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OREGON
ENVIRONMENTAL QUALITY
COMMISSION MEETING
MATERIALS

DEQ

State of Oregon
Department of Environmental Quality

OREGON ENVIRONMENTAL QUALITY COMMISSION MEETING

OCTOBER 9, 1987

BEND SCHOOL DISTRICT BUILDING
520 N. W. WALL STREET
BEND, OREGON

REVISED TENTATIVE AGENDA

9:30 a.m.

SPECIAL ITEM: Environmental Quality Commission Decision on the Scope of the Continued Contested Case Hearing for the Bacona Road Landfill Site.

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 nay item over for discussion.

A. Minutes of the August 28, 1987, EQC meeting.

B. Monthly Activity Reports for July and August.

C. Tax Credits

10:00 a.m.

PUBLIC FORUM

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

HEARING AUTHORIZATIONS

D. Request for Authorization to Conduct a Public Hearing on Pollution Control Tax Credit Rule Amendments, Chapter 340, Division 16.

E. Request for Authorization to hold a Public Hearing on Rules for the Hazardous Substances Remedial Action Fee (on treatment or disposal of hazardous wastes and PCBs).

F. Request for Authorization to Conduct a Public Hearing on Proposed Rules to Establish Chapter 340, Division 130, Procedures Governing the Issuance of Environmental Hazard Notices.

G. Request for Authorization to Conduct Public Hearing on Proposed Rules for the Oregon Underground Storage Tank Program, ORS 468.901 to 468.917.

ACTION ITEMS

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

H. Request for Variance from Portions of OAR 340-60-040(1)(a) and (2), Relating to Education and Promotion of the Opportunity to Recycle, for the Gilliam, Jefferson, Morrow, Sherman, Wasco and Wheeler Wastesheds.

I. Status Report on Yard Debris Recycling in the Portland Metropolitan Area.

J. Proposed Salt Caves Hydroelectric Project:

1. City of Klamath Falls Appeal of the Director's Denial to the Environmental Quality Commission filed September 4, 1987.

2. Northwest Environmental Defense Center, et. al., Cross-Appeal Filed September 9, 1987.

WORK SESSION

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

Because of the uncertain length of time needed, the Commission may deal with any item at any time in the meeting except those set for a specific time. Anyone wishing to be heard on any item not having a set time should arrive at 9:55 a.m. to avoid missing any item of interest.

The Commission will have breakfast (8:00) at Regina's, 415 N. E. Third Avenue, Bend, Oregon. Agenda items may be discussed at breakfast. The next Commission meeting will be December 4, 1987, in Portland, Oregon.

Copies of the staff reports on the agenda items are available by contacting the Director's Office of the Department of Environmental Quality, 811 S. W. Sixth Avenue, Portland, Oregon 97204, telephone 229-5301, 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 Eighty-Third Meeting
October 9, 1987

Bend School District Building
520 N. W. Wall Street
Bend, Oregon

Commission Members Present:

James Petersen, Chairman
Arno Denecke, Vice Chairman
Wallace Brill
Sonia Buist

Mary Bishop was not present.

Department of Environmental Quality Staff Present:

Fred Hansen, Director
Michael Huston, Assistant Attorney General
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

Several local officials attended the breakfast meeting. In attendance were: State Representative Bill Bellamy, State

Representative Bob Pickard, Sisters Mayor Linda Swearingen, and LaPine Sewer District Board Member Ken Travis.

John Hector, DEQ Region Manager, briefed the Commission on several issues affecting the Central Region: Implementation of the new fine particulate standard (PM-10) in Klamath Falls; concerns about excessive smoke in the Central Oregon area; sewer installation progress in LaPine, Klamath Falls (Pelican City), and the Bend area; storm water discharges to drill holes; and cyanide leaching operations for gold recovery. John also provided the Commission with a written report covering significant issues in the region. A copy of this report is included in the files of the Commission.

Chairman Petersen introduced Bill Hutchison, who will be joining the EQC as its newest member at the next meeting. Mr. Hutchison will be replacing Commissioner Buist.

The Commission decided to reschedule the December 4 EQC meeting to December 11. This meeting will be held in Portland at the Department of Environmental Quality offices. The Commission also decided to meet the evening before (December 10) to discuss legislative concepts for the 1989 legislative session.

FORMAL MEETING

Chairman Petersen called the meeting to order and introduced the members of the Commission. He also introduced Bill Hutchison who will become a member starting with the next meeting.

CONSENT ITEMS:

Agenda Item A: Minutes of the August 28, 1987, EQC meeting.

ACTION: It was MOVED by Commissioner Buist, seconded by Commissioner Brill and passed by Commissioners Denecke, Buist and Brill that the minutes of the August 28 meeting be approved. Chairman Petersen abstained from voting since he was not present at the August 28 meeting.

Agenda Item B: Monthly Activity Reports for July and August.

ACTION: It was MOVED by Commissioner Buist, seconded by Commissioner Brill and passed unanimously that the July and August 1987 activity reports be approved.

Agenda Item C: Tax Credits.

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

Issue tax credit certificate for pollution control facility:

T-1888, Willamette Industries-Korpine Division; wastewater pipeline

PUBLIC FORUM:

Shannon Bauhofer spoke to the Commission about the air quality of the Bend area. She talked about the effects of slash burning and indicated that the air quality this summer seemed worse.

Tom Throop, Deschutes County Commissioner, thanked the Department for its decision on the Benham Falls Hydroelectric project and agreed with the Department's decision on the Salt Caves hydroelectric project.

Carol Moorehead, American Lung Association of Oregon, told the Commission that the air quality in Bend had been deteriorating. Her organization would like to work in cooperation with the Department to implement daily reporting of Bend's air quality status.

Dennis Hanson, Bend Chamber of Commerce, said the air quality was affecting Bend's quality of life and tourism. He would like to see a long-term, consistent monitoring program developed for the Bend area.

SPECIAL ITEM: Bacona Road Decision

Chairman Petersen began the discussion with a summary of the issue. At the special meeting on October 2, the Commission had reviewed the contested case Hearing Officer's recommendations, considered exceptions, and agreed with the Hearing Officer on all but two issues--groundwater and landslides. The Commission had requested the transcript on those issues for review. Today, the Commission needs to address the issues of groundwater and landsliding and finalize that portion of the process.

The Commission asked questions of Mr. Greenwood about certain testimony in the transcript relating landslides. Commissioner Denecke stated that he interpreted the testimony to indicate the only concern for landslides was during the process of construction. Commissioner Buist indicated that although the

experts disagree, her conclusion was that the data base on this issue was adequate for this stage of the proceeding. Chairman Petersen disagreed. He said that landsliding was the critical issue because the integrity of the liner system for leachate collection and groundwater protection was dependent upon the area being free of landsliding. He said the Commission had to make a decision and it could not be conditional. He said he has seen nothing in the record to indicate the site is not an appropriate site. However, he does not believe the information on landsliding is adequate to enter the legally required finding that the site is appropriate until additional studies are completed. He indicated this was a very close question and he, therefore, was inclined to rely on the Hearings Officer who sat through the entire testimony. Chairman Petersen also stated he was convinced that shallow landslides could be dealt with in the design; his concern was with deep slides.

Michael Huston reviewed the requirements of the statute with respect to the decision. He said the legal requirement was a fairly low threshold--substantial evidence in the record. Substantial evidence is any evidence that a reasonable person would use in making a serious business-like decision. He said the Commission may choose to want more than that, however. Mr. Huston agreed with the Chairman that conditions cannot substitute for the required statutory findings.

Commissioner Denecke MOVED that the Commission continue the contested case hearing to gather additional information on a leachate treatment system and on the landslide issue. This additional information would satisfy the Commission that substantial evidence is on the record to meet the statutory standards for a decision. The motion was seconded by Commissioner Brill. The motion PASSED by a three to one vote with Commissioner Buist voting NO.

Chairman Petersen asked for an update on the status of the permitting process for the potential Eastern Oregon sites. Steve Greenwood indicated that while one application had been received, it still was incomplete. However, the Department is proceeding with review of that application.

Chairman Petersen stated he would like to have Judge Howell continue to serve as Hearings Officer for the contested case hearing.

Director Hansen told the Commission there had been indications that the Port of Portland was reluctant about a transfer station being located on port property. Chairman Petersen asked the Department to investigate the matter. If the Department found any reluctance from the Port, the Commission authorized, by consensus,

that the Chairman write a letter to the Port's Executive Director about their commitment to assist.

ACTION AND INFORMATIONAL ITEMS:

Agenda Item D: Request for Authorization to Conduct a Public Hearing on Pollution Control Tax Credit Rule Amendments, Chapter 340, Division 16.

House Bill 2023, passed by the 1987 Legislature, includes several amendments to the pollution control tax credit statute (ORS 468.150 to 468.190). For the tax credit rules to be consistent with the bill and to implement portions of the bill, rule amendments are necessary. Additionally, legal counsel identified portions of the current rule that do not accurately reflect statutory intent. These portions should be changed to bring the rules into compliance with enabling legislation.

DIRECTOR'S RECOMMENDATION: Based on the staff report summation, it is recommended the Commission authorize public hearings to take testimony on the proposed Pollution Control Tax Credit Rule Amendments, Chapter 340, Division 16.

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

Agenda Item E: Request for Authorization to Hold a Public Hearing on Rules for the Hazardous Substances Remedial Action Fee (on treatment or disposal of hazardous wastes and PCBs).

In 1985, Oregon Revised Statutes (ORS) 466.685 established a $10 per ton fee on the treatment by incineration and land disposal of hazardous wastes and PBCs. The EQC adopted procedures (OAR 340-105-120) for collecting the fee. Senate Bill 122, now known as Chapter 735, Oregon Laws 1987, repeals ORS 466.685. A new section of the bill reestablishes the hazardous waste fee at $20 per ton effective July 1, 1987. The Department proposes amending OAR 340-105-120 to incorporate the fee increase required by SB 122 as well as other minor housekeeping changes.

DIRECTOR'S RECOMMENDATION: Based upon the staff report summation, it is recommended the Commission authorize a public hearing ~~and~~ take testimony on the proposed amendments to the rule concerning the Hazardous Substances Remedial Action Fee, OAR 340-105-120, as presented in Attachment I of the staff report.

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

Agenda Item F: Request for Authorization to Conduct a Public Hearing on Proposed Rules to Establish Chapter 340, Division 130, Procedures Governing the Issuance of Environmental Hazard Notices.

During the 1985 legislative session, the Legislature enacted a rule which authorizes the EQC to list sites where environmental notice must be given and use restrictions must be imposed. This legislation is codified as ORS 466.360 to 466.385. Amendments were made in 1987 to include sites where remedial action had occurred and were added to the definition of sites where environmental notice may be appropriate. An advisory committee has assisted the Department in drafting rules to implement this legislation. The Department now requests authorization to conduct a public hearing to adopt rules to implement ORS 466.360 to 466.385.

DIRECTOR'S RECOMMENDATION: Based upon the staff report summation, it is recommended the Commission authorize the Department to conduct a public hearing and to take testimony on the proposed rules establishing procedures governing the issuance environmental hazard notices.

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

Agenda Item G: Request for Authorization to Conduct Public Hearing on Proposed Rules for the Oregon Underground Storage Tank Program, ORS 468.901 to 468.917.

Subtitle I of the Resource Conservation and Recovery Act (RCRA) authorized the implementation of a Federal underground storage tank program and encouraged the development of state-operated programs. The 1987 Legislature passed Senate Bill 115 which expands the Department's authority over underground storage tanks to include all federal provisions and certain additional state requirements. Based on the authority of SB 115, the Department proposes that interim underground storage tank rules be adopted so that the Department can develop an underground tank program that meets state program approval.

DIRECTOR'S RECOMMENDATION: Based upon the staff report summation, it is recommended the Commission authorize public hearings to take testimony on the proposed underground storage tank rules.

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

Agenda Item H: Request for Variance from Portions of OAR 340-60-040(1)(a) and (2), Relating to Education and Promotion of the Opportunity to Recycle, for the Gilliam, Jefferson, Morrow, Sherman, Wasco and Wheeler Wastesheds.

The Gilliam, Jefferson, Morrow, Sherman, Wasco and Wheeler Wastesheds are requesting a variance from the opportunity to recycle program required by Oregon Administrative Rules (OAR) 340-60-040. The request is based on special conditions in all or part of the wastesheds. The counties are requesting to be relieved of the requirement of providing a written recycling notice to each rural garbage customer.

Les Ruark, Arlington, Oregon, spoke about his concerns on Gilliam County's variance request. He said the County had not provided citizens with the opportunity to comment at the local level. He expressed concern about the lack of County support for recycling. He also expressed concern about the Waste Management proposal and wanted to make sure conditional use permit conditions are fulfilled. Mr. Ruark encouraged the connection between the proposed regional solid waste landfill operation and the County's request for a variance. Additionally, he asked the Commission to consider Gilliam County for a pilot recycling project. The Commission advised Mr. Ruark that most of his concerns appeared to relate to local government in his area and could not be controlled by the Commission.

Mr. Ruark asked about Waste Management's solid waste disposal permit application. Director Hansen said the opportunity to recycle must be included in the permit, if approved. Additionally, Director Hansen said the permit would not be approved until all information had been received from Waste Management which includes a waste reduction plan.

Commissioner Denecke noted for the record that letters had been received on this matter from Ron Davis and Richard Harper.

DIRECTOR'S RECOMMENDATION:

Gilliam Wasteshed:

Based upon the findings in the summation, it is recommended the Commission grant variances from the requirements of OAR 340-60-040(1)(a) and (2) to the Gilliam Wasteshed with the following conditions:

1. The wasteshed implement an education and promotion program which includes the following:

a. Signs at the two wasteshed landfills and at public locations throughout the wasteshed which promote the full-line recycling which is available in The Dalles and Hermiston.

b. Information about recycling in The Dalles and Hermiston distributed to local media and community groups on at least a semi-annual basis. This information must include all the information required under OAR 340-60-040(1)(a)(B).

c. Promotion of recycling in schools in the wasteshed, including using the recycling curriculum provided by the Department.

2. This variance shall be in effect only as long as the Gilliam Wasteshed is served only by the existing small rural sites.

Jefferson Wasteshed:

Based upon the findings in the summation, it is recommended that the Commission grant variances from the requirements of OAR 340-60-040(1)(a) and (2) to the Jefferson Wasteshed with the condition that the wasteshed implement an education and promotion program which includes the following.

1. Signs at the two wasteshed landfills and at public locations throughout the wasteshed which promote the recycling available in Madras and Bend.

2. Information about recycling in Madras and Bend distributed to local media and community groups on at least a semi-annual basis. This information must include all the information required under OAR 340-60-040(1)(a)(B).

3. Promotion of recycling in schools in the wasteshed, including using the recycling curriculum provided by the Department.

4. Distribution of either a one-time notice or a periodic, at least semi-annual, recycling reminder to all collection service customers.

Morrow Wasteshed:

Based upon the findings in the summation, it is recommended that the Commission grant variances from the requirements of OAR 340-60-040(1)(a) and (2) to the Morrow Wasteshed with the following conditions:

1. The wasteshed implement an education and promotion program which includes the following:

   a. Signs at the Turner Landfill and at public locations throughout the wasteshed which promote both the recycling available at the single-material depots in the Morrow Wasteshed and the full-line recycling available in Hermiston.

   b. Information about recycling opportunities available in the Morrow Wasteshed and in Hermiston distributed to local media and community groups on at least a semi-annual basis. This information must include all the information required under OAR 340-60-040(1)(a)(B).

   c. Promotion of recycling in schools in the wasteshed, including using the recycling curriculum provided by the Department.

2. This variance shall be in effect only as long as the Morrow Wasteshed is served only by the existing small rural sites and the Hermiston Landfill.

Sherman Wasteshed:

Based upon the findings in the summation, it is recommended that the Commission grant variances from the requirements of OAR 340-60-040(1)(a) and (2) to the Sherman Wasteshed with the condition that the wasteshed implement an education and promotion program which includes the following:

1. Signs at the county landfill and at public locations throughout the wasteshed which promote both the recycling available at the county landfill and the full-line recycling available in The Dalles.

2. Information about recycling in the Sherman Wasteshed and in The Dalles distributed to local media and community groups on at least a semi-annual basis. This information must include all the information required under OAR 340-60-040(1)(a)(B).

3. Promotion of recycling in schools in the wasteshed, including using the recycling curriculum provided by the Department.

Wasco Wasteshed:

Based upon the findings in the summation, it is recommended that the Commission grant variances from the requirements of OAR 340-60-040(1)(a) and (2) to that portion of Wasco Wasteshed outside of the UGB of The Dalles with the condition that the wasteshed implement an education and promotion program which includes the following:

1. Signs at the small rural sites and at public locations throughout the wasteshed which promote both the recycling available at the North Wasco and Box Canyon Landfills and the full-line recycling centers available in The Dalles.

2. Information about recycling in the wasteshed distributed to local media and community groups on at least a semi-annual basis. This information must include all the information required under OAR 340-60-040(1)(a)(B).

3. Promotion of recycling in schools in the wasteshed, including using the recycling curriculum provided by the Department.

4. Promotion of recycling in schools in the wasteshed, including using the recycling curriculum provided by the Department.

