict international controls, challenging the U.S. negotiating position on the eve of renewed talks on the issue, government officials told BNA.

The State Department and the Environmental Protection Agency plan to push hard for a short-term freeze and long-term reductions in certain chlorofluorocarbons and halons, which, according to many scientists, destroy ozone in the upper atmosphere and allow harmful ultraviolet radiation to penetrate to the Earth's surface. U.S. negotiators took this position in the last round of talks Feb. 23 in Vienna. The negotiations resume April 27 in Geneva.

"We're going to stick to our basic objectives," Fitzhugh Green, EPA associate administrator for international affairs, told BNA April 21. "We hope that all hands are in agreement with us, because we've made a lot of progress and we don't want any backsliding at this point."

A government official told BNA April 16 that some "mid-level government officials are attempting to disrupt the negotiation process because they are philosophically opposed to regulation."

The Department of Interior, the Department of Commerce, and the National Oceanic and Atmospheric Administration have joined OMB in challenging the U.S. negotiating



7. Economic impact issues surrounding Ramsey Lake site:

7a. What is the scope of economic impacts/lost/ jobs? To what extent would proposed landfill harm nearby employers, the entire Rivergate industrial district, the North Portland community, the economy for Portland and region, or the entire State of Oregon?

This question encompasses the entire scope of both the DEQ and Port economic impact analysis. In answering questions 7b., c., d., and e. the scope of economic impact should be adequately addressed to answer this general question.

7b. On what points do DEQ (CH<sub>2</sub>M) and Port (QED) economic impact studies agree/disagree?

The conclusion of both reports is the same: "there would be negative short-term and long-term economic impacts resulting from the loss of heavy industrial land in the RGID if a landfill were sited at Ramsey Lake. This would result in significant detrimental impacts to economic development efforts and growth both to the City of Portland and the metropolitan region." (DEQ Ramsey Lake Draft Feasibility Study Report, Page 4-85.)

There are no major technical disagreements between the two reports. The QED report uses a standard multiplier to determine the total job loss in the community. The CH<sub>2</sub>M Hill report ignores this factor. The reports do agree on the approximate number of heavy industrial jobs that would be lost directly as a result of siting a landfill in Rivergate: CH<sub>2</sub>M Hill estimates 3,285 jobs; QED estimates 2,100-4,230 jobs depending on the types of industries assumed. With the standard economic multipliers for indirect job creation (retail, construction, other industrial, etc.) added in, QED calculated the total job loss at between 8,400 and 16,920.

The only other aspect of the CH<sub>2</sub>M Hill report that makes its conclusions slightly more ambiguous is the discussion of loss of development to Clark County. They do not directly evaluate the three alternative landfill impact scenarios which they introduce on Page 4-97 of the report. As a result, they leave the impression that there is a reasonable possibility that either 1) other Oregon sites will be able to offer alternative locations or 2) if development goes to Clark County, that is an acceptable substitute. Though no attempt is made to explicitly weigh these against the third alternative (complete loss of heavy industrial development to other regions of the country), there are clear statements made immediately

afterward on Page 4-98 concerning the loss of potential development opportunities and slowing economic development and growth which indicate that CH<sub>2</sub>M Hill substantially agrees with QED's conclusions. The final sentence on Page 4-98 perhaps best summarizes CH<sub>2</sub>M Hill's viewpoint on this issue: "The loss of the available industrial land in Rivergate would be damaging to efforts to continue to diversify the economic base of the region, and could lead to eventual slowing of growth and development."

In summary, there are no significant disagreements between the CH<sub>2</sub>M Hill and QED analysis. Unfortunately, because of the placement of the economic analysis toward the end of a massive report, and the format of the report itself, CH<sub>2</sub>M Hill's main conclusions are hard to discern. This report should have received more prominent treatment, and the conclusions given more importance in DEQ's process.

- 7c. What type of economic activities occur in Rivergate which can't be located elsewhere in the region? and
- 7d. What demand can be substantiated for Rivergate's industrial land, now and projected for the future?

These two questions can best be answered by answering several more specific questions.

Why does the Portland region need heavy industrial land?

The region needs to set aside land appropriate for all general categories of land use. Heavy industrial land is needed to provide for the full range of employment opportunities within the region. Businesses which need heavy industrial sites are an integral and important part of the regional economy. They produce the basic goods of our society and provide a significant portion of the employment for the skilled and semi-skilled "blue collar" labor force. The State (EDD), PDC and the Port have all documented the importance of Rivergate in the region's efforts to diversify its employment base.

What are the heavy industrial uses that Portland, and Rivergate has a good chance of attracting?