Wheeler Wasteshed:

Based upon the findings in the summation, it is recommended that the Commission grant variances from the requirements of OAR 340-60-040(1)(a) and (2) to the Wheeler Wasteshed with the condition that the wasteshed implement an education and promotion program which includes the following:

1. Signs at the Mitchell and Spray Landfills and at public locations throughout the wasteshed which promote the recycling available at the Fossil Landfill.

2. Information about recycling in the Fossil Landfill distributed to local media and community groups on at least a semi-annual basis. This information must include all the information required under OAR 340-60-040(1)(a)(B).

3. Promotion of recycling in schools in the wasteshed, including using the recycling curriculum provided by the Department.

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

Agenda Item I: Status Report on Yard Debris Recycling in the Portland Metropolitan Area.

When the EQC restricted backyard burning is 1983, they identified yard debris recycling as an alternative disposal method. Since that time, the Department has been working with local governments and private industry to develop yard debris collection and processing programs. In December 1984, the Commission discussed, as a part of the Opportunity to Recycle Act, whether yard debris should be designated as a principal recyclable material in the Portland Wasteshed. A series of information meetings were held, and many issues were identified. Many of these issues have been resolved; however, even after considerable effort by the Department and local government over the past seven years, several major issues have not been resolved.

John Charles, Oregon Environmental Council, told the Commission he felt the Department needed to work more with involved parties to resolve existing issues. He said there were no target dates for closure on the yard debris problem and no incentives existed for further implementation. Mr. Charles said there were too many people who would prefer to do nothing. He proposed that the Department talk with the processors about expanding curbside pick-up capacity.

Commissioner Denecke asked Mr. Charles if OSSI's (Oregon Sanitary Service Institute) written statement, which is made part of this record, is correct in its assumption that the market for yard debris is falling off; Mr. Charles indicated the trend for yard debris was going up.

Chairman Petersen expressed the desire to address this issue as soon as possible. The Commission, by consensus, agreed that a proposed rule should be developed listing yard debris as a principal recyclable material in the Portland metropolitan area and establishing an implementation date. This proposed rule would then become a focal point for testimony and a decision.

Agenda Item I: Proposed Salt Caves Hydroelectric Project:

1. City of Klamath Falls Appeal of the Department's Denial to the Environmental Quality Commission filed September 4, 1987.

2. Northwest Environmental Defense Center, et. al., Cross-Appeal field September 9, 1987.

The City of Klamath Falls has requested a contested case hearing on the Department's denial of the City's 401 certification request. The Northwest Environmental Defense Center has filed a cross-appeal. The City has suggested in their appeal letter that the contested case hearing may be resolved if 401 certification were to be issued subject to higher summertime water flows. The Department believes it is inappropriate for the Commission to consider this proposal. Certification decisions, by law and by Commission rule, are made by the Director.

Additional issues to be addressed by the Commission include appointment of a Hearings Officer, establishment of procedures for the hearing including whether Attorney General Model Rules should be substituted for existing Commission rules, determination of the status of the cross-petition, if the cross petitioners are granted party status, and if the issues they raise should be addressed in the hearing.

George Flitcraft, Mayor of the City of Klamath Falls, told the Commission he had two areas of concern: lack of cooperation and lack of fairness from the Department. He indicated the DEQ has rejected their offers to cooperate in solving the one problem resulting in denial of their 401 certification. The City proposed increased minimum flow releases to meet temperature concerns as soon as they became aware of DEQ's concern. They were upset when DEQ said it did not have time to consider their proposal. The lack of time was a result of DEQ's long delay in starting substantive review on their application.

Mayor Flitcraft indicated that while the City is still willing to cooperate and compromise, it appears DEQ is not. The City would like a certificate issued subject to a condition that they provide flows that will solve the temperature problem. Alternatively, they want DEQ to reconsider its denial and work with the City in solving the temperature problem. However, DEQ will not cooperate and insists the City file a new application. The City does not wish to spend more time and money on a new application and will strongly resist another year-long application process. He urged the Commission to grant the City's request.

Mayor Flitcraft then addressed the fairness issue. The City is concerned that DEQ has shifted the rules the middle of the process. DEQ had no definition of its temperature standard to apply to the City's project until late June 1987. In August when the certification was denied, DEQ changed the standard. Further, DEQ is proposing to change the rules for holding of a contested case hearing. The changes proposed would allow opponents of the project to reopen issues already solved and would be detrimental to the City. He asked the Commission to reject the Department's proposal.

Commissioner Buist asked Mayor Flitcraft whether the City had found DEQ to be cooperative in other areas. Mayor Flitcraft said he had heard the cooperation toward the end of the process was good; however, initially the cooperation was not good.

Cyrus Smith, representing Save Our Klamath Jobs, spoke to the Commission about the history of the Salt Caves project, how it fits into the Oregon Comeback and their frustration with DEQ's denial of their certification request. They expect reasonable cooperation from government, not needless confrontation. Government must be flexible to achieve the Oregon Comeback.

Joseph Riker, III, Planning Director for Klamath Falls, spoke in support of the Salt Caves project. He felt the differences between the Department and City were solvable. He said he had seen the consultant proposals for solving the temperature problem and believes they will meet DEQ concerns. Mr. Riker said DEQ should work with the City toward a mutual goal of approving the project.

Peter Glaser, attorney for Klamath Falls, told the Commission of his frustration with the confrontational position of the Department. He reviewed the reasons for the City's concerns, including that the temperature standard was written for a point source discharge and not for a hydroelectric project. He said they had no clarification from DEQ staff of what the standard would be and how it would be measured until the City received a letter from the department in late June 1987. They did not agree with the Department's interpretation of measurable temperatures and model accuracy. In August, DEQ changed its interpretation of the temperature standard. The City continues to believe the project as originally proposed will comply with the temperature standard; however, they are willing to compromise and release additional water. As soon as the City discovered that DEQ believed there would be a temperature problem, they sent a letter to DEQ saying they were willing to release additional water and asked that a certificate be issued subject to that condition. Unfortunately, that letter came very late in the one-year process since DEQ has delayed substantive review of their application.

Commissioner Denecke asked Mr. Glaser if certification would have been waived based on federal interpretation if the Department had not acted by August 25, 1987. Mr. Glaser indicated that was true but also noted there was an open issue between the Department and the City about whether DEQ action was sufficient to prevent waiver.

Mr. Glaser indicated they believe there is a way to resolve the problem short of the contested case hearing. They have sent a letter to the Department requesting reconsideration of the denial based on their offer to provide additional water flows.

However, DEQ indicated to the City that they must submit a new application. The City questions the necessity of submitting a new application; therefore, they want the certificate issued subject to a condition that the flows be resolved. If the Commission is not willing to issue the certificate at this time, the City wants the Department to work with them and to resolve the problem in a scheduled time.

Mr. Glaser then addressed the NEDC petition for cross-appeal. He expressed the view that the Department's proposals to adopt the Attorney General's Model Rules, treat the NEDC petition as a petition for party status, and consider the other issues raised by NEDC way a method to grant a petition that is without legal or procedural right. He indicated that approval of the Department's proposals would constitute an unfair rule change.

Jeff Rola, representing the Deschutes River Chapter of Trout Unlimited and the Coalition for the Deschutes, told the Commission these groups were not "anti-hydro". However, they did believe that responsible development could provide many benefits to the community and the environment. He agreed with the Department of Fish and Wildlife's recommendation that the Salt Caves project would be a detriment to wild fish production and the fisheries recreation industry in Klamath County. Mr. Rola suggested the City should investigate geothermal technology for industrial development sites.

In response to a request from the Commission, Michael Huston, Assistant Attorney General, reviewed three legal issues related to the Department's recommendation and the City's response. These include: 1) the request to either issue a conditional certification or direct the Department to reconsider the matter; 2) the use of the AG Model Rules versus the existing Commission rules for contested cases; and 3) the matter of party status.

Mr. Huston indicated his office has advised the agency that the Commission does not have the authority to direct the terms of a 401 certificate except within the context of a contested case hearing. He has additional concerns about the Commission reaching the merits of this case at this time. A special statute gives the Director the responsibility of approving or denying a 401 certificate. Through rulemaking, the Commission has allowed a contested case appeal of the Director's decision. Having done this, the Commission should adhere strictly to the contested case process.

With respect to the second issue, Mr. Huston advised that the Commission's contested case rules were primarily designed for enforcement cases and civil penalty matters. Those rules have special provisions that allow the hearings officer to make the final decision. A case only reaches the Commission if the

hearings officer's final order is appealed. The AG Model Rules provide greater flexibility and often a quicker decision in a case such as the Salt Caves 401 Certification appeal. Mr. Huston further indicated that in his experience, the Commission has not used the existing EQC rules when considering other than a normal enforcement/civil penalty case. The Commission has either adopted the Model Rules for the case or reached agreement with the parties to use alternative procedures.

With regard to party status, Mr. Huston stated the AG Model Rules establish a liberal standard for determining whether party status should be granted. The existing EQC rules are not clear on whether intervention by third parties is allowed. The Commission has been very clear that a third party cannot trigger a contested case. However, the Commission has not, to Mr. Huston's knowledge, held that third parties cannot intervene in an existing contested case. The problem in the existing Commission rules has not been confronted since third parties do not typically get involved in civil penalty cases. Finally, Mr. Huston advised that if party status were denied, a possible result would be that the department would be faced with a contested case hearing and a circuit court case being pursued at the same time. Allowing party status would have the potential benefit of placing all the issues in a single forum.

Chairman Petersen asked whether the 401 Certification was the only outstanding state permit or approval for the Salt Caves project. Mr. Huston indicated that at least two significant state processes have not been completed: the Water Appropriation Permit decision by the Department of Water Resources and the Site Certificate decision by the Energy Facility Siting Council. The state also claims ownership of the beds and banks of the Klamath River and must issue a lease before the project can proceed.

Fred Hansen then advised the Commission of the Department's position about the serious charges made by the spokespersons for the City of Klamath Falls. He stated the Department takes total exception with the charges of being uncooperative and changing procedures.

Mr. Hansen briefly reviewed the history of the City's application. The application was filed incomplete on August 25, 1986 since it lacked the land use compatibility statement required by EQC rules. On November 15, 1986, the City petitioned the EQC to waive its rule on application content with respect to the land use compatibility statement. On December 12, 1986, the EQC rejected the petition by the City, and directed the Department to develop a proposed modification to the 401 certification rules, providing an alternative method for an applicant to submit the needed land use information. Such rule modification was developed on a short timeframe. A public hearing on the rule modification

was held at the January 23, 1987, EQC meeting and a rule modification was immediately adopted--a very fast timeframe for development and adoption of a significant rule change. On February 2, 1987, the City filed land use information pursuant to the new rule amendment. Under the procedures of the rule, their application was finally deemed complete for processing on March 10, 1987. On April 2, 1987, the Department issued public notice of the completed application, public hearings were held on May 12, and May 15, and the public comment period closed May 18. Review of the extensive record continued over the next several months. In addition, a number of meetings and discussions were held with the City's consultants. A decision was made on August 19, 1987.

Mr. Hansen noted the Department did not wait until March 10 when the application was deemed "officially complete" to begin review of the documents. Department review began in August 1986 when the application (six to seven volumes) were received. Intensive review began on February 2, 1987, when the City submitted the land use information.

Mr. Hansen then addressed the charges about the Department changing its interpretation of the temperature standard and unwillingness to consider consider an alternative proposal. In meeting with the City's consultants in June, and by letter dated June 26, 1987, the Department made it clear that the applicable temperature standard would be "no measurable increase." Department concerns about temperature were discussed at subsequent meetings with the consultants. The Department was surprised when the applicant's first proposal to increase minimum stream flows for addressing temperature concerns raised in June came by a letter delivered after 5 p.m. on Friday, August 14, 1987, several days before the one-year FERC interpreted deadline for a final decision. This letter did not propose a specific flow level, rather it was indicated that higher flows would be considered and suggested a condition in a certificate to work out flow levels later. The Department contacted FERC to determine if an extension of the one-year deadline could be obtained if DEQ and the City agreed. FERC's response was "absolutely not." Based on this response and on the City's position that no part of their August 14, 1987, letter would preclude any assertion by the City of other legal rights in the future, the Department had no choice but to deny certification.

Shortly after the denial letter was issued, the Department met with Mr. Glaser and representatives of the City. The Department discussed whether it would accept re-application and the process and timetable for acting on a revised application. DEQ advised the City that if the revised application only modified the minimum stream flow and did not change other project conditions, department review would focus on temperature and could be completed within 90 days unless unforeseen circumstances arise.

Mr. Hansen stressed that the department believes it is the responsibility of the applicant to submit the project proposal. Since any modification of a project to address an environmental concern may have impacts on other areas of the project, the applicant must be responsible for proposing changes.

Mr. Hansen advised the Commission that he would like to respond to specific charges about the interpretation and application of the temperature standard; however, legal counsel had advised those were substantive issues that should only be addressed in the contested case proceeding.

Commissioner Buist stated the information provided by Mr. Hansen answered her questions about department cooperation.

Roy Elicker, staff attorney for the National Wildlife Federation, was present to represent that organization and the Oregon Wildlife Federation. He indicated that the responses by Mr. Huston and Mr. Hansen had clarified the issues for the Commission, and he agreed with their statements and with the staff analysis. He expressed the view that the Commission and Department were doing a good job and carrying out the public's wishes. He advised that Mr. Karl Anuta, who filed the petition for cross-appeal on behalf of NEDC and other environmental organizations could not be present. As a representative of one of those environmental organizations, Mr. Elicker further requested that the NEDC cross-appeal be treated as a motion for intervention. He urged the Commission to adopt the Director's recommendation.

Molly Holt, representing NEDC and the Sierra Club, also stated that the EQC was carrying out the public's interest. She further stated that DEQ had always been cooperative and fair. She urged the Commission to adopt the AG Model Rules to ensure a full and fair hearing occurs.

John Putnam, representing Save Our Klamath Jobs, advised the Commission that the City of Klamath Falls Salt Caves Project was not funding the cost of citizen attendance at the EQC meeting. He further indicated there had been no fisherman on the section of the Klamath River where the Salt Caves Project would be located all summer.

Mr. Glaser requested the opportunity to respond to comments made by Mr. Hansen. Chairman Petersen indicated he was unwilling to open the matter for such responses unless the Commission voted to do so.

Commissioner Brill expressed concern about adopting the AG Model Rules. Chairman Petersen indicated he initially shared the same view; however, he concluded the contested case rules do not go

into effect until there is a contested case hearing. Since the hearing has not commenced, no one in this matter has been operating under the contested case rules and adopting the Model Rules would not change rules. Mr. Huston agreed with the Chairman and further noted that the party issue will have to be addressed regardless of the rules the Commission follows.

Chairman Petersen expressed the view that the 401 certification process is a unique component of federal law and is different from other issues the Commission has been involved with. He stated his belief that 401 certification is the Director's decision and the Commission should not be involved outside the contested case process. He also stated it is in the public's interest to have the opportunity to participate in this decision since so many people are interested in the project.

DIRECTOR'S RECOMMENDATION: Based on the discussion in the staff report, the Director recommends that the Commission:

1. Reject the request by the City of Klamath Falls to consider the issuance of 401 certification subject to increased summertime flows because it is inappropriate for the Commission to consider the matter outside the pending contested case hearing.

2. Authorize the Chairman to appoint a Hearings Officer to preside over the Contested Case Hearing requested by the City of Klamath Falls regarding the Director's denial of 401 Certification for the proposed Salt Caves Hydroelectric Project.

3. Adopt Attachment D which would adopt the Attorney General's Model Rules for Contested Case Hearings in lieu of the Commissions existing contested case procedural rules, to apply to the contested case hearing on the Director's decision to deny 401 certification on the proposed Salt Caves Hydroelectric Project, and instruct the Department to file Attachment D with the Secretary of State in the manner provided by ORS 183.355.

4. Recognize the petition of NEDC, et. al., as a petition for party status in the contested case hearing and grant the petitioners party status.

5. Authorize expansion of the scope of the contested case hearing to include the additional issues raised by NEDC in its petition for party status.

ACTION:

It was MOVED by Commissioner Buist, seconded by Commissioner Denecke and passed unanimously that Director's recommendation No. 1 be approved.

It was MOVED by Commissioner Denecke, seconded by Commissioner Buist and passed unanimously that Director's recommendation No. 2 be approved.

It was MOVED by Commissioner Denecke, seconded by Commissioner Buist and passed three to one, with Commissioner Brill voting NO, that Director's recommendation No. 3 be approved.

Commissioner Denecke suggested that the determinations in Director's recommendations 4 and 5 be left to the Hearings Officer. Commissioner Buist MOVED that Director's recommendation No. 5 be approved. That motion died for lack of a second. Therefore, these issues are left to the Hearings Officer to decide. In further discussion, the Commission, by consensus, agreed that the Chairman could appoint either himself or another Commission member as a joint Hearings Officer to assure that ruling on critical motions and petitions reflected the concern of the members that the hearing fully address the issues.

Chairman Petersen announced that today was Commissioner Buist's last meeting since her term as commissioner had ended. He thanked her on behalf of all the Commission for her contribution to the meetings, her insightful comments on technical issues, her sense of humor, and her service as an outstanding commissioner.

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

Statement on Salt Caves

Members of the Commission. It seems to me, first, that there are two types of issues that have been raised by the City and spokespeople on behalf of the City. Those are:

1) Very serious charges that I take total exception with in terms of whether or not the Department has been cooperative and what the procedures have been--that the Department has been employing within this issue.

2) Are what I would consider the substantive issues that are at issue here. Those substantive issues are the applicability of the temperature standard that is currently within the rules to hydro projects and secondly, the temperature standard--what it means, what is the degree of accuracy, and so on. The council has advised that those issues, those last two issues are substantive issues that should probably be addressed within the contested case hearing. I will then not address those two in my responses, though I think that they need response, unless so asked by you.

Let me then address, if I may, the procedural process and the issue of whether or not there has been cooperation. We, the Department have--as with all applicants, been working to be able to resolve whatever issues have been outstanding to be able to work within the context. The process began on August 25, 1986, in terms of Salt Caves II, with an application that was submitted to us. At that time the information, though most of the project information was there, one of the requirements of our rules which was not there was the land use requirement as provided for within the rules. The applicant petitioned you for a waiver of those rules on November 15, 1986, and asked to be able to have that issue resolved.

At your December 12, 1986 meeting, you rejected that petition by the City, and in fact in turn directed the Department to be able to return with a modified rule in the 4-1 area--to be able to provide basically an alternative to providing the actual land use compatibiity statement but to be able to provide that there would be a certain amount of time in which that information could be supplied. If it were not to be supplied, that the Department could proceed with review.

You, at the December 12 meeting, directed that we develop such a rule. We developed that on a very, very fast track, brought it back at the public hearings and brought it to you, and it was adopted by you on February 2, 1987--again a very fast time frame for that kind of very substantial rule-making procedure. (Pardon me, it was on January 3 that you adopted that rule).

On February 2, 1987, the City of Klamath Falls submitted the necessary land use information provided for under that new rule. Under the procedures, we deemed that application complete on March 10, 1987. Now, let me first stress that we did not wait until March 10 to begin review of the application. Our six to seven volumes, about three inches thick (each volume)--that information was being reviewed from that date it was submitted in August, 1986. We internally began our formal intensive review at the date, February 2, when the City submitted their land use compatibility statement though it was not yet formally deemed a completed application.

The procedural steps after that were, after our review, we ended up on April 2 of 1987 taking it out on public notice. We held public hearings

in two parts of the state on May 12 and May 15. Comment period closed on May 18. We then ended up going through substantial review of a very extensive record for the next several months, including a substantial amount of meetings and discussions with the consultants for the project.

In short, it seems to me that there is no question but that the cooperative effort throughout that period was there.

Let me address some of the other specific issues:

First off--we on August 14, slightly after 5 p.m., when in fact - that Friday afternoon, we received a letter from the City consultants on behalf of the City indicating that they wanted to be able to have the certificate issued if we were in fact going to deny on the basis of temperature, that we would in fact, instead of doing that, issue a certificate that had language similar to a condition that would just say there would have to be sufficient flows necessary to be able to maintain temperatures that were required--not a specific amount of flow-- but rather the requirement that it would be maintained at some level.

The concern that we had is that as of meetings through June and very explicitly in the letter from Administrator Nichols on June 26, we had made clear what our requirements were for the temperature standard and what in fact had to be maintained--that is no measureable increase. That information did not come as a surprise to the applicant. The applicant throughout the day, and most every speaker has expressed profound frustration for why the Department did not address these issues earlier.

Very frankly, from our perspective, we expressed profound frustration of not only why, as we expressed concerns about temperature all the way throughout our review through, formally in June, but even during those other discussions with the consultants, that instead of being able to try to address that issue and to address additional flows, not until the eleventh and one-half hours on August 14 at 5:p.m. did we receive a letter even indicating that there was a willingness to be able to discuss that issue.

On August 14, when in fact we needed to be able to make a decision by August 24; that is, one year after the date of submission--or thereby allow for waiver of the application, we were faced with the question of how do we proceed? Do we take into account this--can we address the issue?

Our first request, a request that I made specifically of staff was to ask the Federal Energy Regulatory Commission if in fact we could reach an agreement with the City for a voluntary extension of the one year deadline, both parties agreeing, and at that time we had not contacted the City regarding this. If we could have reached such an agreement, would FERC be willing to recognize that, particularly in light of their most recent rulemaking. FERC's response was "absolutely not." They felt their rule would not allow for recognition of any voluntary agreement between the parties; and, consequently, we felt that there was in fact no ability to go past the August 24 date without the danger that in fact it would be deemed waived. In fact explicitly within the August 14 letter from the City, they indicated their willingness to be able to work at additional flows that nothing within that letter would in fact preclude any assertion of other legal rights in the future. Certainly, for us, that if in fact

we passed that 24th date that we would in fact see the City asserting the fact that the waiver had actually taken place.

We met shortly thereafter (after the 14th) after we had denied - which we did then the next Wednesday - with the City and their consultants and with Mr. Glazer, and again I am somewhat puzzled and troubled by the fact that what was represented by me and our staff to them at that meeting is not reflected in their comments before you today. We specifically looked at the issue of whether or not we could in fact consider a re-application and under what conditions would such a re-application be considered. We said that barring unforeseen circumstances, which of course we could not project, that we would expect that we would be able to render an opinion on a re-submittal of an application assuming it dealt solely with the issue of additional flows. Not with the reconfiguration of the rest of the project, and thereby requiring additional work. That we would be able to evaluate that project within the current rule requirement of 90 days, barring unforeseen circumstances.

Number 2 - that we had indicated that although we would have to work to be certain that on the other issues that unless there was something in the project modification that would be submitted that would in fact require us or lead us to believe that our findings on the other areas of water quality standards and compliance with those water quality standards that we would not be re-doing additional analysis other than insofar as the additional flows would require us to be able to make such an analysis atain again to insure water quality assurance. So that the issue of whether or not all the work that had to be done would have to be done again, and chose our analysis, or take great lengths of time, our best reading and

what we had certainly expressed to the City at that time was that no, assuming that the project had not changed in a technical fashion, that would in fact allow us or require us to be able to look at that differently.

Again, let me stress that Mr. Glazer in his letter to you says, "In retrospect, it can be seen that the Department's delay prevented it from cooperating with the City and identifying the proper flow within the one year." As I have outlined to you, we have identified to you early on that there were problems with the temperature, and that in fact instead of addressing those problems, we did not find out until the very last minute from the City that they were even willing to. Rather, what we certainly felt was that they were being not responsive to that issue.

Secondly, let me stress on behalf of the Department that it is not our responsibility, we do not believe, to be able to do the job of the consultant to the project. We are not there to redesign a project and have potential impacts well beyond that which may address water quality issues, but may in fact frustrate other issues or other concerns of the City.

Now, I think there are very significant issues that have been raised relative to the applicability of temperature standards of hydro projects and the temperature increase. I feel frustrated not to be able to respond to those, but I do believe those are most appropriate for a contested case process. But let me not leave the impression that we do not have very strong responses to those issues.

MINUTES ARE NOT FINAL UNTIL APPROVED BY THE EQC

ENVIRONMENTAL QUALITY COMMISSION

Minutes of the One Hundred Eighty-Second Meeting
August 28, 1987

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

Commission Members Present:

Arno Denecke, Vice Chairman
Mary Bishop
Wallace Brill
Sonia Buist

James Petersen, Chairman, was absent.

Department of Environmental Quality Staff present:

Director, Fred Hansen
Assistant Attorney General, Michael Huston
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, advised the Commission that he has been asked to talk at the Oregon Environmental Council retreat on September 19, 1987, on the topic "Life After the Legislature: How to Affect the Public Policy Process". OEC is interested in improving their effectiveness in influencing and providing information to Boards and Commissions. To assist in preparing his presentation, Stan asked the Commission for their views about how citizens and environmental groups can more effectively discuss issues with agencies and policy boards.

  The Commission expressed the view that written material was more desirable than a telephone call. Written material should be concise and brief and visual aids are helpful. The Commission said that an antagonistic tone toward the Department and Commission tends to close off communication and is counterproductive.

- Ron Householder, Acting Administrator for the Air Quality Division, gave the Commission a brief update on the Smoke Management Plan. Mr. Householder told the Commission that while the field burning season started quickly, field burning had slowed significantly due to weather conditions.

  The smoke management plan was recently modified to restrict burning on weekends if smoke would contribute to visibility impairment in wilderness areas in the Cascades. If the Director declares an emergency, weekend burning may be allowed subject to conditions even if smoke intrusion occurs into the cascades.

Growers are feeling the pressure of being behind the normal schedule of burning and are afraid they will not be able to burn this year. They have been representing the situation as a ban on weekend burning. They are asking the director to declare an emergency and allow weekend burning, including on the upcoming Labor Day weekend.

The Commission expressed a reluctance to have any exceptions granted for weekend burning through the Labor Day holiday weekend.

Commissioner Buist asked Mr. Householder if any results had been published from the coastal study of test burns of slash from forested areas where herbicides had been sprayed. Alan Hose, Administrator of the Environmental Quality Laboratory, said that no herbicides had been found during Phase I of the study. Mr. Hose indicated that Phase II of the study, to be completed this summer, will include preparation of a report presenting the finalized results. Commissioner Buist asked that the Department notify the State Health Division of the study findings.

- The Commission also considered an additional item of action not included on the agenda. The item, Request for Authorization to Hold Public Hearings for the Assessment Deferral Loan Program Revolving Fund, resulted from the passage of Senate Bill 878. The department is on a tight schedule to implement this legislation. Rules must be drafted and adopted. Rules must also be reviewed by the Legislative Emergency Board before implementation. In order to meet the needs of this legislation, the Department is requesting Commission authorization to proceed to a rulemaking hearing even thought a draft of the proposed rules is not complete yet.

DIRECTOR'S RECOMMENDATION: It is recommended the Commission authorize the Department to proceed to rulemaking for the purpose of implementing Senate Bill 878.

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

- Fred Hansen, Director, informed the Commission that a special EQC meeting needs to be scheduled in late September or early October. The purpose of the meeting will be to consider Judge Howell's recommendation on the contested case hearing on the Bacona Landfill site selection. It was decided that the special meeting should be held during the week of September 28 through October 2.

- The Commission received a copy of the Department's 1987-89 budget. Lydia Taylor, Administrator of the Management Services Division, explained how the budget reflected 115 new positions and approximately $ 14 million additional dollars compared to last biennium. Relative funding sources for the budget are approximately:

  25% General Funds
  25% Federal Funds
  50% Fee Revenues

  The Commission requested that a budget summary be sent to them.

FORMAL MEETING

The regular meeting was called to order by Vice Chairman Denecke.

CONSENT ITEMS

Agenda Item A: Minutes of the July 17, 1987, EQC meeting.

Commissioner Buist indicated that page 2 of the her statement on Agenda Item J, July 17 EQC meeting, was incorrect. Line 8 of page 2 should read:

> The evidence is reasonably good that children whose parents smoke have increased risks, have an increased number of respiratory infections and certainly increased respiratory symptoms and perhaps have a slight decrease in their rate of lung growth.

> ACTION: It was MOVED by Commissioner Buist, seconded by Commissioner Bishop and passed that the minutes of July 17 meeting be approved as corrected. Commissioner Brill abstained from voting because he was not present at the July 7 meeting.

Agenda Item B: Monthly Activity Report for June 1987.

Commissioner Denecke asked Michael Huston, Assistant Attorney General, about the status of the McInnis cases. Mr. Huston advised that an October trial date has been set for the criminal case. It is the District Attorney's hope that no slippage will occur in this trial date; however, the Multnomah County docket is quite full.

> ACTION: It was MOVED by Commissioner Bishop, seconded by Commissioner Buist and passed unanimously that the June 1987 activity report be approved.

Agenda Item C: Tax Credits.

Commissioner Brill asked if tax credits could be issued when equipment is replaced. Maggie Conley, Intergovernmental

Coordinator, indicated that like-for-like replacement of previously certified pollution control facilities is not eligible for tax credit. However, if the Department requires additional equipment due to new standards, a tax credit could be approved.

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

1. Issue tax credit certificates for pollution control facilities:

   T-1881, Portland General Electric, Riverview Substation; Oil spill control system
   T-1882, Portland General Electric, North Fork Hydroelectric Plant; Oil spill control system
   T-1886, Les Schwab Warehouse Center, Inc.; Resource recovery facility
   T-2069, Marwyn Naegeli; Manure holding facility

2. Revoke Pollution Control Facility Certificate No. 1080 issued to Naumes Orchards of Oregon, Incorporated, and reissue to Wild River Orchards, Incorporated.

PUBLIC FORUM

No public forum testimony was given.

ACTION AND INFORMATIONAL ITEMS

Agenda Item D: Request for Authorization to Conduct a Public Hearing Concerning Proposed Amendments to the Hazardous Waste Management Rules, OAR Chapter 340, Division 100, 102 and 104.

In 1976, Congress passed the Resource Conservation and Recovery Act (RCRA). In November 1984, the Hazardous and Solid Waste Amendments of 1984 (HSWA) became law. These amendments require

extensive changes to the basic RCRA program to be implemented during the period between November 1984 and May 1990. On January 31, 1986, EPA granted the State of Oregon Final Authorization to manage the base RCRA program that existed prior to the HSWA amendments. To maintain authorization, the state was required to modify its laws and rules to be consistent with the HSWA amendments and implementing regulations. The 1987 Oregon legislature passed SB 116 which enables the state to comply with the federal HSWA provisions.

This agenda item is the second in a series of proposed rulemakings which the Department has scheduled over the next two years to comply with the HSWA amendments. The goal of the Department is to operate an equivalent program to the federal program.

> DIRECTOR'S RECOMMENDATION: Based upon the report summation, it is recommended the Commission authorize the Department to conduct a public hearing, to take testimony on these proposed amendments to the hazardous waste management rules, OAR Chapter 340, Divisions 100, 102 and 104.
>
> ACTION: It was MOVED by Commissioner Buist, seconded by Commissioner Bishop and passed unanimously that the Director's recommendation be approved.

Commissioner Denecke asked if hazardous waste fuel could be burned in industrial boilers. Mike Downs, Administrator of the Hazardous and Solid Waste Division, responded that hazardous waste fuel was prohibited for use in commercial boilers (apartment houses, schools, public buildings, etc.) that are generally located closer to people and are not as carefully operated. Use is allowed under controlled conditions in industrial boilers which are usually located in less populated areas, have better emission control equipment installed and are more carefully operated.

Agenda Item E: Request for Authorization to Hold a Public Hearing on Proposed Redesignation of the Salem Area as Attainment for Ozone and Proposed Revision of the State Implementation Plan.

The Clean Air Act of 1977 required states to submit plans for achieving attainment with national ambient air standards. The Salem area was designated nonattainment for ozone in June 1979. The Environmental Quality Commission adopted an ozone control strategy for the Salem nonattainment area in June 1979. The strategy was added to the State Implementation Plan in 1980. Ambient ozone levels in the Salem area have improved significantly. No violations of the standard have been recorded since 1981. It therefore appears appropriate to redesignate the Salem are as attainment for ozone.

DIRECTOR'S RECOMMENDATION: Based on the staff report summation, it is recommended the Commission authorize a public hearing to take testimony on:

1. The proposed redesignation of the Salem area as attainment for ozone.

2. The proposed replacement of the Salem ozone attainment strategy (Section 4.5 of the State Implementation Plan) with an ozone maintenance strategy as a revision to the State Implementation Plan.

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

Commissioner Bishop asked about the status of ozone standard compliance in the Portland area. Merlyn Hough, Air Quality Division, responded that the Portland area is designated non-attainment for ozone. Discussions are ongoing with EPA regarding the potential acceptability of designating Portland to be in compliance with the standard.

Agenda Item F: Proposed Adoption of Amendments to the Water Quality Standards Regulation, OAR 340, Chapter 41: Mixing Zone

Policy, Toxic Substances Standards, and Total Dissolved Solids Standards.

This item proposes adoption of amendments to Oregon's water quality standards. This item was initially presented to the Commission for adoption at the July 17 meeting in Coos Bay. At the request of the Northwest Pulp and Paper Association (NWPPA), consideration of the item was delayed to allow them time to review the Department's recommendations. The Department has met with NWPPA representatives and discussed the agenda item.

Douglas Morrison, Northwest Pulp and Paper Association, sent a letter to the Commission about this agenda item. The letter, which is made a part of the record of this meeting, stated that NWPPA was satisfied with the proposed rule and supported the rule adoption. Director Hansen indicated to the Commission that the NWPPA letter did not fully reflect the discussions staff had had with NWPPA. Vice Chairman Denecke asked that a memorandum about the discussions be included in the Department's files.

Director Hansen indicated that Table 20 in the proposed rule amendments included values for several parameters for which water quality standards have already been adopted in other sections of OAR Chapter 340, Division 41. These parameters are: Bacteria, gasses (total dissolved), Oil and grease, oxygen (dissolved), pH, solids (dissolved and salinity), solids (dissolved and turbidity), and temperature. To avoid confusion, it was recommended that these parameters be deleted from Table 20. In addition, since the Department is in the process of conducting an evaluation of color as recommended by the Commission at the July 17 EQC meeting, it was recommended that the color criteria be deleted from Table 20. A revised copy of Table 20 with these 9 parameters deleted was provided to the Commission.