Internationally there has been, and will continue to be, significant new plant development for a variety of heavy industrial processes. The State (EDD), the City (PDC), and the Port have developed a strategy aimed at attracting 3 general types of companies to Portland:

1. Specialty chemicals - this includes organic chemicals, pharmaceuticals, resins and other products in this steadily growing sector. American Tokyo Kasei is the first of what could be a significant number of similar companies who could be attracted to Portland.
2. Specialty materials - this category of industrial development is one of the most dynamic sectors in the international economy, and includes silicon products, ceramics, carbon and other specialty fibers, and graphite. These uses can be characterized as the heavy industrial segment of "high tech" industry.
3. Food processing - this is a growing segment of the economy and Portland is in a good position to take advantage of that growth. Steinfeld's Products, Manna Pro (Carnation), and Fisher Mills are examples of this sector.

In addition to these targeted industries, there are a wide variety of manufacturing, service and distribution uses that need heavy industrial property because of the potential impacts their businesses have on surrounding uses. For many companies, Rivergate is the only place they can locate because, in addition to its other unique features, there are few potential conflicts with residential, commercial, or more sensitive industrial uses.

How much heavy industrial land does Portland need?

The region needs enough land available for heavy industrial uses to be competitive with other areas. What this means is that we must have land that is properly zoned, has good utility capacity, is relatively level, is in a good location with access to interstate freeway and rail, and is large and isolated enough to provide some buffering from potentially conflicting adjacent uses. Although an exact acreage need is hard to pinpoint, it is evident that the Portland region, and particularly the City, has few pieces of land which can satisfy these criteria. The vacant 700+ acres of Rivergate, therefore, represents 84% of all the heavy industrial land in the City, and about 50% of the available land in the region. Removing this land from the inventory would have a devastating effect on the region's ability to market to heavy industry. Because of constraints on the other regional sites, Rivergate is frequently the only site heavy industries will consider when looking at Portland or Oregon as a possible plant location, especially if the site needs to be 100 acres or more. Land in Rivergate has been sold or developed (by the Port) at the average rate of 28 acres/year since it was first opened. We have now emerged from a cyclical downturn in activity caused by the recession of the early 80's and have seen land sales activity pick up again in the mid 80's. The following tables list the sales by year and name of industry. Major infrastructure improvements have been noted to indicate the effect that each has had on Rivergate development. The cyclical nature of industrial development activity points to the likelihood of strong interest in Rivergate in the immediate future.

What makes Rivergate so important to the region?

Rivergate is so important because of its location and how it has been developed. In addition to the criteria mentioned above, Rivergate is adjacent to a world class container terminal, has 2 major railroads competing to provide service not just one, and has major power transmission lines on-site. All of the industries mentioned above find each of these features to be a significant advantage to them when looking for a site. Heavy industrial sites with this combination of factors are extremely difficult to plan for and develop.

Isn't a landfill a heavy industrial use?

No. While landfills may seem to be superficially more compatible with heavy industry, in fact landfills are a special regional facility with impacts unlike heavy industrial uses. In this respect, landfills are in the same category as a new state penitentiary, nuclear power plant, or international airport. Local land use ordinances have no adequate means of providing for, or addressing the impacts of these kinds of facilities. The only way these uses can be sited appropriately is through a special regional process that weighs the potential costs, benefits, and impacts of each facility on the community, including impacts on the regional economy. DEQ's process has not placed adequate emphasis on land use analysis or economic impact analysis from the outset. These important factors have always taken a back seat to environmental and technical issues.

SOUTH RIVERGATE LAND INVENTORY

<u>Date Sold, Leased, or Developed by the Port</u>	<u>Use</u>	<u>Total Acres</u>	<u>Significant Events</u>
1962			1st Phase of Rivergate fill Completed
1963	Ash Grove Cement	Processing 30.0	
1964	Consol. Metco	Manufacturing 20.0	
1968	Oregon Steel	Manufacturing 147.0	
1968	Waterways Terminals	Whse./Dist. 53.8	
1968	Union Oil	Whse./Dist. 31.4	
1970	H.B. Fuller	Manufacturing 5.2	
1972	Union Pacific Yards	Infrastructure 32.1	
	BPA Lines and Easement	Infrastructure 65.5	
1973	Columbia Grain	Marine 41.4	
1975	Beall Transliner	Manufacturing 8.0	
			Lombard St. Extended
1977	Westinghouse	Service 3.6	
1978	Steinfeld's	Processing 15.0	
1978	RGID Credit Union	Service 1.0	
1978	Blickle Co.	Service 3.2	
1979	Purdy Brush	Manufacturing 9.6	
1981	Carnation	Processing 20.0	
1981	Macro Manufacturing	Manufacturing 1.0	
1982	Pacific Coal	Marine 87.1	
			Recession
1985	POP Industrial	Service 16.7	
1985	American Tokyo Kasei	Whse./Dist. 3.6	
1986	Tonquin Resources	2.2	
1987	Tokyo Kasei Kogyo	<u>3.3</u>	
	Total South Rivergate	600.7	