DIRECTOR'S RECOMMENDATION: Based upon the staff report summation, it is recommended the Commission adopt the final rule language as presented in:

1. Attachment A for the Mixing Zone Policy.

2. Attachment B for the Toxic Substances Standards.

3. Attachment C for the Total Dissolved Solids Standards.

ACTION: It was MOVED by Commissioner Buist, seconded by Commissioner Bishop and passed unanimously that the Director's recommendation in the staff report be approved with substitution of the revised Table 20 as recommended by the Director.

Agenda Item G: Appeal by Frank and Sandra Brown of On-Site Sewage Disposal System Variance Denial.

Frank and Sandra Brown have appealed the decision by the Department's variance officer to deny their application for a variance from Commission rules regarding installation of an on-site sewage disposal system. System deficiencies identified by Clackamas County were not corrected. The Browns installed the system using materials not allowed by EQC rules, and failed to follow procedures in the rules and obtain proper inspections. The system was placed into operation without final approval. The system appears to be functioning properly at this time. They have substantial land available, and the soils appear suitable.

In order to grant a variance, the Commission must find that strict compliance with the rules is inappropriate for cause, or that special physical conditions render strict compliance unreasonable, burdensome, or impractical. The department concluded that questions of materials should be more properly addressed through a rule change. The department further found no basis to conclude that the standard of unreasonable, burdensome, or impractical was met. Therefore, a variance in this situation is inappropriate.

DIRECTOR'S RECOMMENDATION: Based on the staff report summation , it is recommended the Commission uphold the decision to deny Frank and Sandra Brown's proposal to vary

from materials standards OAR 340-71-130(7), OAR 340-71-220(10), OAR 340-71-220(11), Or 340-71-220(12), and construction standards in OAR 340-71-175(4), OAR 340-71-175(5), OAR 340-71-175(6).

Mrs. Brown appeared to represent herself in this matter. She indicated that cost is the issue. She further indicated that they installed the system themselves, and put in the materials they were sold. They covered the system because it was raining and they needed to get the equipment out before it got too muddy. She stated the system is working effectively and they agree to replace the system if problems occur in the future. She believes that reconstruction of the system now is unreasonable and unduly burdensome.

Commissioner Denecke recapped the facts from the staff report and noted that Mr. and Mrs. Brown appeared to have ample opportunity to comply with the rules but seemed to make no effort to do so. Commissioner Bishop expressed the view that use of a variance in this case was inappropriate.

ACTION: It was MOVED by Commissioner Bishop, seconded by Commissioner Buist and passed unanimously that the variance officer's decision be upheld and that the appeal be denied.

There was no further business, and the meeting was adjourned at approximately 10 a.m.

NEIL GOLDSCHMIDT
GOVERNOR

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, October 9, 1987, EQC Meeting

July and August 1987 Program Activity Report

Discussion

Attached is the July and August, 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

C.Nuttall:p
MD26
229-6484
Attachment

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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

C.Nuttall:p
MD26
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Attachment

DEPARTMENT OF ENVIRONMENTAL QUALITY

Monthly Activity Report

July and August, 1987

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Listing of Plan Actions Completed	6	27
Summary of Permit Actions	*	*
Listing of Permit Actions Completed	8	29
Hazardous and Solid Waste Management Division		
Summary of Plan Actions	1	1
Summary of Hazardous Waste Program Activities	10	31
Summary of Solid Waste Permit Actions	10A	31A
Listing of Solid Waste Permit Actions Completed	11	32
List of Plan Actions Completed	12	35
Listing of Hazardous Waste Disposal Requests	13	36
Noise Control Section		
Summary of Noise Control Actions	16	38
Listing of Noise Control Actions Completed	17	39
Enforcement Section		
Civil Penalties Assessed	19	40
Hearings Section		
Contested Case Log	21	41

*Figures not available

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

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

July and August, 1987
(Month and Year)

SUMMARY OF PLAN ACTIONS

	Plans Received		Plans Approved		Plans Disapproved		Plans
	Month	FY	Month	FY	Month	FY	Pending
Air							
Direct Sources	16	16	15	15	0	0	17
Small Gasoline Storage Tanks Vapor Controls	-	-	-	-	-	0	-
Total	16	16	15	15	0	0	17
Water							
Municipal	18	18	14	14	0	0	45
Industrial	14	14	16	16	0	0	6
Total	32	32	30	30	0	0	51
Solid Waste							
Gen. Refuse	7	7	-	-	-	-	26
Demolition	-	-	-	-	-	-	2
Industrial	-	-	1	1	-	-	10
Sludge	-	-	-	-	-	-	1
Total	7	7	1	1	0	0	39
GRAND TOTAL	55	55	46	46	0	0	107

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION

MONTHLY ACTIVITY REPORT

DIRECT SOURCES
PLAN ACTIONS COMPLETED

Permit Number	Source Name	County		Date Scheduled	Action Description	Date Achieved
09 0002	WILLAMETTE INDUSTRIES	DESCHUTES	01	06/16/87	COMPLETED-APRVD	06/25/87
10 0025	ROSEBURG FOREST PRODUCTS	DOUGLAS	01	12/08/86	COMPLETED-APRVD	07/24/87
10 0078	ROSEBURG FOREST PRODUCTS	DOUGLAS	01	11/13/86	COMPLETED-APRVD	07/24/87
15 0010	DOUBLE DEE LUMBER COMPANY	JACKSON	01	05/11/87	COMPLETED-CNCLD	07/14/87
18 0074	KLAMATH PACIFIC CORP	KLAMATH	01	07/16/87	COMPLETED-APRVD	07/16/87
20 5808	NEWOOD PRODUCTS OF OR INC	LANE	01	05/14/87	COMPLETED-APRVD	07/07/87
22 0547	TELEDYNE WAH CHANG ALBANY	LINN	01	04/21/87	COMPLETED-APRVD	06/25/87
22 3501	POPE & TALBOT PULP, INC	LINN	01	06/16/87	COMPLETED-APRVD	07/20/87
26 1865	GILMORE STEEL CORPORATION	MULTNOMAH	01	05/26/87	COMPLETED-APRVD	07/17/87

TOTAL NUMBER QUICK LOOK REPORT LINES 9

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Air Quality Division (Reporting Unit) — July 1987 (Month and Year)

SUMMARY OF AIR PERMIT ACTIONS

	Permit Actions Received Month	Permit Actions Received FY	Permit Actions Completed Month	Permit Actions Completed FY	Permit Actions Pending	Sources Under Permits	Sources Reqr'g Permits
Direct Sources							
New	4	4	6	6	18		
Existing	0	0	2	2	6		
Renewals	8	8	2	2	52		
Modifications	6	6	11	11	12		
Total	18	18	21	21	88	1398	1422
Indirect Sources							
New	0	0	0	0	5		
Existing	0	0	0	0	0		
Renewals	0	0	0	0	0		
Modifications	1	1	0	0	1		
Total	1	1	0	0	6	271	276
GRAND TOTALS	25	247	18	290	95	1669	1700

Number of Pending Permits	Comments
12	To be reviewed by Northwest Region
14	To be reviewed by Willamette Valley Region
4	To be reviewed by Southwest Region
1	To be reviewed by Central Region
0	To be reviewed by Eastern Region
26	To be reviewed by Program Operations Section
22	Awaiting Public Notice
9	Awaiting end of 30-day Public Notice Period
88	

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AA5323

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION

MONTHLY ACTIVITY REPORT

DIRECT SOURCES
PERMITS ISSUED

Permit Number	Source Name	County Name	Appl. Rcvd.	Status	Date Achvd.	Type Appl.
05 2085	ARMSTRONG WORLD IND INC	COLUMBIA	06/23/87	PERMIT ISSUED	07/01/87	MOD
05 2581	OREGON NATURAL GAS CORP.	COLUMBIA	02/10/87	PERMIT ISSUED	07/09/87	NEW
05 2593	SCAPPOOSE SAND & GRAVEL	COLUMBIA	03/12/87	PERMIT ISSUED	07/09/87	NEW
09 0001	DAW FOREST PRODUCTS CO	DESCHUTES	04/14/87	PERMIT ISSUED	07/01/87	MOD
09 0015	BEND MILLWORK SYSTEMS INC	DESCHUTES	06/12/87	PERMIT ISSUED	07/09/87	MOD
09 0085	KKRP CUTSTOCK	DESCHUTES	11/14/86	PERMIT ISSUED	06/30/87	EXT
14 0027	CASCADE WOOD COMPONENTS	HOOD RIVER	06/16/86	PERMIT ISSUED	06/30/87	EXT
18 0073	CRATER LAKE LUMBER CO.	KLAMATH	07/08/87	PERMIT ISSUED	07/16/87	MOD
21 0011	WHEELER MANUFACTURING CO	LINCOLN	06/19/87	PERMIT ISSUED	07/01/87	MOD
22 3501	POPE & TALBOT PULP, INC	LINN	04/29/85	PERMIT ISSUED	07/24/87	RNW
24 5835	OREGON STATE CORRECTIONAL	MARION	04/14/87	PERMIT ISSUED	06/30/87	MOD
24 9044	WOODBURN FOODS CORPORATIN	MARION	06/25/87	PERMIT ISSUED	07/09/87	MOD
26 1891	ASH GROVE CEMENT WEST INC	MULTNOMAH	03/19/87	PERMIT ISSUED	07/01/87	MOD
26 2965	LONE STAR INDUSTRIES INC	MULTNOMAH	04/22/87	PERMIT ISSUED	06/30/87	MOD
26 3135	BULLSEYE GLASS CO	MULTNOMAH	04/29/87	PERMIT ISSUED	07/16/87	MOD
27 8009	AGRIPAC, INC.	POLK	01/05/87	PERMIT ISSUED	07/09/87	RNW
30 0103	HUMBERT ASPHALTING	UMATILLA	03/09/87	PERMIT ISSUED	07/09/87	NEW
34 2670	LEAR SIEGLER PEERLESS DIV	WASHINGTON	00/00/00	PERMIT ISSUED	07/16/87	MOD
37 0368	HUMBERT ENTERPRISES INC	PORT.SOURCE	03/26/87	PERMIT ISSUED	07/09/87	NEW
37 0370	NORTH CENTRAL CONST INC	PORT.SOURCE	05/04/87	PERMIT ISSUED	07/09/87	NEW
37 0373	NORTH CENTRAL CONST INC	PORT.SOURCE	05/04/87	PERMIT ISSUED	07/09/87	NEW

TOTAL NUMBER QUICK LOOK REPORT LINES 21

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Air Quality Division (Reporting Unit) — July 1987 (Month and Year)

PERMIT ACTIONS COMPLETED

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

Indirect Sources

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AA5324

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Water Quality (Reporting Unit) — July 1987 (Month and Year)

PLAN ACTIONS COMPLETED - 16

County	Name of Source/Project /Site and Type of Same	Date of Action	Action
MUNICIPAL WASTE SOURCES - 8			
Baker	Huntington Sewer Improvements - Phase II	8-10-87	Provisional Approval
Curry	Brookings Brook-Haven PUD	8-10-87	Provisional Approval
Deschutes	LaPine Special Sewer Dist. Collecton, Lagoon and Irrigation 100,000 gpd	8-11-87	Provisional Approval
Tillamook	NTCSA Nehalem Bayshore Estates, Phase 1	8-10-87	Provisional Approval
Linn	Halsey Weaver Sewer Line and Pump Station	8-10-87	Provisional Approval
Coos	Bandon Outfall Extension	7-31-87	Provisional Approval
Deschutes	Mt. Bachelor - Main Lodge Septic Tank - Drainfields 60,000 gpd	8-1-87	Comment to Engineer
Morrow	Irrigon Collection & Disposal 120,000 gpd	8-13-87	Provisional Approval

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Water Quality Division (Reporting Unit) — July 1987 (Month and Year)

PLAN ACTIONS COMPLETED - 16

County	Name of Source/Project /Site and Type of Same	Date of Action	Action
INDUSTRIAL WASTE SOURCES - 8			
Linn	Willamette Industries Mud Lagoon (Lime)	7-17-87	Approved
Multnomah	McCormick & Baxter Concrete Drip Pads & Roof	7-31-87	Approved
Columbia	Olympic Forest Products Oil/Water Separator	6-15-87	Approved
Wasco	Union Pacific Railroad Phase III Groundwater Work	6-8-87	Approved
Yamhill	Environmental Pacific Corp. Scaling Conrete Floor	7-31-87	Approved
Clackamas	Consolidated Rock Products Wastewater Treatment/Storage System	7-8-87	Approved
Tillamook	William Goodman Manure Control Facility	7-15-87	Approved
Columbia	Boise Cascade, St. Helens River and Groundwater Monitoring Well	7-23-87	Approved

CAT	PERMIT NUMBER	TYPE	SUB-TYPE	OR NUMBER	FACILITY	FACILITY NAME	CITY	COUNTY/REGION	DATE ISSUED	DATE EXPIRES
General: Suction Dredges										
IND	700	GEN07	NEW		102893/A	DAWSON, DAVID ERNEST		JACKSON/SWR	13-JUL-87	31-JUL-91
IND	700	GEN07	NEW		102896/A	GERTZ, E.W.		MOBILE SRC/ALL	14-JUL-87	31-JUL-91
IND	700	GEN07	NEW		102897/A	CRAPO, JERRY W. & JEFFREY S.		JACKSON/SWR	14-JUL-87	31-JUL-91
IND	700	GEN07	NEW		102904/A	BRITTON, JIM & DAVE		MOBILE SRC/ALL	27-JUL-87	31-JUL-91
NPDES										
DOM	100352	NPDES	RWO	OR002272-1	4475/A	AUMSVILLE, CITY OF	AUMSVILLE	MARION/WVR	24-JUL-87	30-JUN-92
DOM	100353	NPDES	RWO	OR002779-1	34136/A	GOVERNMENT CAMP SANITARY DISTRICT	GOVERNMENT CAMP	CLACKAMAS/NWR	24-JUL-87	30-APR-92
DOM	100355	NPDES	RWO	OR002082-6	74319/A	REEDSPORT, CITY OF	REEDSPORT	DOUGLAS/SWR	24-JUL-87	31-MAR-92
DOM	100356	NPDES	RWO	OR002330-2	75825/A	ROCKAWAY BEACH, CITY OF	ROCKAWAY	TILLAMOOK/NWR	24-JUL-87	30-JUN-92
DOM	100357	NPDES	RWO	OR002956-4	73705/A	ANDERSON, ARTHUR; HANSEN, DAVID; NEWELL, CHARLES; TUCKER,ROBERT	RICE HILL	DOUGLAS/SWR	24-JUL-87	31-JUL-92
DOM	100358	NPDES	RWO	OR002063-0	75227/A	RIDDLE, CITY OF	RIDDLE	DOUGLAS/SWR	24-JUL-87	30-JUN-92
DOM	100359	NPDES	RWO	OR002059-1	40494/A	HUBBARD, CITY OF	HUBBARD	MARION/WVR	24-JUL-87	31-MAR-92
DOM	100360	NPDES	RWO	OR002835-5	29920/A	JOSEPHINE COUNTY SCHOOL DISTRICT	MERLIN	JOSEPHINE/SWR	24-JUL-87	31-JAN-92
DOM	100361	NPDES	RWO	OR002000-1	98815/A	WOODBURN, CITY OF	WOODBURN	MARION/WVR	27-JUL-87	30-JUN-92
DOM	100362	NPDES	RWO	OR003021-0	38625/A	JOSEPHINE COUNTY SCHOOL DISTRICT	MURPHY	JOSEPHINE/SWR	27-JUL-87	30-APR-92
DOM	100363	NPDES	RWO	OR002993-9	90800/A	UNION, CITY OF	UNION	UNION/ER	27-JUL-87	30-JUN-92
DOM	100366	NPDES	RWO	OR002238-1	57613/A	MOLALLA, CITY OF	MOLALLA	CLACKAMAS/NWR	27-JUL-87	30-JUN-92

CAT	PERMIT NUMBER	TYPE	SUB-TYPE	OR NUMBER	FACILITY	FACILITY NAME	CITY	COUNTY/REGION	DATE ISSUED	DATE EXPIRES
WPCF										
DOM	3400	WPCF	MWO		11364/B	BLACK BUTTE RANCH CORPORATION		DESCHUTES/CR	14-JUL-87	30-NOV-86
DOM	100343	WPCF	RWO		80070/A	SENECA, CITY OF	SENECA	GRANT/ER	23-JUL-87	31-MAR-92
DOM	100344	WPCF	RWO		15995/A	COMPUTERIZED ENTERTAINMENT CONCEPTS LIMITED PARTNERSHIP	PORTLAND	MULTNOMAH/NWR	23-JUL-87	30-JUN-92
DOM	100345	WPCF	RWO	OR002070-2	9104/A	BOARDMAN, CITY OF	BOARDMAN	MORROW/ER	23-JUL-87	30-JUN-92
DOM	100346	WPCF	RWO		51180/A	LONG CREEK, CITY OF	LONG CREEK	GRANT/ER	23-JUL-87	31-JUL-92
DOM	100347	WPCF	RWO		20640/A	COVE, CITY OF	COVE	UNION/ER	24-JUL-87	30-JUN-92
DOM	100348	WPCF	RWO	OR002039-7	75135/A	RICHLAND, CITY OF	RICHLAND	BAKER/ER	24-JUL-87	30-JUN-92
DOM	100349	WPCF	RWO		44040/A	JORDAN VALLEY, CITY OF	JORDAN VALLEY	MALHEUR/ER	24-JUL-87	30-JUN-92
DOM	100350	WPCF	NEW		102743/A	DEL VIEW OWNERS ASSOCIATION, INC.	ROSEBURG	DOUGLAS/SWR	24-JUL-87	30-APR-92
IND	100351	WPCF	NEW		100148/A	OREGON TRAIL MUSHROOM COMPANY	VALE	MALHEUR/ER	24-JUL-87	30-APR-92
IND	100354	WPCF	NEW		100154/A	KOSMOS, TOM	HERMISTON	UMATILLA/ER	24-JUL-87	31-MAY-92
DOM	100364	WPCF	RWO	OR002722-7	43569/A	JOHN DAY, CITY OF	JOHN DAY	GRANT/ER	27-JUL-87	30-JUN-92
DOM	100365	WPCF	NEW		100169/A	ROMAINE VILLAGE ESTATES, LTD, A CALIFORNIA LIMITED PARTNERSHIP	BEND	DESCHUTES/CR	27-JUL-87	30-APR-92