D10a:ch

NORTH RIVERGATE LAND INVENTORY

<u>Date Sold, Leased, Or Developed by the Port</u>	<u>Use</u>	<u>Total Acres</u>	<u>Signifcant Events</u>
1972	Container Terminal	98.0	o T-6 Developed
1975	Cargo Dist. Center	21.0	
			o Marine Drive Constructed
1978	Oregon Transfer	10.0	
1978	Rodda Paint	4.0	
1978	Acme Roofing	5.0	
1978	H.A. Andersen	9.1	
1978	Montgomery Ward	14.0	
1978	Nordstrom	15.0	
1978	Albina Transfer	6.6	
1978	Port Services	8.0	
1978	Auto Storage	85.0	
1978	Rail Staging	5.4	
1978	Truck and Process. Stg.	10.0	
1978	BN Rails/Yards	17.3	
1979	Snap-On-Tools	1.4	
1979	Northgate Ind. Center	6.8	
1980	Lakeside Industries	4.6	
1980	Merit U.S.A., Inc.	3.0	
			o Recession
			o Slough Bridge Opens
1984	B.N. Ind. Park	80.0	
	N.E. Corner Industrial	26.0	
1985	Fisher Mills	3.9	
	Boise Cascade	<u>6.5</u>	
	Total North Rivergate	440.6	

D10a:ch



7e. Are adequate replacement sites available for industrial land lost to landfill expansion: west end of Hayden Island, or Clark County. Could these sites be ready in time to meet future industrial demand?

Clark County is the only regional alternative to Rivergate at present, and may have the only viable sites in the future as well. The Port of Vancouver has heavy industrial sites available which are somewhat comparable to Rivergate in terms of size, separation from potential conflicting uses, and electrical capacity, although all aspects of transportation access are not as good as Rivergate's. The west end of Hayden Island has significant long term development costs (\$100 million) to get to a point where it could offer similar heavy industrial siting opportunities. The development costs exceed the "finished" market price of industrial property, making Hayden Island a project for the longer term future. In addition, one of the conditions of the Urban Growth Boundary extension and the costs of engineer's fill permit for west Hayden Island is that it would take advantage of its position in the Columbia River. For the foreseeable future there is no possibility that Hayden Island could replace Rivergate as a suitable location for a full range of heavy industrial uses.

Other parts of the metropolitan area could conceivably be made more attractive to heavy industrial development. However, there are significant impediments to changing the types of development for which these other areas are targeted. Other parts of the urban or nearby rural area are always going to have potentially conflicting uses. None can match the natural isolation from more sensitive uses that are inherent in a Rivergate location. It would be difficult to recreate the rail and freeway access, and the access to ocean cargo terminals. Accumulating even 200 acres of flat, serviceable land under one ownership also seems highly unlikely, especially if the other siting factors mentioned above are considered as well.

In summary, adequate replacement sites for Rivergate are not available now, especially in Oregon, and may never be. We are entering an era when it will be increasingly difficult to have available sites for a full range of land uses within the Portland region. The region may be hard pressed to broaden economic base in the future if we are not foresighted enough to keep our options open in 1987.

# Route Slip



Date 6/3

TO:	Name	Division/Section	Initial	Date
1.	TINA	PAYNE		
2.				
3.	DIRECTOR'S OFFICE			
4.				
5.				

<input checked="" type="checkbox"/>	as requested	investigate	per conversation
<input type="checkbox"/>	approval	justify	prepare reply
<input type="checkbox"/>	comment	necessary action	return with more detail
<input type="checkbox"/>	confer	initial and return	review and circulate
<input type="checkbox"/>	for your information	note and file	signature

FROM: <u>D. ST. LOUIS</u>	Phone No.
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Central Stores 51569

See Other Side

Recycled Paper





1 e. Sewage was observed flowing into storm drainageways.

2 f. Sumps and pumps were found installed under single story homes  
3 without basements to prevent sewage-contaminated groundwaters from flooding  
4 fixtures and foundations.

5 5. Bacteriological sampling during the 1979/1980 survey and in 1984  
6 and 1987 confirmed the presence of human sewage in roadside ditches,  
7 seasonal tributary streams and drainageways. The discharge of inadequately  
8 treated sewage to waters of the state is in violation of ORS 468.770 and  
9 constitutes a potential public health hazard.

10 6. On March 24, 1987, the Department conducted an inspection of the  
11 Riverview Heights Subdivision sewage treatment facility and documented the  
12 following deficiencies and violations. Riverview Heights has 123 homes, is  
13 within Area II-A and the sewerage facilities are owned and operated by the  
14 District.

15 a. Sewage contamination of off-site drainageways, seasonal tributary  
16 streams and Crocker Creek was documented, in violation of ORS 468.770. The  
17 source of the contamination was runoff of inadequately treated and  
18 disinfected sewage applied to the irrigation site. The fecal coliform  
19 levels in the final effluent exceeded 1200 fecal coliform per 100  
20 milliliters, in violation of Schedule A, Condition 1 of NPDES Permit  
21 No. 3728-J issued to the District. This contaminated runoff would be  
22 expected to occur throughout the late fall, winter and early spring months  
23 of each year.

24 b. Excessive inflow and/or infiltration in the sewage collection  
25 system results in impaired treatment capability and bypassing of raw sewage  
26 from a surge pond directly to the irrigation pond. On March 24, the surge

1 pond was overflowing raw sewage directly to the irrigation pond. Such  
2 bypassing would be expected to occur commonly throughout the late fall,  
3 winter and early spring months of each year.

4 c. The spray irrigation site (placed into emergency use in 1980 when  
5 EPA ordered the plant's effluent discharge be removed from a slough  
6 suspected of being linked to a drinking water source) was found to be  
7 unsuitable for year around irrigation of effluent. The site has  
8 unmanageable runoff due to slope, slow surface infiltration capacity of  
9 soils, springs and lack of adequate acreage. The runoff is a violation of  
10 Condition D3 of NPDES Permit No. 3728-J, which prohibits any runoff from  
11 the irrigation site.

12 d. The sewage treatment plant lacks the physical equipment and  
13 capacity to adequately treat and dispose of sewage in a manner which  
14 protects public health and meets water quality requirements.

15 7. Until sewage collection and treatment facilities are constructed  
16 for Area II-A, the potential public health hazards and the violations of  
17 ORS 468.770 will continue. Further, until corrective action is  
18 implemented, the violations and deficiencies at Riverview Heights sewerage  
19 facilities will continue. At this time, the District is evaluating  
20 alternatives to resolve these issues.

21 8. The Environmental Quality Commission has the authority to issue  
22 an Order under ORS 468.090 through 468.110 to require the District to  
23 resolve these violations and prevent future violations. In the event local  
24 financing efforts fail, the Commission may seek self-liquidating bonds  
25 under ORS 454.235 to finance the needed sewerage facilities.

26 ///

ORDER

Based on these findings, IT IS HEREBY ORDERED THAT:

1. By July 1, 1987, the District shall submit an achievable compliance proposal and time schedule for constructing the needed sewerage facilities in Area II-A. The schedule shall include milestones for the following:

- a. Selection of alternative
- b. Method of financing
- c. Design of proposed facilities
- d. Initiation of construction (by June 15, 1988)
- e. Completion of construction
- f. Connection of homes to system

2. By no later than June 15, 1988, the District shall initiate construction of sewerage facilities.

3. The District shall complete construction and connection of residences in accordance with the schedule submitted under Item No. 1 and approved by the Department.

4. Until the deficiencies and violations at the Riverview Heights Subdivision are corrected or alternative sewage treatment and disposal provided, no additional connections or increases in sewage flows to the Riverview Heights system shall occur.

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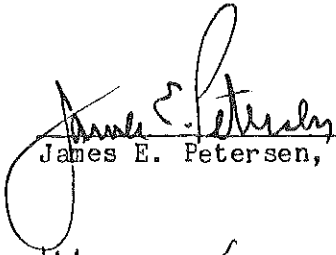
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1 IT IS SO ORDERED:

2  
3 ENVIRONMENTAL QUALITY COMMISSION

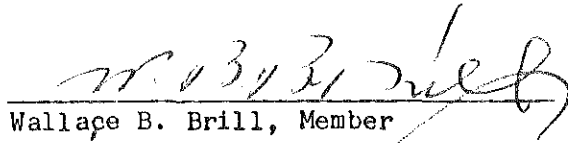
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7 Date

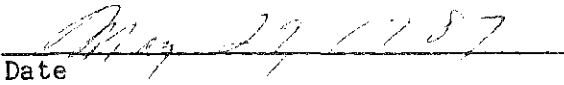
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9 James E. Petersen, Chairman

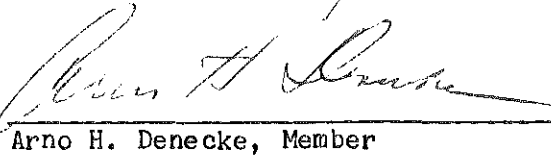
10 5/29/87  
11 Date

12   
13 Mary V. Bishop, Member

14 5/29/87  
15 Date

16   
17 Wallace B. Brill, Member

18   
19 Date

20   
21 Arno H. Denecke, Member

22  
23  
24  
25  
26  
27 Date

28 A. Sonia Buist, M.D., Member



STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMO

TO: Interested Parties

DATE: May 28, 1987

FROM: John Hewalczyk

SUBJECT: New EPA PM<sub>10</sub> Air Quality Standard

Yes, it may happen! On June 3, 1987, EPA Administrator Lee Thomas is expected to announce the promulgation of the long awaited PM<sub>10</sub> standard. There likely will be significant press coverage which would generate considerable public interest and inquiry.