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Hazardous and Solid Waste Division (Reporting Unit) — July 1987 (Month and Year)

SUMMARY OF HAZARDOUS WASTE PROGRAM ACTIVITIES

PERMITS

	ISSUED		
	No.	Fiscal Year to Date (FYTD)	Planned in FY 88
Treatment	-0-	-0-	-0-
Storage	-0-	-0-	7
Disposal	-0-	-0-	1

INSPECTIONS

	COMPLETED		
	No.	FYTD	Planned in FY 88
Generator	5	5	38
TSD	-0-	-0-	29

CLOSURES

	PUBLIC NOTICED			CERTIFICATIONS ACCEPTED		
	No.	FYTD	Planned in FY88	No.	FYTD	Planned in FY 88
Treatment	-0-	-0-	-0-	-0-	-0-	-0-
Storage	-0-	-0-	3	-0-	-0-	4
Disposal	-0-	-0-	2	1	1	3

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DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Hazardous and Solid Waste Division (Reporting Unit) — July 1987 (Month and Year)

SUMMARY OF SOLID WASTE PERMIT ACTIONS

	Permit Actions Received		Permit Actions Completed		Permit Actions Pending	Sites Under Permits	Sites Reqr'g Permits
	Month	FY	Month	FY			
General Refuse							
New	1	1	1	1	2		
Closures	–	–	–	–	4		
Renewals	1	1	1	1	14		
Modifications	1	1	1	1	–		
Total	3	3	3	3	20	176	176
Demolition							
New	–	–	–	–	–		
Closures	–	–	–	–	–		
Renewals	–	–	1	1	1		
Modifications	–	–	–	–	–		
Total	0	0	1	1	1	12	12
Industrial							
New	–	–	1	1	5		
Closures	–	–	–	–	1		
Renewals	2	2	–	–	6		
Modifications	1	1	1	1	–		
Total	3	3	2	2	12	104	104
Sludge Disposal							
New	–	–	–	–	1		
Closures	–	–	–	–	–		
Renewals	–	–	–	–	–		
Modifications	–	–	–	–	–		
Total	0	0	0	0	1	17	17
Total Solid Waste	6	6	6	6	34	309	309

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Hazardous and Solid Waste Division (Reporting Unit) — July 1987 (Month and Year)

PERMIT ACTIONS COMPLETED

County	Name of Source/Project /Site and Type of Same	Date of Action	Action
Coos	Weyerhaeuser Company North Spit Landfill New industrial waste lndfl.	7/8/87	Permit issued.
Washington	Howard Grabhorn Lakeside Reclamation Existing demolition waste landfill.	7/8/87	Permit renewed.
Gilliam	Gilliam County Arlington Landfill Existing municipal waste landfill.	7/23/87	Permit renewed.
Hood River	Dee Forest Products, Inc. Dee Forest Products Inc. Landfill Existing industrial waste landfill.	7/28/87	Addendum issued.
Wheeler	Wheeler County Fossil Landfill Existing municipal waste landfill.	7/28/87	Addendum issued.
Clackamas	K.B. Recycling, Inc. K.B. Recycling Center New municipal waste processing center	7/31/87	Permit issued.

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Hazardous and Solid Waste Division (Reporting Unit) — July 1987 (Month and Year)

PLAN ACTIONS COMPLETED

County	Name of Source/Project /Site and Type of Same	Date of Action	Action
Linn	Willamette Industries, Inc. Snow Peak Landfill New industrial waste landfill.	7/29/87	Plan approved.

DATE	WASTE TYPE	SOURCE	DISPOSE ANNUALLY
02-JUL-87	PCB CONTAMINATED SOLIDS	PCB REMOVAL & CLEANUP ACTIVITY	27 CU YD

1 Request(s) approved for generators in Alaska

02-JUL-87	DIP TANK SLUDGE	WOOD PRESERVING	8.25 CU YD
02-JUL-87	PENTA/TETRA CONTAMINATED SAWDUST	WOOD PRESERVING	20 CU YD
02-JUL-87	PLATING SLUDGE	PLATING & ANODIZING	72 CU YD
02-JUL-87	FIELD RODENT BAIT 1-10 FORMULATION	FEDERAL GOV'T	0.27 CU YD
02-JUL-87	SUMP SEDIMENT	HW TREAT/STORE/DISPOSE FCLTY	635 CU YD
07-JUL-87	WASTE SODIUM HYDROXIDE SOLUTION	CUTLERY	1.08 CU YD
07-JUL-87	DIP TANK SLUDGE	SAWMILLS & PLANING MILLS	3.78 CU YD
10-JUL-87	CHROME BEARING BRICK	GLASS CONTAINERS	5.94 CU YD
13-JUL-87	MERCURY CONTAMINATED DEBRIS	COLLEGES & UNIVERSITIES	1.08 CU YD
13-JUL-87	PCB EQUIPMENT	PCB REMOVAL & CLEANUP ACTIVITY	2.16 CU YD
15-JUL-87	STILL BOTTOM FROM RECOVERY OF PAINT THINNER	HARDWOOD VENEER & PLYWOOD	0.81 CU YD
17-JUL-87	ZINC PHOSPHIDE AT 10% OR LESS CONCENTRATION	RETAIL NURSERY/GARDEN SUPPLIES	40 CU YD
17-JUL-87	2,4 D CONTAMINATED WASTE	RETAIL NURSERY/GARDEN SUPPLIES	1.62 CU YD
31-JUL-87	SMALL V-2 POND SOLIDS	PRIMARY SMELT NONFERROUS METAL	600 CU YD

14 Request(s) approved for generators in Oregon

02-JUL-87	CRUSHED DRUMS	HW TREAT/STORE/DISPOSE FCLTY	80 CU YD
02-JUL-87	LEAD CONTAMINATED DEBRIS	OTHER GOVERNMENT AGENCY	1.62 CU YD
02-JUL-87	RCRA CONTAMINATED SOIL	SUPERFUND SITE CLEANUP	15000 CU YD
02-JUL-87	SOILS CONTAMINATED WITH ORGANOCHLORIDES	NON-SUPERFUND SITE CLEANUP	50 CU YD

DATE	WASTE TYPE	SOURCE	DISPOSE ANNUALLY
07-JUL-87	CARBON CARTRIDGE/FILTERS	INSTR. TO MEASURE ELECTRICITY	27 CU YD
07-JUL-87	PCB CONTAMINATED SOLIDS/SOIL	NON-SUPERFUND SITE CLEANUP	1500 CU YD
07-JUL-87	LAB PACK - OXIDIZER	MALT	0.27 CU YD
07-JUL-87	LAB PACK - ORM-A	MALT	0.27 CU YD
07-JUL-87	LAB PACK - POISONOUS LIQUID	MALT	0.54 CU YD
07-JUL-87	LAB PACK - CORROSIVE LIQUID	MALT	0.27 CU YD
07-JUL-87	LAB PACK - ORM-E	MALT	0.27 CU YD
07-JUL-87	LAB PACK - CORROSIVE SOLIS	MALT	0.27 CU YD
07-JUL-87	LAB PACK - FLAMMABLE LIQUID	MALT	0.27 CU YD
07-JUL-87	ABSORBENT PADS USED TO CLEAN UP ACIDIC LIQUID SPILLS	INSTR. TO MEASURE ELECTRICITY	3.2 CU YD
10-JUL-87	CONTAMINATED COMMERCIAL PRODUCTS (GLOVES, BOOTS, RESPIRATOR CARTRIDGES, RAGS, ETC)	NON-SUPERFUND SITE CLEANUP	40.5 CU YD
10-JUL-87	PCB TRANSFORMER OIL	PCB REMOVAL & CLEANUP ACTIVITY	1.62 CU YD
10-JUL-87	CREOSOTE TANK BOTTOMS	HW TREAT/STORE/DISPOSE FCLTY	36.8 CU YD
10-JUL-87	PCB CONTAMINATED WATER	PCB REMOVAL & CLEANUP ACTIVITY	0.27 CU YD
10-JUL-87	PCB EQUIPMENT	PCB REMOVAL & CLEANUP ACTIVITY	0.54 CU YD
10-JUL-87	SURPLUS RUBBER CEMENT SOLID	SUPERFUND SITE CLEANUP	1.35 CU YD
10-JUL-87	SURPLUS JOINT SEALANT COMPOUND	SUPERFUND SITE CLEANUP	4.59 CU YD
10-JUL-87	FLASHBURN PROTECTIVE CREAM	SUPERFUND SITE CLEANUP	1.89 CU YD
13-JUL-87	SOIL CONTAMINATED WITH OIL AND GREASE	ELEMENTARY & SECONDARY SCHOOLS	60 CU YD
13-JUL-87	POWDERED PHENOLIC POLY/HEX MIX	PLASTICS MATERIALS, SYNTHETICS	45 CU YD
13-JUL-87	SPENT ELECTROLYTIC POTLINING	PRIMARY PRODUCTION OF ALUMINUM	473221.0 CU YD
13-JUL-87	SOLID AND FLAKED PHENOLIC RESIN	PLASTICS MATERIALS, SYNTHETICS	40 CU YD
13-JUL-87	HAZARDOUS WASTE SOLID NOS	NON-SUPERFUND SITE CLEANUP	200 CU YD
13-JUL-87	PCB CONTAMINATED SOIL AND SOLIDS	PCB REMOVAL & CLEANUP ACTIVITY	1.35 CU YD

DATE	WASTE TYPE	SOURCE	DISPOSE ANNUALLY
13-JUL-87	PCB TRANSFORMERS DRAINED	PCB REMOVAL & CLEANUP ACTIVITY	7 CU YD
17-JUL-87	CONCRETE CONTAMINATED WITH XYLENE	DEPARTMENT OF DEFENSE	100 CU YD
17-JUL-87	LIMESTONE, IRON OXIDE, ETC CONTAMINATED WITH FUEL	NON-RCRA SPILL CLEANUP	300 CU YD
17-JUL-87	CHLOROTHENE(R) SM SOLVENT CONTAMINATED SOIL	RCRA SPILL CLEANUP	55 CU YD
24-JUL-87	LAB PACK	PRIMARY PRODUCTION OF ALUMINUM	2.7 CU YD

33 Request(s) approved for generators in Washington

48 Requests granted - Grand Total

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

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

SUMMARY OF NOISE CONTROL ACTIONS

Source Category	New Actions Initiated Mo	New Actions Initiated FY	Final Actions Completed Mo	Final Actions Completed FY	Actions Pending Mo	Actions Pending Last Mo
Industrial/ Commercial	14	14	21	21	239	246
Airports			2	2	1	2

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

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

FINAL NOISE CONTROL ACTIONS COMPLETED

County	Name of Source and Location	Date	Action
Clackamas	Kirks Body Shop, Portland	7/87	In compliance
Multnomah	Autobody Shop, Portland	7/87	In compliance
Multnomah	Brown Car Paint, Portland	7/87	In compliance
Multnomah	Crown Door & Supply Co., Portland	7/87	In compliance
Multnomah	Disdero Lumber Co., Portland	7/87	In compliance
Multnomah	Fruit and Flower Child Care Center, Portland	7/87	In compliance
Multnomah	Market Transport Limited, Portland	7/87	In compliance
Multnomah	McCormick & Baxter Creosoting Co., Portland	7/87	No violation
Multnomah	Robowski Woodcutting, Portland	7/87	In compliance
Multnomah	Ross Island Sand & Gravel, Willamette River, Portland	7/87	In compliance
Multnomah	Sunshine Dairy, Portland	7/87	No violation
Multnomah	United Cerebral Palsy Assn., Portland	7/87	In compliance
Washington	Grimm's Fuel, Sherwood	7/87	No violation
Washington	Lung Fung West Restaurant, Portland	7/87	In compliance
Marion	Ogden-Martin, Marion County Solid Waste-to-Energy Facility Brooks	7/87	In compliance

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

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

FINAL NOISE CONTROL ACTIONS COMPLETED

County	Name of Source and Location	Date	Action
Marion	Youth With a Mission, Salem	7/87	In compliance
Lane	Agripac, Inc., Eugene	7/87	In compliance
Jackson	Mike's Muffler Shop, Ashland	7/87	In compliance
Jackson	North America Pneumatics, Central Point	7/87	In compliance
Union	Idaho Timber Company, North Powder	7/87	In compliance
Union	Union Pacific Railroad, Perry	7/87	In compliance
Deschutes	LaPine Emergency Heliport, LaPine	7/87	Exception granted
Multnomah	Randolph Heliport, N.W. Multnomah County	7/87	Boundary approved

CIVIL PENALTY ASSESSMENTS

DEPARTMENT OF ENVIRONMENTAL QUALITY
1987

CIVIL PENALTIES ASSESSED DURING MONTH OF JULY, 1987:

Name and Location of Violation	Case No. & Type of Violation	Date Issued	Amount	Status
Festus J. Walter Coquille, Oregon	AQOB-SWR-87-54 Open burned prohibited materials (asphalt roof shingles).	7/8/87	$150	Default order & judgment was issued on 8/11/87.
LSP Contractors, Inc. Troutdale, Oregon	AQOB-NWR-87-55 Open burned demolition waste (land clearing debris).	7/15/87	$150	Paid 7/21/87.
Vanport Manufacturing, Inc. Boring, Oregon	WQ-NWR-87-45 Excessive turbidity in North Fork Deep Creek caused by Vanport's log and wood chip storage practices.	7/27/87	$800	Awaiting response to notice.
Astoria Plywood Corporation Astoria, Oregon	AQ-NWR-87-46 Excessive veneer dryer emissions, in violation of air contaminant discharge permit; 2 days of violation.	7/28/87	$1,000	Paid 8/6/87.
Atlantic Richfield Company Ashland, Oregon	AQ-SWR-87-62 Unloaded a gasoline truck without using vapor return hoses.	7/31/87	$150	Awaiting response to notice.

VAK:b
GB6884

July, 1987
DEQ/EQC Contested Case Log

ACTIONS	LAST MONTH	PRESENT
Preliminary Issues	0	0
Discovery	0	0
Settlement Action	1	2
Hearing to be scheduled	0	1
Department reviewing penalty	0	0
Hearing scheduled	3	1
HO's Decision Due	0	1
Briefing	0	0
Inactive	4	4
SUBTOTAL of cases before hearings officer.	8	9
HO's Decision Out/Option for EQC Appeal	1	0
Appealed to EQC	5	4
EQC Appeal Complete/Option for Court Review	0	1
Court Review Option Taken	0	0
Case Closed	1	1
TOTAL Cases	15	15

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
AG1	Attorney General 1
AQ	Air Quality Division
AQOB	Air Quality, Open Burning
CR	Central Region
DEC Date	Date of either a proposed decision of hearings officer or a decision by Commission
ER	Eastern Region
FB	Field Burning
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

CONTES.B

July 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	Resp.	05-AQ-FB-84-141 Civil Penalty of $500	EQC order affirming penalty issued 7/14/87. Court review option available.
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.

July 1987

DEQ/EQC Contested Case Log

Pet/Resp Name	Hrng Rqst	Hrng Rfrrl	Hrng Date	Resp Code	Case Type & No.	Case Status
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.
VANDERVELDE, ROY	06/06/86	06/10/86	11/06/86	DEQ	05-WQ-WVR-86-39 $5,500 Civil Penalty	DEQ's brief on appeal to EQC to be filed by 9/1/87.
~~MALLORIE'S DAIRY, INC.~~	~~09/08/86~~	~~09/08/86~~	~~04/10/87~~	~~Prtys~~	~~08-AQOB-WVR-86-92~~ ~~$1,050 Civil Penalty~~	Penalty affirmed. No appeal. Case closed.
RICHARD KIRKHAM dba, WINDY OAKS RANCH		01/07/87	03/04/87	Resp	1-AQ-FB-86-08 $680 civil penalty	Appealed to EQC.
PAUL D. HOWELL dba, HOWELL ENTERPRISES	04/30/87	05/04/87	08/03/87	Hrgs/ Prtys	2-AQ-SWR-87-17 $5,000 asbestos penalties	Settlement action. August 3 hearing deferred.
KURT ANTONI dba CASCADE SEPTIC TANK SERVICE	05/29/87	05/29/87	07/14/87	Prtys	3-OS-NWR-87-33 $500 civil penalty	Decision due.
MERIT USA, INC.	05/30/87	06/10/87	07/25/87		4-WQ-NWR-87-27 $3500 civil penalty (oil)	Hearing rescheduled.
PACIFIC COATINGS, INC.	07/09/87	07/10/87			5-AQ-NWR-87-40 $500 civil penalty (odor)	To be scheduled.