In anticipation of this event, a feature story "PM<sub>10</sub>" Gearing Up" has been written for inclusion in our 1986 Air Quality Annual Report. Our Annual Report is expected to be available for distribution in late June. In order to help answer questions when the EPA announcement is made, we are providing you with a preprint of the PM<sub>10</sub> story. This article explains the health implications of the new standard, identifies areas likely to exceed the standard, and the time frame we will face to develop and implement control strategies. It should help you answer many of the questions that will come up. If you have any further questions on PM<sub>10</sub> control strategy development, please contact Merlyn Hough at 229-6446.

JK:a  
AA6345

# PM<sub>10</sub>: Gearing Up

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## Introduction

Sometime during the first half of 1987 it is expected that the U.S. Environmental Protection Agency (EPA) will put into effect a new National Ambient Air Quality Standard (NAAQS). This will be the first new NAAQS that has been adopted by EPA in over 10 years (although there have been amendments to existing standards as recently as 1985). Each NAAQS is designed to protect human health and well-being, and to prevent undesirable effects on the environment. Standards are currently in effect for six "criteria" pollutants. These are commonly occurring pollutants that have been shown to harm human health; they are called "criteria" pollutants because EPA has published a criteria document for each. The current standards are for carbon monoxide (CO), ozone (O<sub>3</sub>), sulfur dioxide (SO<sub>2</sub>), nitrogen dioxide (NO<sub>2</sub>), lead (Pb) and total suspended particulate (TSP).

The new standard will be for particulate matter of less than or equal to a nominal 10 micrometers (um) in aerodynamic diameter (PM<sub>10</sub>). Particulate of less than 10 micrometers can't be seen without the aid of magnification. The period at the end of this sentence is about 1,000 micrometers in diameter. That is 100 times the size of a 10-micrometer particle. This PM<sub>10</sub> standard will replace the existing TSP standard, which includes particles that are larger than 10 micrometers. The larger particles present less of a health threat than the smaller particles.

The new standard will have significant impact on Oregon. The Clean Air Act requires that each state must submit to EPA a plan which provides for achieving and maintaining the NAAQS within the jurisdiction of the state. But before such a plan can be developed, the Department of Environmental Quality (DEQ) must determine which areas (if any) of the state exceed the standard, what sources contribute to the exceedance, and what options are available to reduce the PM<sub>10</sub> levels in those areas. Some data relevant to these issues have already been gathered. The DEQ Laboratory Division has been collecting PM<sub>10</sub> data in Portland, Medford and Bend since 1983, and in several other cities beginning in 1986. (See Appendix 1H).

There will also be several state rule-making actions required as a result of the promulgation of the federal PM<sub>10</sub> standard. First, the Environmental Quality Commission (EQC) will have to adopt a state PM<sub>10</sub> air quality standard at least as strict as the federal standard. Then areas that exceed these standards will have to be designated as nonattainment areas. Because the PM<sub>10</sub> standard will replace the existing TSP standard,

there could be substantial changes in the distribution of nonattainment areas in Oregon. Once nonattainment areas are identified, control strategies must be developed to meet standards in those areas. The control strategies must then be adopted as rules by the EQC and be submitted to EPA as a revision of the Oregon State Implementation Plan (SIP). The strategies will have to demonstrate that the PM<sub>10</sub> standard can be attained within three years from the date that EPA approves the strategy. All of this must occur within nine months after EPA puts its PM<sub>10</sub> standard into effect. Obviously, the DEQ will experience a substantial increase in resource requirements and workload.

## Why a New Standard?

The human respiratory tract naturally limits the number and penetration of larger solid and liquid particles into the body. The present TSP standard and air sampling system does not reflect the sizes of particles that actually enter the lower respiratory tract and can cause adverse health effects. The human respiratory tract can be divided into two main areas, shown diagrammatically in Figure 10. The upper respiratory tract extends from the nose and mouth to the larynx (voice box). In general, particles larger than 10 micrometers in size become deposited in this area and are expelled from the body within a day (through coughing, sneezing, etc.), without causing prolonged health effects.

The lower respiratory tract can be subdivided into the conducting airways (trachea and bronchi) and the gas exchange areas (alveoli). Particles less than 10 micrometers in size can penetrate and become deposited in the lower respiratory tract. Particles deposited in the alveolar area may take weeks to years to be expelled from the body. Particles in the lower respiratory tract, because of their physical and chemical properties, can cause severe health effects such as cancer and emphysema.

It has been recognized for several years that the TSP standard, and control actions to achieve compliance with the standard, are somewhat misdirected. That is, they may not fully address direct protection of public health. Generally, the scientific and medical communities have agreed to the need for a particulate standard that better reflects the size ranges of particles that enter and deposit in the human respiratory tract. PM<sub>10</sub> is the size range considered to best reflect the particles affecting human health, and there has been substantial pressure put on EPA to revise its TSP standard accordingly.

In addition to protecting public health, the Clean Air Act also requires protection of such welfare (livability)

conditions as visibility. Degradation of visibility is due principally to very small particulates (of one micrometer or less). Because PM<sub>10</sub>, unlike TSP, sets a standard for fine particles, PM<sub>10</sub> control programs should provide greater benefits than the TSP standard for correcting both health effects and such conditions as impaired visibility.

## Where Do PM<sub>10</sub> Particles Come From?

Particulate pollution comes from a wide variety of sources. Particles derived from geologic (soil dust) sources or abrasion processes tend to be relatively large in size and, in general, they are inherently less toxic than particles derived from such sources as combustion (burning), for example. Particles derived from combustion, condensation of gases, airborne chemical reactions and industrial processes tend to be much smaller and, because of their chemistry, often more toxic. Figure 11 shows a distribution of particle sizes typically found in urban air.

Inventories conducted by DEQ in 1983 showed some differences between the sources of TSP and PM<sub>10</sub>. The pie charts in Figure 12 show relative contributions of various sources to the TSP and PM<sub>10</sub> emission inventories. Most important are the changes in burning source categories (exploded pie slices). If all the burning sources are combined, they make up about 31 percent of the TSP pie. For PM<sub>10</sub>, the burning sources increase to make up 40 percent of the pie. Therefore, the significance of these sources will increase as we move to a PM<sub>10</sub> standard.

It is also important to notice that the dust category, while still large, is much smaller in the PM<sub>10</sub> pie compared to the TSP pie. Particles in the dust category are generally less toxic than particles derived from burning sources. So it is appropriate that a PM<sub>10</sub> standard would tend to reduce the emphasis on control of this category.

## Which Cities Will Be Affected?

As mentioned above, the change from a TSP standard to a PM<sub>10</sub> standard could result in substantial changes in the distribution of nonattainment areas in the state. Currently, there are three urban areas in nonattainment with the TSP standard--Portland, Eugene/Springfield and Medford. Preliminary monitoring by the DEQ Laboratory Division indicates that Portland may be in attainment with the proposed PM<sub>10</sub> standard, but further monitoring is needed. Other borderline PM<sub>10</sub> problem areas that need further monitoring are Oakridge, Bend and La Grande. Eugene/Springfield, Grants Pass, Klamath Falls and Medford would likely be desig-

nated as nonattainment for PM<sub>10</sub>. Additional cities may be identified with future monitoring.

Soon after an area is designated as nonattainment for PM<sub>10</sub>, DEQ staff members and local officials will have to develop jointly a control strategy to bring the area into attainment. This control strategy must be submitted to EPA within nine months after the designation. These strategies will likely focus on increased efforts to reduce emissions of particulates from residential wood heating, as this appears to be the predominate cause of urban PM<sub>10</sub> problems. The Oregon Woodstove Certification Program that went into effect in 1986 will assist long-term maintenance of the standard, but shorter-range reductions may be necessary to meet the standard within the three-year limit after approval of the control strategy. Some areas will also need to look at further industrial source controls and possibly further restrictions on field and slash burning.

## How Stringent is the Standard?

The current TSP health standard is 75 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ) for the annual geometric mean and 260  $\mu\text{g}/\text{m}^3$  for the 24-hour average. It is likely the new PM<sub>10</sub> standard will be 50  $\mu\text{g}/\text{m}^3$  for the annual arithmetic mean and 150  $\mu\text{g}/\text{m}^3$  for the 24-hour average. A national average PM<sub>10</sub>/TSP ratio is thought to be about 0.6. This means that on average, nationwide, the new PM<sub>10</sub> standard may be about the same stringency as the old TSP standard. In Oregon, however, combustion sources such as woodstoves and forest and field burning dominate particulate emissions. The predominate particulate emissions for these sources are in the PM<sub>10</sub> size range. At times, PM<sub>10</sub> has made up over 90 percent of the TSP at selected monitoring sites in Oregon. This means that the new PM<sub>10</sub> standard will likely be more stringent in Oregon than the existing TSP standard. This is evidenced by the projected increase in PM<sub>10</sub> nonattainment areas in the state, compared to existing TSP nonattainment areas.