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION

MONTHLY ACTIVITY REPORT

DIRECT SOURCES
PLAN ACTIONS COMPLETED

Permit Number	Source Name	County	Date Scheduled	Action Description	Date Achieved
03 2624	OMARK INDUSTRIES, INC.	CLACKAMAS	07/23/87	COMPLETED-APRVD	08/04/87
18 0013	WEYERHAEUSER COMPANY	KLAMATH	05/29/87	COMPLETED-APRVD	07/31/87
26 1869	COLUMBIA STEEL CASTING CO	MULTNOMAH	07/22/87	COMPLETED-APRVD	07/27/87
26 2930	KOPPERS INC	MULTNOMAH	08/10/87	COMPLETED-APRVD	08/17/87
26 3234	TTA, INC.	MULTNOMAH	06/30/87	COMPLETED-APRVD	08/05/87

TOTAL NUMBER QUICK LOOK REPORT LINES 7

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Air Quality Division (Reporting Unit) — August 1987 (Month and Year)

SUMMARY OF AIR PERMIT ACTIONS

	Permit Actions Received Month	Permit Actions Received FY	Permit Actions Completed Month	Permit Actions Completed FY	Permit Actions Pending	Sources Under Permits	Sources Reqr'g Permits
Direct Sources							
New	1	5	1	7	18		
Existing	3	3	1	3	7		
Renewals	8	16	8	10	52		
Modifications	6	12	4	15	13		
Total	18	36	14	35	90	1398	1422
Indirect Sources							
New	0	0	5	0	0		
Existing	0	0	0	0	0		
Renewals	0	0	0	0	0		
Modifications	1	2	0	0	2		
Total	1	2	5	0	2	276	276
GRAND TOTALS	19	38	19	35	92	1674	1698

Number of Pending Permits	Comments
15	To be reviewed by Northwest Region
13	To be reviewed by Willamette Valley Region
5	To be reviewed by Southwest Region
2	To be reviewed by Central Region
1	To be reviewed by Eastern Region
15	To be reviewed by Program Operations Section
23	Awaiting Public Notice
16	Awaiting end of 30-day Public Notice Period
90	

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION

MONTHLY ACTIVITY REPORT

DIRECT SOURCES
PERMITS ISSUED

Permit Number	Source Name	County Name	Appl. Rcvd.	Status	Date Achvd.	Type Appl.
03 2727	MCCLURE INDUSTRIES INC.	CLACKAMAS	02/09/87	PERMIT ISSUED	08/14/87	EXT
05 2567	J.E. NEUMAN	COLUMBIA	07/13/87	PERMIT ISSUED	08/14/87	RNW
07 0008	PRINEVILLE SAWMILL CO	CROOK	07/21/87	PERMIT ISSUED	07/31/87	MOD
10 0131	TRI-CITY READY MIX INC	DOUGLAS	07/24/87	PERMIT ISSUED	08/14/87	RNW
14 0002	DEE FOREST PRODUCTS, INC.	HOOD RIVER	07/16/87	PERMIT ISSUED	07/31/87	MOD
15 0053	WHITE CITY DRY KILN INC.	JACKSON	05/22/87	PERMIT ISSUED	07/31/87	RNW
26 2044	OWENS-CORNING FIBERGLAS	MULTNOMAH	02/18/87	PERMIT ISSUED	07/31/87	RNW
26 2777	JAMES RIVER CORP OF NEV	MULTNOMAH	07/16/87	PERMIT ISSUED	07/31/87	MOD
26 3015	MT. HOOD OIL COMPANY	MULTNOMAH	06/01/87	PERMIT ISSUED	07/31/87	RNW
37 0019	KLAMATH CNTY RD DEPT	PORT.SOURCE	01/30/87	PERMIT ISSUED	08/14/87	RNW
37 0146	KINCHELOE & SONS INC	PORT.SOURCE	07/13/87	PERMIT ISSUED	08/14/87	RNW
37 0167	TAGGART R J CONSTR CO	PORT.SOURCE	07/20/87	PERMIT ISSUED	08/14/87	RNW
37 0305	J. C. COMPTON CONTRACTOR	PORT.SOURCE	07/23/87	PERMIT ISSUED	07/31/87	MOD
37 0372	CENTRAL WASH ASPHALT INC	PORT.SOURCE	05/18/87	PERMIT ISSUED	08/14/87	NEW

TOTAL NUMBER QUICK LOOK REPORT LINES 14

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Air Quality Division (Reporting Unit) — August, 1987 (Month and Year)

PERMIT ACTIONS COMPLETED

County	Name of Source/Project /Site and Type of Same	Date of Action	Action
Indirect Sources			
Washington	Trammel Crow Retail Center, 454 Spaces, File No. 34-8706	08/04/87	Final Permit Issued
Marion	Club Wholesale, 450 Spaces, File No. 24-8707	08/11/87	Final Permit Issued
Washington	Tigard Towne Square, 922 Spaces, File No. 34-8708	08/25/87	Final Permit Issued
Clackamas	Clackamas Square, 734 Spaces, File No. 03-8709	08/04/87	Final Permit Issued
Multnomah	Medical School/Patient Parking Structure, 420 Spaces, File No. 26-8710	08/04/87	Final Permit Issued

MAR.6
AA5324

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Water Quality (Reporting Unit) — August 1987 (Month and Year)

PLAN ACTIONS COMPLETED - 14

County	Name of Source/Project /Site and Type of Same	Date of Action	Action
MUNICIPAL WASTE SOURCES - 6			
Marion	Silverton East Silverton Project # 428	9-8-87	Provisional Approval
Curry	Gold Beach Sea Bear Subdivision	8-10-87	Provisional Approval
Lane	Country Squire Inn Storage/Polishing Pond	9-8-=87	Provisional Approval
Deschutes	Mt. Bachelor Ski Area, Main On-Site System	8-25-87	Provisional Approval
Union	Hot Lake Resort Lagoon upgrade	8-26-87	Comments to owner
Lane	Emporium, Inc. (Troutman Investment Co.) Sand filter addition	8-15-87	Comments to engineer

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Water Quality Division (Reporting Unit) — August 1987 (Month and Year)

PLAN ACTIONS COMPLETED - 14

County	Name of Source/Project /Site and Type of Same	Date of Action	Action
INDUSTRIAL WASTE SOURCES - 8			
Multnomah	PGE PCB Soil Cleanup Stephens Substation	8-17-87	Withdrawn
Marion	Gerben Atnia Manure Control Facility	8-20-87	Approved
Tillamook	Tony Hancock Manure Control Facility	8-13-87	Approved
Clackamas	Willamette Egg Farms Storage Pond/Wastewater Irrigation	8-11-87	Approved
Benton	Evanite Leachate Runoff Collection System	8-7-877	Approved
Clatsop	Olson Dairy Sprinkler Irrigation System	8-20-87	Approved
Benton	John Van Beck Manure Control Facility	8-25-87	Approved
Lane	Spectra-Physics Waste Chemical Secondary Storage Vessel	8-25-87	Approved

CAT	PERMIT NUMBER	TYPE	SUB-TYPE	OR NUMBER	FACILITY	FACILITY NAME	CITY	COUNTY/REGION	DATE ISSUED	DATE EXPIRES
General: Filter Backwash										
IND	200	GEN02	NEW	OR003236-1	102958/A	CHB COMPANIES, INC.	PORTLAND	MULTNOMAH/NWR	06-AUG-87	31-DEC-90
General: Suction Dredges										
IND	700	GEN07	NEW		102960/A	INLAND ECHO MINING CO.		MOBILE SRC/ALL	24-AUG-87	31-JUL-91
IND	700	GEN07	NEW		102966/A	HUMPHREY, KELLY D.		MOBILE SRC/ALL	27-AUG-87	31-JUL-91
IND	700	GEN07	NEW		102967/A	WILLIAMSON, DAVID H. AND LEE		MOBILE SRC/ALL	27-AUG-87	31-JUL-91
NPDES										
IND	100124	NPDES	MWO	OR000186-4	15810/B	DEE FOREST PRODUCTS, INC.	DEE	HOOD RIVER/CR	11-AUG-87	31-MAR-90
IND	100234	NPDES	MWO	OR000040-0	21354/A	JAMES RIVER CORPORATION OF NEVADA	PORTLAND	MULTNOMAH/NWR	28-AUG-87	30-SEP-91
DOM	100373	NPDES	RW	OR002613-1	35173/A	GRESHAM, CITY OF	PORTLAND	MULTNOMAH/NWR	31-AUG-87	31-MAR-92
WPCF										
DOM	100367	WPCF	NEW		100133/A	U. S. DEPARTMENT OF THE INTERIOR		KLAMATH/CR	10-AUG-87	31-MAR-92
IND	100199	WPCF	MWO		100118/A	MK-FERGUSON COMPANY	LAKEVIEW	LAKE/CR	18-AUG-87	31-DEC-88
DOM	3678	WPCF	MWO		84113/A	STAGE STOP, INC.	LAPINE	DESCHUTES/CR	21-AUG-87	31-MAY-88
DOM	100368	WPCF	RWO		84076/A	ST PAUL, CITY OF	ST PAUL	MARION/WVR	21-AUG-87	31-MAR-92

CAT	PERMIT NUMBER	TYPE	SUB-TYPE	OR NUMBER	FACILITY	FACILITY NAME	CITY	COUNTY/REGION	DATE ISSUED	DATE EXPIRES
IND	100369	WPCF	NEW		102707/A	K LINES, INC.	LAKE OSWEGO	CLACKAMAS/NWR	21-AUG-87	31-JUL-92
DOM	100370	WPCF	RWO		75120/A	LANE COUNTY PUBLIC WORKS, PARKS DIVISION		LANE/WVR	21-AUG-87	31-MAR-92
DOM	100371	WPCF	RWO		90994/A	U. S. ARMY CORPS OF ENGINEERS	DORENA LAKE	LANE/WVR	21-AUG-87	31-JUL-92

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Hazardous and Solid Waste Division (Reporting Unit) — August 1987 (Month and Year)

SUMMARY OF HAZARDOUS WASTE PROGRAM ACTIVITIES

PERMITS

	ISSUED		
	No.	Fiscal Year to Date (FYTD)	Planned in FY 88
Treatment	-0-	-0-	-0-
Storage	-0-	-0-	7
Disposal	-0-	-0-	1

INSPECTIONS

	COMPLETED		
	No.	FYTD	Planned in FY 88
Generator	2	7	38
TSD	-0-	-0-	29

CLOSURES

	PUBLIC NOTICED			CERTIFICATIONS ACCEPTED		
	No.	FYTD	Planned in FY88	No.	FYTD	Planned in FY 88
Treatment	-0-	-0-	-0-	-0-	-0-	-0-
Storage	-0-	-0-	3	-0-	-0-	4
Disposal	-0-	-0-	2	0	1	3

SB5285.A
MAR.2 (9/87)

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Hazardous and Solid Waste Division (Reporting Unit) — August 1987 (Month and Year)

SUMMARY OF SOLID WASTE PERMIT ACTIONS

	Permit Actions Received		Permit Actions Completed		Permit Actions Pending	Sites Under Permits	Sites Reqr'g Permits
	Month	FY	Month	FY			
General Refuse							
New	1	2	–	1	3		
Closures	1	1	–	–	5		
Renewals	–	1	–	1	14		
Modifications	8	9	8	9	–		
Total	10	13	8	11	22	176	176
Demolition							
New	–	–	–	–	–		
Closures	–	–	–	–	–		
Renewals	–	–	–	1	1		
Modifications	1	1	1	1	–		
Total	1	1	1	2	1	12	12
Industrial							
New	2	2	3	4	4		
Closures	–	–	–	–	1		
Renewals	–	2	–	–	6		
Modifications	6	7	6	7	–		
Total	8	11	9	11	11	104	104
Sludge Disposal							
New	–	–	–	–	1		
Closures	–	–	–	–	–		
Renewals	–	–	–	–	–		
Modifications	1	1	1	1	–		
Total	1	1	1	1	1	17	17
Total Solid Waste	20	26	19	25	35	309	309

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Hazardous and Solid Waste Division (Reporting Unit) — August 1987 (Month and Year)

PERMIT ACTIONS COMPLETED

County	Name of Source/Project /Site and Type of Same	Date of Action	Action
Clatsop	James River Corp. of Nevada Wauna Mill Landfill Existing industrial waste landfill	8/11/87	Permit amended
Clatsop	James River Corp. of Nevada Wauna Mill Landfill Existing industrial sludge landfill	8/11/87	Permit amended
Lane	Delta Sand & Gravel Co. Delta Sand & Gravel Demolition landfill Existing demolition landfill	8/14/87	Permit amended
Jackson	Jackson Landfill, Inc. Dry Creek Disposal Site Existing municipal waste landfill	8/18/87	Permit amended
Linn	Willamette Industries, Inc. Snow Peak Pond Landfill New industrial waste landfill	8/18/87	Permit issued
Umatilla	City of Milton-Freewater Milton-Freewater Landfill Existing municipal waste landfill	8/18/87	Permit amended
Wasco	Harold & Nancy Carter Land reclamation project	8/24/87	Letter authorization issued
Wasco	Tim Morelli Land reclamation project	8/26/87	Letter authorization issued
Coos	Roseburg Lumber Company Coquille Disposal Site Existing industrial waste landfill	8/31/87	Permit amended

MAR.5S (11/84) (SB5285.B)

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Hazardous and Solid Waste Division (Reporting Unit) — August 1987 (Month and Year)

PERMIT ACTIONS COMPLETED

County	Name of Source/Project /Site and Type of Same	Date of Action	Action
Crook	Les Schwab Warehouse Ctr. Les Schwab Tire Disposal Site. Existing tire landfill/storage area	8/31/87	Permit amended
Curry	Sandy's Backhoe & Const. Clay Hill Lagoon Existing septage lagoon	8/31/87	Permit amended
Douglas	Douglas County, Inc. (Douglas Co. Forest Prod.) Douglas Co. Forest Prod. Existing industrial waste landfill	8/31/87	Permit amended
Josephine	Mtn. Fir Lumber Co., Inc. Mtn. Fir Lumber Co. Madrone Tract. Existing industrial waste landfill	8/31/87	Permit amended
Klamath	Klamath County Beatty Disposal Site Existing municipal landfill	8/31/87	Permit amended
Klamath	Klamath County Chemult Diposal Site Existing municipal waste landfill	8/31/87	Permit amended
Klamath	Klamath County Odessa Transfer Station Existing transfer station	8/31/87	Permit amended
Lane	Lane County Sharps Creek Transfer Station. Existing transfer station	8/31/87	Permit amended

MAR.5S (11/84) (SB5285.B)

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Hazardous and Solid Waste Division (Reporting Unit) — August 1987 (Month and Year)

PERMIT ACTIONS COMPLETED

County	Name of Source/Project /Site and Type of Same	Date of Action	Action
Lincoln	Lincoln County Logsden Transfer Station and Brush Disposal Service Existing transfer station and demolition landfill	8/31/87	Permit amended
Wasco	Rajneesh Neo-Sannyas Internationa Commune Rajneesh Puram Landfill Existing municipal waste landfill	8/31/87	Permit amended

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Hazardous and Solid Waste Division (Reporting Unit) — August 1987 (Month and Year)

PLAN ACTIONS COMPLETED

County	Name of Source/Project /Site and Type of Same	Date of Action	Action
None			

DATE	WASTE TYPE	SOURCE	DISPOSE ANNUALLY
10-AUG-87	PCB CONTAMINATED SOIL AND SOLIDS	RCRA SPILL CLEANUP	8.1 CU YD

1 Request(s) approved for generators in Alaska

05-AUG-87	PCB	PCB REMOVAL & CLEANUP ACTIVITY	4.86 CU YD

1 Request(s) approved for generators in Idaho

03-AUG-87	PCB EQUIPMENT	PCB REMOVAL & CLEANUP ACTIVITY	0.27 CU YD
03-AUG-87	DISMANTLED CHEMICAL PROCESS EQUIPMENT	GAS TRANSMISSION/DISTRIBUTION	4 CU YD
03-AUG-87	2,4-D AND 2,4-DP HERBICIDE	OTHER GOVERNMENT AGENCY	1.27 CU YD
03-AUG-87	DYFONATE CONTAMINATED DEBRIS	RCRA SPILL CLEANUP	0.27 CU YD
04-AUG-87	WASTEWATER TREATMENT RESIDUALS	WOOD PRESERVING	105 CU YD
04-AUG-87	LAB PACK	NON-SUPERFUND SITE CLEANUP	1 CU YD
04-AUG-87	STODDARD SOLVENT SLUDGE	MINING MACHINERY	0.81 CU YD
05-AUG-87	ASBESTOS	INSTR. TO MEASURE ELECTRICITY	7.4 CU YD
05-AUG-87	CAUSTIC WATER	MOTORS AND GENERATORS	2.7 CU YD
05-AUG-87	TIN - LEAD SOLDER STRIP	OTHER ELECTRONIC COMPONENTS	2 CU YD
10-AUG-87	FILTER MATERIAL CONTAMINATED WITH CHROMIUM	PRIMARY SMELT NONFERROUS METAL	40.5 CU YD
10-AUG-87	COAL TAR CREOSOTE	WOOD PRESERVING	225 CU YD
10-AUG-87	LAB PACK	COOKIES & CRACKERS	2 CU YD
24-AUG-87	SODIUM BICHROMATE	WOOD PRESERVING	0.54 CU YD
24-AUG-87	BORING SOIL	NON-SUPERFUND SITE CLEANUP	37 CU YD
24-AUG-87	WOOD TREATING TANK SLUDGE	WOOD PRESERVING	80 CU YD