FIGURE 10

MAJOR REGIONS OF THE RESPIRATORY TRACT

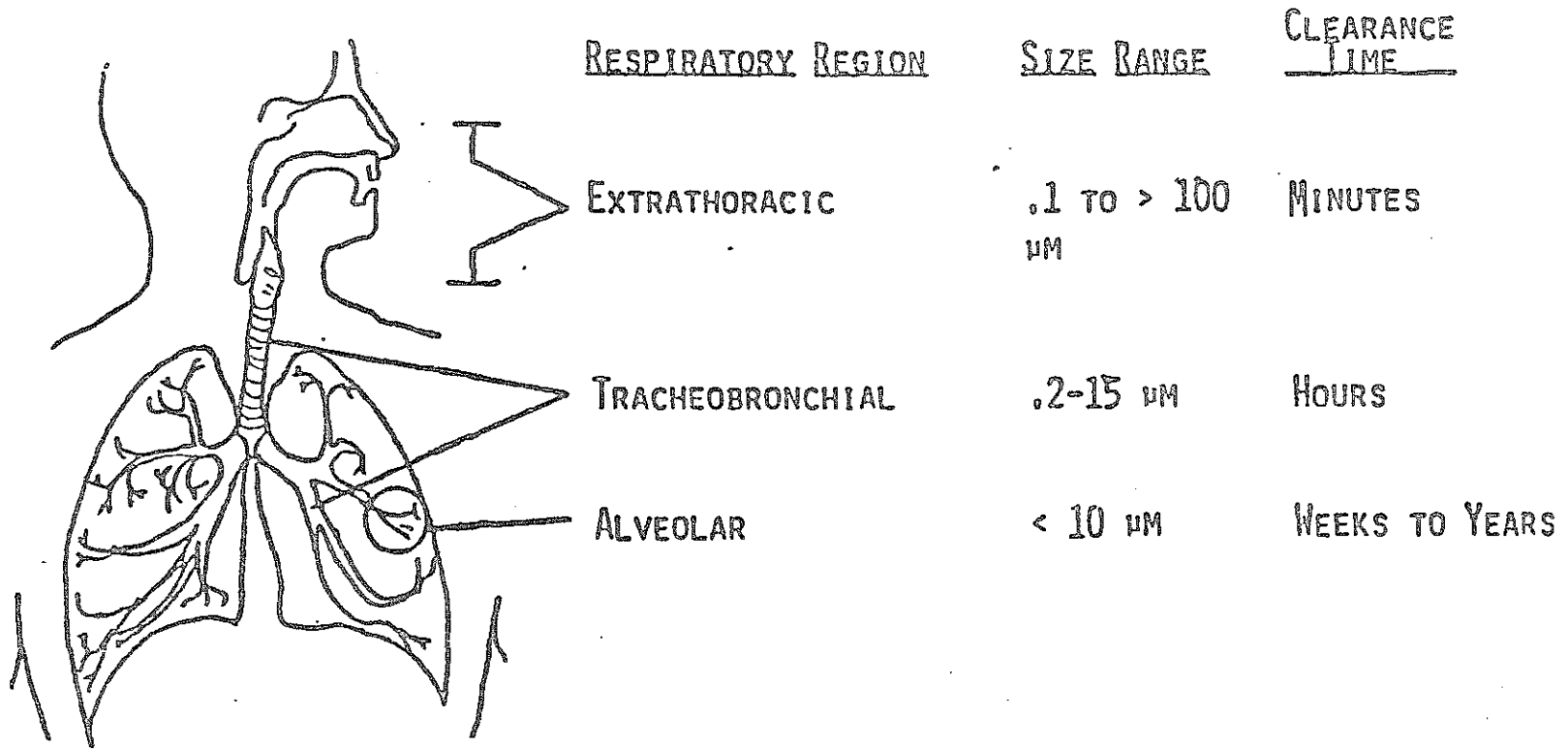


Figure 11  
Particulate Matter Size Distribution  
Typical Urban Case

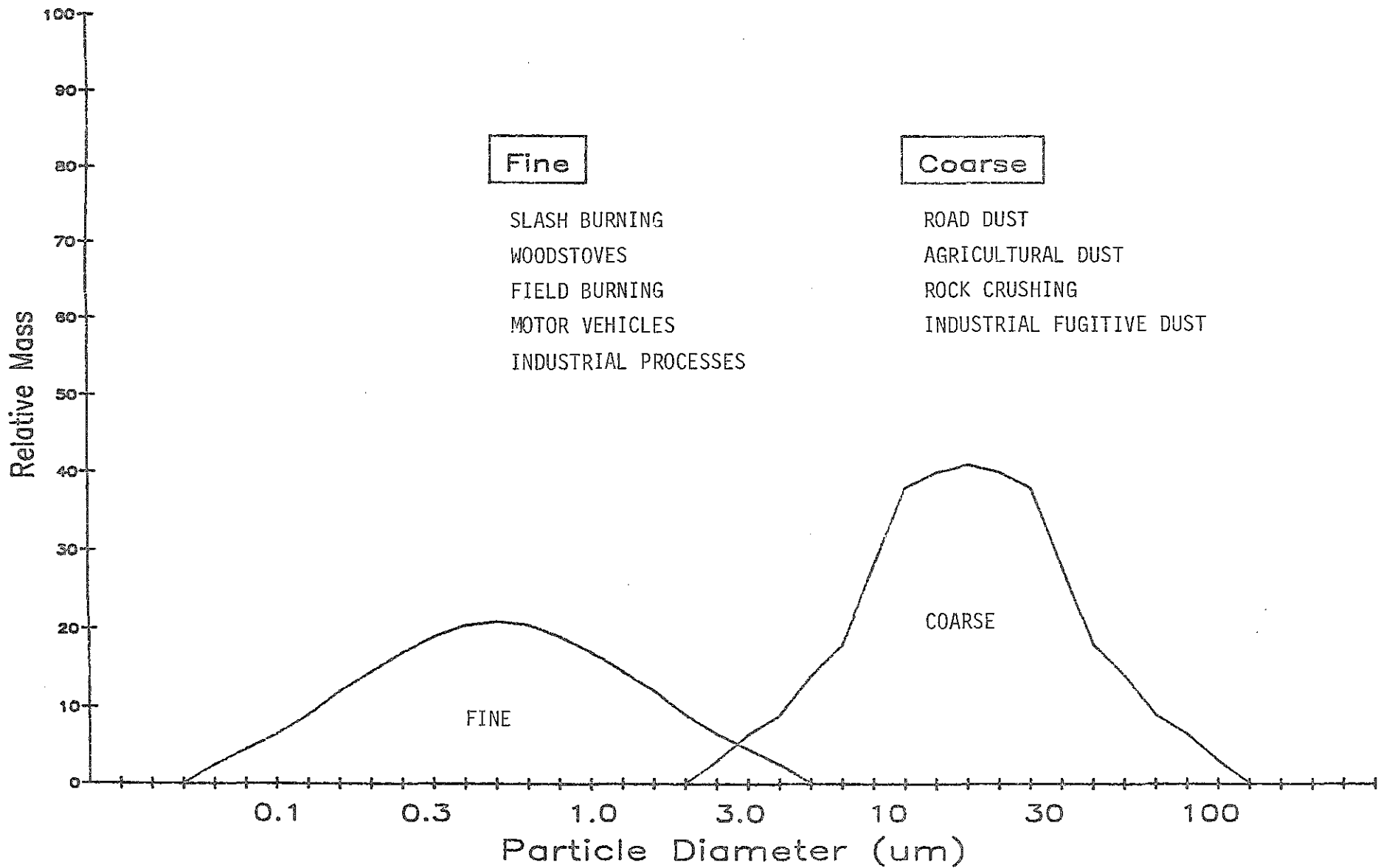
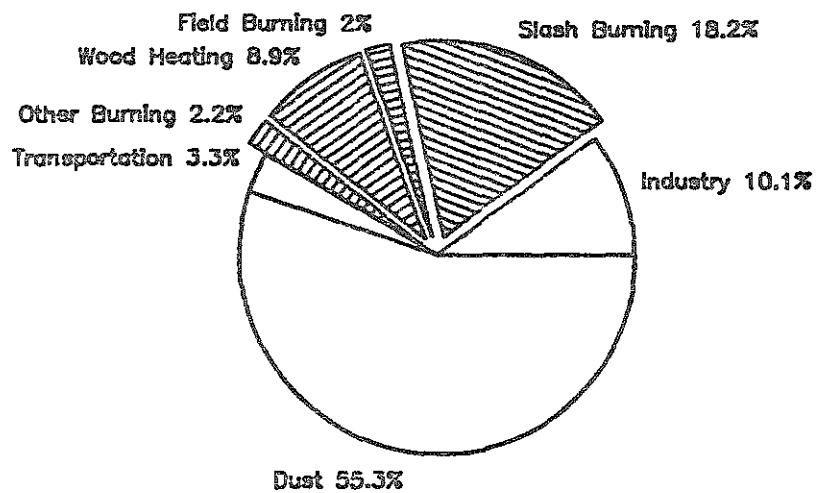
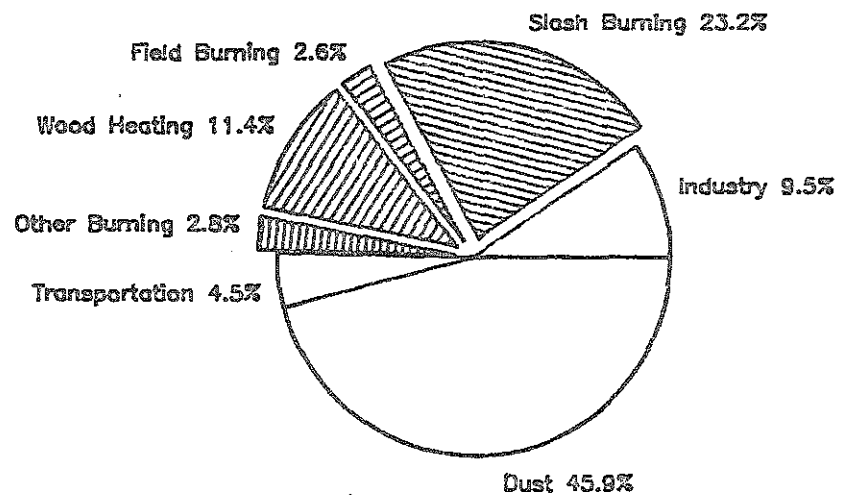


Figure 12  
Oregon Emission Inventory  
Percent of Total (Calendar Year 1983)



TSP



PM-10