16 Request(s) approved for generators in Oregon

DATE	WASTE TYPE	SOURCE	DISPOSE ANNUALLY
03-AUG-87	ABSORBENT PADS FROM ALKALINE SPILL	INSTR. TO MEASURE ELECTRICITY	2.16 CU YD
03-AUG-87	CONCRETE TANKS CONTAMINATED WITH HEAVY METALS	AIRCRAFT	50 CU YD
03-AUG-87	LAB PACK	SUPERFUND SITE CLEANUP	3.24 CU YD
03-AUG-87	AQUEOUS WASTE WITH DDT CONTAMINATION	SUPERFUND SITE CLEANUP	0.27 CU YD
03-AUG-87	OIL SPILL CLEANUP DEBRIS	INSTR. TO MEASURE ELECTRICITY	4.32 CU YD
04-AUG-87	INDUSTRIAL WASTEWATER	GLASS CONTAINERS	4.86 CU YD
04-AUG-87	PCB CONTAMINATED SOIL	SUPERFUND SITE CLEANUP	5.94 CU YD
04-AUG-87	CHLORINATED PICOLINE WASTE FUSED WITH SODA ASH	OTHER INDUS. ORGANIC CHEMICALS	2.16 CU YD
05-AUG-87	CARBON CONTAMINATED WITH MERCURY	ALKALIES & CHLORINE	2.7 CU YD
10-AUG-87	PAINT	PETROLEUM REFINING (& ASPHALT)	54 CU YD
10-AUG-87	LAB PACK - FLAMMABLE POISON	NON-SUPERFUND SITE CLEANUP	0.5 CU YD
10-AUG-87	CORROSION INHIBITOR AND FLOOR DRY	FLAT GLASS	1 CU YD
13-AUG-87	PLATING WASTE SLUDGE AND DIRT	PLATING & ANODIZING	500 CU YD
13-AUG-87	PCB CONTAMINATED SOIL AND DEBRIS	PCB REMOVAL & CLEANUP ACTIVITY	500 CU YD
13-AUG-87	1,1,1-TRICHLOROETHANE EMPTY CONTAINERS	PRIMARY PRODUCTION OF ALUMINUM	34 CU YD
24-AUG-87	PENTACHLOROPHENOL CONTAMINATED SLUDGE	WOOD PRESERVING	2.97 CU YD
24-AUG-87	TANK CONTAMINATED WITH PENTACHLOROPHENOL	WOOD PRESERVING	3 CU YD

17 Request(s) approved for generators in Washington

35 Requests granted - Grand Total

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

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

SUMMARY OF NOISE CONTROL ACTIONS

Source Category	New Actions Initiated Mo	New Actions Initiated FY	Final Actions Completed Mo	Final Actions Completed FY	Actions Pending Mo	Actions Pending Last Mo
Industrial/ Commercial	20	34	9	30	250	239
Airports			0	2	1	1

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

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

FINAL NOISE CONTROL ACTIONS COMPLETED

County	Name of Source and Location	Date	Action
Multnomah	Jaris Dog Boutique, Portland	8/87	No violation
Multnomah	Kleinberg Concrete Pipe, Gresham	8/87	In compliance
Multnomah	Lewis Packing Company, Gresham	8/87	In compliance
Multnomah	Skylark Dance Studio, Portland	8/87	In compliance
Multnomah	Taco Bell, 5036 NE Sandy Bd., Portland	8/87	No violation
Multnomah	Traffic Safety Supply Co., Portland	8/87	In compliance
Multnomah	Wendy's Restaurant, 232 NE 82nd Avenue, Portland	8/87	No violation
Multnomah	West End Ltd., Portland	8/87	In compliance
Marion	R. Fetsch Body Shop, Keizer	8/87	No violation

CIVIL PENALTY ASSESSMENTS

DEPARTMENT OF ENVIRONMENTAL QUALITY
1987

CIVIL PENALTIES ASSESSED DURING MONTH OF AUGUST, 1987:

Name and Location of Violation	Case No. & Type of Violation	Date Issued	Amount	Status
Western Compliance Service, Inc.	HW-NWR-87-48 Numerous violations relating to the storage and handling of hazardous waste.	8/13/87	$15,500	Company is contesting the penalty and will submit an "answer" by 9/11/87.

GB6966

August, 1987
DEQ/EQC Contested Case Log

ACTIONS	LAST MONTH	PRESENT
Preliminary Issues	0	1
Discovery	0	0
Settlement Action	2	3
Hearing to be scheduled	1	0
Department reviewing penalty	0	0
Hearing scheduled	1	1
HO's Decision Due	1	0
Briefing	0	0
Inactive	4	4
SUBTOTAL of cases before hearings officer.	9	9
HO's Decision Out/Option for EQC Appeal	0	1
Appealed to EQC	4	3
EQC Appeal Complete/Option for Court Review	1	1
Court Review Option Taken	0	0
Case Closed	1	5
TOTAL Cases	15	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
AG1	Attorney General 1
AQ	Air Quality Division
AQOB	Air Quality, Open Burning
CR	Central Region
DEC Date	Date of either a proposed decision of hearings officer or a decision by Commission
ER	Eastern Region
FB	Field Burning
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

July 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	Resp.	05-AQ-FB-84-141 Civil Penalty of $500	EQC order affirming penalty issued 7/14/87. Court review option available.
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.

July 1987

DEQ/EQC Contested Case Log

Pet/Resp Name	Hrng Rqst	Hrng Rfrrl	Hrng Date	Resp Code	Case Type & No.	Case Status
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.
VANDERVELDE, ROY	06/06/86	06/10/86	11/06/86	Prtys	05-WQ-WVR-86-39 $5,500 Civil Penalty	EQC to review at October 9, 1987 meeting.
~~MALLORIE'S DAIRY, INC.~~	~~09/08/86~~	~~09/08/86~~	~~04/10/87~~	~~Prtys~~	~~08-AQOB-WVR-86-92 $1,050 Civil Penalty~~	Penalty affirmed. No appeal. Case closed.
RICHARD KIRKHAM dba, WINDY OAKS RANCH		01/07/87	03/04/87	Resp	1-AQ-FB-86-08 $680 civil penalty	EQC to review at October 9, 1987 meeting.
PAUL D. HOWELL dba, HOWELL ENTERPRISES	04/30/87	05/04/87	08/03/87	Hrgs/ Prtys	2-AQ-SWR-87-17 $5,000 asbestos penalties	Settlement action. August 3 hearing deferred.
KURT ANTONI dba CASCADE SEPTIC TANK SERVICE	05/29/87	05/29/87	07/14/87	Prtys	3-OS-NWR-87-33 $500 civil penalty	Hearing Officer's decision modifying penalty to $100 issued 8/25/87.
MERIT USA, INC.	05/30/87	06/10/87	09/14/87	Prtys	4-WQ-NWR-87-27 $3500 civil penalty (oil)	Hearing rescheduled.
PACIFIC COATINGS, INC.	07/09/87	07/10/87			5-AQ-NWR-87-40 $500 civil penalty (odor)	Answer to be filed.

CONTES.T

August 10, 1987

NEIL GOLDSCHMIDT
GOVERNOR

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, October 9, 1987, EQC Meeting

TAX CREDIT APPLICATIONS

Director's Recommendation

It is recommended that the Commission take the following action:

Issue tax credit certificate for pollution control facility:

Appl. No.	Applicant	Facility
T-1888	Willamette Industries-Korpine Division	Waste water pipeline

Fred Hansen

C. Nuttall:p
(503) 229-6484
September 19, 1987
MP1026

Proposed October 9, 1987 Totals:

Air Quality	$ - 0 -
Water Quality	86,877.00
Hazardous/Solid Waste	- 0 -
Noise	- 0 -
	$ 86,877.00

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

Air Quality	$ 1,017,695.63
Water Quality	1,509,872.93
Hazardous/Solid Waste	555,799.00
Noise	- 0 -
	$ 3,083,367.56

MP1026

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 Department to prevent water pollution. The requirement is to comply with a conditions of a Water Pollution Control Facilities Permit.

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

Prior to installation of the claimed facilities, industrial waste waters and sewage were conveyed to waste disposal wells. In accordance with a condition of their Water Pollution Control Facilities permit, Willamette Industries submitted plans to connect to the City of Bend sewerage system and abandon the use of the wells for disposal of sewage and industrial waste. Since sewage collection and transport systems are not eligible for pollution control tax credit, Willamette Industries has only applied for those portions of the collection and transport system which are used exclusively for industrial waste. Since installation of the claimed facilities, all glue washdown water, air pollution scrubber water, and domestic sewage are now conveyed to Bend's sewerage system.

b. Analysis of Eligible Costs

One hundred percent (100%) of the cost of the facility is eligible for 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 Department to prevent water pollution and accomplishes this purpose by the disposal of industrial waste as defined in ORS 468.700.

c. The facility complies with permit conditions.

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 $ 86,877.00 with 100 % allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-1888.

L.D. Patterson:c
WC2422
(503) 229-5374
September 4, 1987

NEIL GOLDSCHMIDT
GOVERNOR

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, October 9, 1987, EQC Meeting

Request for Authorization to Conduct a Public Hearing on Pollution Control Tax Credit Rule Amendments, Chapter 340, Division 16

Background

HB2023, passed by the 1987 legislature, includes several amendments to the pollution control statute (ORS 468.150 to .190). In order for the tax credit rules to be consistent with HB2023 and in order to implement portions of HB2023, rule amendments are necessary. In addition, legal counsel has identified portions of the current rule which do not accurately reflect statutory intent and which should be changed to bring the rules within the scope of the enabling legislation.

Certain amendments to the tax credit program made by HB2023 are not reflected in the proposed rule amendments. Most important of these is the reduction of the amount of tax credit available from 50 percent to 25 percent of the eligible cost for facilities commenced after June 30, 1989 and completed before December 31, 1990. Since these amendments were made to the Department of Revenue statutes, rule amendments, as needed, will be made by the Department of Revenue.

It should be noted that no amendments are proposed to the return on investment formula. Simplifying the return on investment formula which is used to determine the percent of the certified facility cost allocable to pollution control, has been discussed in the past. Due to the upcoming sunset date of the program in 1990, it was determined that major amendments of this type are not warranted.

The following is a summary of the highlights of the proposed rule amendments:

NEIL GOLDSCHMIDT
GOVERNOR

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, October 9, 1987, EQC Meeting

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The following is a summary of the highlights of the proposed rule amendments:

1. Elimination of Energy Recovery Facilities from Eligibility (OAR 340-16-010(7) and 340-16-025(2)(d).

   HB2023 amended ORS 468.155 so that "resource recovery" processes that obtain energy from waste are no longer eligible for tax credit. However, "material recovery" processes which obtain useful material, other than energy, from waste are still eligible. The rules have been amended to reflect this change (OAR 340-16-025(2)(d)) and to include a definition of "material recovery process" (OAR 340-16-010(7)). This definition specifically excludes processes in which the major purpose is to produce fuel for heat or energy production. This would exclude pelletizers, resource derived fuel plants and other similar facilities which change waste to a product which can be used for fuel or heat. The definition also makes clear that pollution control devices, such as electrostatic precipitators, used in association with an energy recovery process which produces energy from waste, continue to be eligible even though equipment used for energy recovery is no longer eligible.

2. Elimination of Property Installed, Constructed or Used for Cleanup of Spills or Unauthorized Releases from Eligibility. (OAR 340-16-010(10) and (13))

   HB2023 amended ORS 468.155 to state that property installed, constructed or used for clean up of emergency spills or unauthorized releases is no longer eligible for tax credit. In the past, the Commission has certified tax credits for facilities, such as groundwater monitoring wells, used in association with the clean up of spills. The definition in the proposed rule is written so that facilities used to detect, deter or prevent future spills continue to be eligible. Equipment used for cleanup of spills which have already occurred would not be eligible unless the spill or unauthorized release is from an activity operated under a DEQ permit or a pollution control activity for which a DEQ permit is not required and which has been operated with due care. Under this definition, facilities such as curbing used to catch leaks, and groundwater monitoring wells used to detect leaks would still be eligible. Also, cleanup of spills or unauthorized releases from, for example, hazardous waste storage lagoons operated in compliance with a DEQ permit would be eligible for tax credit. A definition of spill or unauthorized release is also included. This definition is taken largely from the definition of "spill or release" in the hazardous waste rules (OAR 340-108-002(15)).

3. Deletion of 120 Day Deadline for Review of Tax Credit Applications by EQC. (OAR 340-16-020(2)(a) and (c)).

   HB2023 amended ORS 468.170 (2) to delete the requirement that a completed tax credit application must be reviewed by the EQC within 120 days or be rejected. Though no specific problems with the 120 day deadline have occurred, the Legislature felt that rejection of an application due to failure to meet the deadline would place an undue burden on the applicant. The proposed rule amendment reflects this change.

4. Extension of Sunset Date of Tax Credit Program Until December 31, 1990. (OAR 340-16-020(2)(b)(d)).

   HB2023 amended ORS 468.170(4)(d) to change the sunset date from December 31, 1988 to December 31, 1990. To be eligible for tax credit, a facility must be completed before December 31, 1990. The proposed rule amendments reflect this change.

5. Reinstatement of Revoked Tax Credits. (OAR 340-16-035(6),(7),(8) and (9)).

   HB2023 amended ORS 468.165(5) to allow the commission to reinstate a tax credit revoked due to fraud or misrepresentation used in obtaining a certificate, failure to operate the facility to control pollution or failure to comply with DEQ requirements. The proposed rule reflects this amendment. To date, no revocations of tax credits have occurred. It is felt that with the ability to reinstate revoked tax credits, it will be more likely that the Department will recommend revocation of tax credits as an enforcement tool.

   The burden for initiating the reinstatement of the tax credit is put on the applicant who must notify the EQC that the facility has been inspected by DEQ and found to be in compliance.

   The proposed rule states that the period for which certificates are revoked is from the date on which the Commission takes action to revoke the certificate to the date when the Commission takes action to reinstate the certificate. The reinstatement procedures will be the same as the contested case procedures used for revocation of tax credit.

6. Amendment of Statutory References.

   ORS 459 was amended by the 1985 legislature to delete certain sections related to hazardous waste and move them to ORS Chapter 466. Throughout the proposed rules housekeeping amendments have been made to change all references from ORS 459.410 to 466.005.

7. Determination of Percent Allocable. (OAR 340-16-030(2) and (4))

a. Consideration of the five factors.

The pollution control tax credit statute (ORS 468.190) states that the Commission shall consider five factors in establishing the percent of the pollution control facility cost allocable to pollution control. These factors are as follows:

(a) If applicable, the extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

(b) The estimated annual percent return on the investment in the facility.

(c) If applicable, the alternative methods, equipment and costs for achieving the same pollution control objective.

(d) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.

(e) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution or solid or hazardous waste or to recycling or properly disposing of used oil.

In the past, the Department has selected only one factor, which was in most cases factor (b), return on investment. In a few cases other factors, as applicable, have been considered in the staff report and used to establish percent allocable.

In reviewing the application for tax credit for the Ogden-Martin resource recovery facility, the Commission and the Assistant Attorney General decided that it was necessary for all five factors to be considered by the Commission in determining percent allocable. In doing this, the Commission weighed the relevant factors and arrived at a percent allocable figure which was a combination of these weighted factors.

Since legal counsel has determined that the Commission must consider all five factors in establishing percent allocable for all tax credit certifications, the rule must be amended. In order to have the Commission consider all five factors in all cases, the proposed rule amendments delete language which makes consideration of all five factors optional. (OAR 340-16-030(2)).

The rule also allows the EQC the option of assigning different weights to the different factors as was done in Ogden-Martin's case. Rather than proposing a formula to use in determining percent allocable, it is recommended that a case by case determination be made of whether weighting is appropriate.

b. Deletion of the Requirement to Choose the Least Percent Allocable.

Currently, the tax credit rule states that the Commission shall choose the factor or combination of factors which result in "the least percent allocable." Legal counsel has indicated that this rule is not within the authority granted to the Commission which states that "the Commission may adopt rules to establish methods to determine the portion of costs properly allocable" to pollution control (ORS 468.190(3)). Since this rule goes beyond statutorily granted rule making authority, the proposed rule amendments delete this section. (OAR 340-16-030(4)).

7. Deletion of Portions of Rule Regarding Percent Allocable Determination for Facilities Completed Before 1984. (OAR 340-16-030(3)).

OAR 340-16-030(3) addresses allocation of percent allocable for facilities completed before 1984. Tax credits for these facilities were issued in increments of 20 percent. Tax credits for facilities completed after 1984 are issued in 1 percent increments.

Since all facilities completed before 1984 had to apply for final tax credit by December 31, 1986 and would no longer be eligible to apply, this section of the rule is obsolete. The proposed rule, therefore, deletes this section.

Alternatives and Evaluation

1. Most of the proposed amendments are housekeeping amendments necessary to make the rules consistent with the recent statutory changes. There is no alternative to updating the rules to reflect these amendments.

2. The definition of "material recovery process" (OAR 340-16-010(7)) could be defined to include facilities which produce fuel. This would not, however, be consistent with the legislative intent of excluding from eligibility energy recovery facilities. Production of fuel is integrally related to energy recovery and cannot be considered a separate process. Furthermore, fuel production has not traditionally been accepted as a method of reusing or recycling waste under ORS Chapter 459. It would, therefore, not qualify as a material recovery process under the definition in ORS 459 since fuel production does not result in recycling or reuse as required under this definition.

   "Material recovery" could also be defined to eliminate from eligibility all pollution control devices associated with energy recovery processes. There does not, however, appear to be any reason to make pollution control devices ineligible when they are attached to energy recovery facilities since these same pollution control devices would be eligible if associated with any other type of process. Furthermore, DEQ testimony was given before the House Energy and Environment Committee that the Department intended pollution control devices attached to energy recovery facilities to be eligible under this definition.

3. The definition of "property installed, constructed, or used for cleanup of emergency spills or unauthorized releases" (OAR 340-16-010(10)) could be written to eliminate from eligibility pollution control facilities used to deter, detect or prevent spills or unauthorized releases. This would, however, seem inconsistent with the intent of the pollution control statute which is to provide financial assistance to individuals or corporations that prevent, control or reduce pollution. The definition could also be written to eliminate from eligibility those facilities used for cleanup of spills from facilities operating in compliance with DEQ permits or, if not governed by a DEQ permit, being operated with due care. It does not, however, seem appropriate to penalize for spills or unauthorized releases those who make reasonable efforts to control pollution by complying with DEQ requirements or are using due care.

4. The proposed rule amendments (OAR 340-16-030(4)) could include a formula indicating how the five factors would be weighted in all percent allocable determinations. The Department determined that this would be inappropriate since each pollution control facility is different and merits an individual determination of how the factors are to be weighted.

Summation

1. HB2023 passed during the 1987 legislative session made several changes to the pollution control tax credit statute (ORS 468.150 to .190). As a result, the tax credit rules must be updated to reflect and implement these amendments.

2. Legal counsel has recommended that the tax credit rules relating to percent allocable determinations be amended to bring them within the scope of the enabling legislation. The proposed rules would accomplish this purpose.

Director's Recommendation

Based on the summation, it is recommended that the Commission authorize public hearings to take testimony on the proposed Pollution Control Tax Credit Rule Amendments, Chapter 340, Division 16.

Fred Hansen

Attachments
I Statement of Need for Rules
II Statement of Land Use Consistency
III Draft Public Notice of Rules Adoption
IV Proposed Amendments to Chapter 340, Division 16
V House Bill 2023

Maggie Conley:p
MP1014
229-6408
September 4, 1987

Attachment I
Agenda Item No. D
October 9, 1987 EQC Meeting

BEFORE THE ENVIRONMENTAL QUALITY COMMISSION

OF THE STATE OF OREGON

IN THE MATTER OF AMENDING OAR CHAPTER 340, DIVISION 16	)))	STATEMENT OF NEED FOR RULES

Statutory Authority:

Amendment of the Pollution Control Tax Credit Rules is consistent with enabling legislation, ORS 468.150 to 468.190 and amendments made to the statute by HB2023 approved during the 1987 legislature.

Need for Rule Amendments:

In order to implement recent statutory changes, amendment of the tax credit rules is necessary. In addition, legal counsel has determined that portions of the current rules need to be amended to bring them within the scope of the enabling legislation.

Principal Documents Relied Upon:

Existing state statute, ORS 468.150 to 468.190, existing state rules OAR Chapter 340-16-010 to 340-16-050, and HB2023 (1987).

Fiscal and Economic Impact:

Amending the rules to include a definition of "material recovery" which identifies as ineligible those facilities used in energy production, including those used to produce fuel, would reduce the number of facilities eligible for tax credit.

Amending the rules to define "property installed, constructed or used for cleanup of emergency spills or unauthorized releases" so that facilities used to prevent spills continue to be eligible would result in more applicants being eligible for tax credit. Facilities used to clean up spills or unauthorized releases after they have occurred would only be eligible if operated in compliance with permit conditions or, if no permit is required, if operated with due care. This will probably result in a reduced number of facilities being eligible for tax credit.

Amending the rules to delete the requirement that in determining percent allocable the Commission use the combination of factors which results in the least percent allocable may result in larger percent allocable determinations. Therefore, larger tax credits for applicants would be expected.

Amending the rules to allow reinstatement of revoked tax credits, as required by statutory amendments, may result in more revoked tax credits being reinstated.

Amending the sunset date for the tax credit program, as required by statutory amendments, will extend the program two years from December 31, 1988 to December 31, 1990 thereby allowing more tax credits to be certified.

The net effect of the rules will probably be a reduction in the number of tax credits certified and a reduction in the impact on the general fund.

The overall impact of the rule would not be significant or adverse to small business.

MC:p
MP1015
229-6408
September 4, 1987

Attachment II
Agenda Item No. D
October 9, 1987 EQC Meeting

BEFORE THE ENVIRONMENTAL QUALITY COMMISSION

OF THE STATE OF OREGON

IN THE MATTER OF AMENDING OAR CHAPTER 340, DIVISION 16	)))	LAND USE CONSISTENCY

The proposal described appears to be consistent with all statewide planning goals. Specifically, the rule amendments comply with Goal 6 because they would provide tax credits for pollution control facilities, thereby contributing to the protection of air, water and land resource quality.

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

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

After public hearing, the Commission may adopt permanent rules identical to the proposal, adopt modified rules on the same subject matter, or decline to act. The Commission's deliberation should come on October 9, 1986 as part of the agenda of a regularly scheduled Commission meeting.

MC:p
MD146.B

ATTACHMENT III
Agenda Item No. D
October 9, 1987 EQC Meeting

Oregon Department of Environmental Quality

A CHANCE TO COMMENT ON...

Pollution Control Tax Credit Rule Amendments Public Hearing

Date Prepared: September 9, 1987
Hearing Date: November 2, 1987
Comments Due: November 2, 1987

WHO IS AFFECTED: Amendment of the rules will affect people applying for pollution control tax credits.

WHAT IS PROPOSED: The DEQ proposes to adopt amendments to the Pollution Control Tax Credit Rules (OAR 340-16-010 through 340-16-050) to reflect statutory amendments made by the 1987 legislature and to bring the rules within the bounds of the enabling legislation.

WHAT ARE THE HIGHLIGHTS: Amendments to the rules would implement recent statutory changes including elimination from eligibility of facilities which produce energy from waste and some facilities which are used for spill clean-up. They would also reflect statutory changes which amend the sunset date for the tax credit program from December 31, 1988 to December 31, 1990 and which allow restoration of a revoked tax credit if the facility is brought into compliance.

Amendments to the rules would require the Environmental Quality Commission to consider all five factors listed in the statute and allow the Commission to give them different weights when determining percent allocable rather than considering less than five of the factors. The amendments would no longer require the Commission to use the method for determining percent allocable which results in the least percent allocable.

HOW TO COMMENT: Copies of the proposed rule amendments can be obtained from:

Christie Nuttall
Management Services Division
811 SW Sixth Avenue
Portland, OR 97204
Telephone: 229-6484
Toll-free 1-800-452-4011

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

11/1/86

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.

Written comments should be sent to the same address by November 2, 1987. Verbal comments may be given during the public hearing scheduled as follows:

3:00 p.m.
November 2, 1987
Fourth Floor Conference Room
811 SW Sixth Avenue
Portland, Oregon

WHAT IS THE NEXT STEP: After the public hearing, the Environmental Quality Commission may adopt rules identical to those proposed, modify the rules or decline to act. The Commission's deliberations should come on December 4, 1987 as part of the agenda of a regularly scheduled Commission meeting.

ATTACHMENTS: Statement of Need for Rules (including Fiscal Impact)
Statement of Land Use Consistency

MD146.C

Attachment IV
Agenda Item No. D
October 9, 1987 EQC Meeting

OREGON ADMINISTRATIVE RULES

FOR POLLUTION CONTROL TAX CREDITS

CHAPTER 340, DIVISION 16

340-16-015 PURPOSE

The purpose of these rules is to prescribe procedures and criteria to be used by the Department and Commission for issuance of tax credits for pollution control facilities. These rules are to be used in connection with ORS 468.150 to 468.190 and apply only to facilities on which construction has been completed after December 31, 1983, except where otherwise noted herein.

340-16-010 DEFINITIONS

(1) "Circumstances beyond the control of the applicant" means facts, conditions and circumstances which applicant's due care and diligence would not have avoided.

(2) "Commencement of erection, construction or installation" means the beginning of a continuous program of on-site construction, erection or modification of a facility which is completed within a reasonable time, and shall not include site clearing, grading, dredging, landfilling or similar physical change made in preparation for the facility.

(3) "Commission" means Environmental Quality Commission.

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

(5) "Facility" means a pollution control facility.

(6) "Like-for-like replacement cost" means the current price of providing a new facility of the same type, size and construction materials as the original facility.

(7) "Material recovery process" means any process for obtaining from solid waste, hazardous waste or used oil, by presegregation or otherwise, materials which still have useful physical or chemical properties after serving a specific purpose and can, therefore, be reused or recycled for the same or other purpose. This does not include any process in which the major purpose is the production of fuel from solid waste, hazardous waste or used oil

which can be utilized for heat content or other forms of energy. It does not include any type of process which burns waste to produce energy or to reduce the amount of waste. However, it does not eliminate from eligibility a pollution control device associated with a process which burns waste if such device is otherwise eligible for pollution control tax credit under these rules.

(8) [7] "Principal purpose" means the most important or primary purpose. Each facility may have only one principal purpose.

(9) [8] "Reconstruction or replacement" means the provision of a new facility with qualities and pollution control characteristics equivalent to the original facility. This does not include repairs or work done to maintain the facility in good working order.

(10) "Property installed, constructed or used for cleanup of emergency spills or unauthorized releases" means any facility installed, constructed or used for cleanup after a spill or unauthorized release has occurred. It does not include a spill or unauthorized release due to an activity operating in compliance with a DEQ permit or an activity not governed by a DEQ permit which was operated with due care. It does not include facilities installed, constructed, or used to detect, deter, or prevent spills or unauthorized releases.

(11) [9] "Sole purpose" means the exclusive purpose.

(12) [10] "Special circumstances" means emergencies which call for immediate erection, construction or installation of a facility, cases where applicant has relied on incorrect information provided by Department personnel as demonstrated by letters, records of conversations or other written evidence, or similar adequately documented circumstances which directly resulted in applicant's failure to file a timely application for preliminary certification. Special circumstances shall not include cases where applicant was unaware of tax credit certification requirements or applied for preliminary certification in a manner other than that prescribed in 340-16-015(1).

(13) "Spill or unauthorized release" means the discharge, deposit, injection, dumping, spilling, emitting, releasing, leaking or placing of oil, hazardous materials or other polluting substances into the air or into or on any land or waters of the state, as defined in ORS 468.700, except as authorized by a permit issued under ORS Chapter 454, 459, 468 or 469, ORS 466.005 to 466.385, 466.880(1) and (2), 466.890 and 466.995(1) and (2) or federal law while being stored or used for its intended purpose.

(14) [11] "Substantial completion" means the completion of erection, installation, modification, or construction of all elements of the facility which are essential to perform its purpose.

(15) [12] "Useful life" means the number of years the claimed facility is capable of operating before replacement or disposal.

340-16-015 PROCEDURES FOR RECEIVING PRELIMINARY TAX CREDIT CERTIFICATION

(1) Filing of Application

(a) Any person proposing to apply for certification of a pollution control facility pursuant to ORS 468.165, shall file an application for preliminary certification with the Department of Environmental Quality 30 days before the commencement of erection, construction or installation of the facility. The application shall be made on a form provided by the Department. The preliminary certificate need not be issued prior to construction for compliance with this requirement.

(b) If the application is filed less than 30 days before commencement of construction, the application will be rejected as incomplete due to failure to comply with ORS 465.175(1) and OAR 340-16-015(a). However, if the Department reviews the application within 30 days of filing, and finds it complete, the Department shall notify the applicant in writing that the application is complete and ready for processing, and that the applicant may proceed with construction without waiting 30 days and without being rejected as incomplete.

(c) The Commission may waive the filing of the application if it finds the filing inappropriate because special circumstances render the filing unreasonable and if it finds such facility would otherwise qualify for tax credit certification pursuant to ORS 468.150 to 468.190.

(d) Within 30 days of the filing of an application the Department shall request any additional information that applicant needs to submit in order for the application to be considered complete. After examination thereof, the Department may request corrections and revisions to the plans and specifications. The Department may, also, require any other information necessary to determine whether the proposed construction is in accordance with Department statutes, rules and standards.

(e) The application shall not be considered complete until the Department receives the information requested and notifies the applicant in writing that the application is complete and ready for processing. However, if the Department does not make a timely request pursuant to subsection (d) above, the application shall be deemed complete 30 days after filing.

(f) Notice of the Department's recommended action to deny an application shall be mailed at least seven days before the Commission meeting where the application will be considered unless the applicant waives the notice requirement in writing.

(2) Approval of Preliminary Certification

(a) If the Department determines that the proposed facility is eligible it shall issue a preliminary certificate approving the erection, construction or installation within 60 days of receipt of a completed application. It is not necessary for this certificate to include a determination of the full extent a facility is eligible for tax credit.

(b) If within 60 days of the receipt of a completed application, the Department fails to issue a preliminary certificate of approval and the Commission fails to issue an order denying certification, the preliminary certificate shall be considered to have been issued. The construction must comply with the plans, specifications and any corrections or revisions thereto, if any, previously submitted.

(c) Issuance of a preliminary tax credit certification does not guarantee final tax credit certification.

(3) Denial of Preliminary Certification

If the Department determines that the erection, construction or installation does not comply with the Department statutes, rules and standards, the Commission shall issue an order denying certification within 60 days of receipt of a completed application.

(4) Appeal

Within 20 days from the date of mailing of the order the applicant may demand a hearing. The demand shall be in writing, shall state the grounds for hearing and shall be mailed to the Director of the Department. The hearing shall be conducted in accordance with the applicable provisions of ORS 183.310 to 183.550.

340-16-020 PROCEDURES FOR RECEIVING FINAL TAX CREDIT CERTIFICATION

(1) Filing of Application

(a) A written application for final tax credit certification shall be made to the Department on a form provided by the Department.

(b) Within 30 days of receipt of an application, the Department shall request any additional information that applicant needs to submit in order for the application to be considered complete. The Department may also require any other information necessary to determine whether the construction is in accordance with Department statutes, rules and standards.

(c) An application shall not be considered filed until all requested information is furnished by the applicant, and the Department notifies the applicant in writing that the application is complete and ready for processing.

(d) The application shall be filed within two years of substantial completion of construction of the facility. Failure to file a timely application shall make the facility ineligible for tax credit certification.

(e) The Commission may grant an extension of time to file an application if circumstances beyond the control of the applicant would make a timely filing unreasonable.

(f) An extension shall only be considered if applied for within two years of substantial completion of construction of the facility. An extension may be granted for no more than one year. Only one extension may be granted.

(g) An application may be withdrawn and resubmitted by applicant at any time within two years of substantial completion of construction of the facility without paying an additional processing fee, unless the cost of the facility has increased. An additional processing fee shall be calculated by subtracting the cost of the facility on the original application from the cost of the facility on the resubmitted application and multiplying the remainder by one-half of one percent.

(h) If the Department determines the application is incomplete for processing and applicant fails to submit requested information within 180 days of the date when the Department requested the information, the application will be rejected, unless applicant requests in writing additional time to submit requested information.

(2) Commission Action

(a) Notice of the Department's recommended action on the application shall be mailed at least seven days before the Commission meeting where the application will be considered unless the applicant waives the notice requirement in writing. [The Commission shall act on an application for certification before the 120th day after the filing of a complete application.] The Commission may consider and act upon an application at any of its regular or special meetings. The matter shall be conducted as an informal public informational hearing, not a contested case hearing, unless ordered otherwise by the Commission.

(b) Certification

(A) If the Commission determines that the facility is eligible, it shall certify the actual cost of the facility and the portion of the actual cost properly allocable to pollution control, [resource] <u>material</u> recovery or recycling as set forth in ORS 468.190. Each certificate shall bear a separate serial number for each such facility.

(B) No determination of the proportion of the actual cost of the facility to be certified shall be made until receipt of the application.

(C) If two or more facilities constitute an operational unit, the commission may certify such facilities under one certificate.

(D) A certificate is effective for purposes of tax relief in accordance with ORS 307.405, 316.097 and 317.116 if erection, construction or installation of the facility was [begun] completed before December 31, [1988] 1990.

(E) Certification of a pollution control facility qualifying under ORS 468.165(1) shall be granted for a period of 10 consecutive years. The 10-year period shall begin with the tax year of the person in which the facility is certified under this section. However, if ad valorem tax relief is utilized by a corporation organized under ORS Chapter 61 or 62 the facility shall be exempt from ad valorem taxation, to the extent of the portion allocable, for a period of 20 consecutive years, or 10 years if construction is commenced after June 30, 1989 and completed before December 31, 1990, from the date of its first certification by the Commission.

(F) Portions of a facility qualifying under ORS 468.165(1)(c) may be certified separately under this section if ownership of the portions is in more than one person. Certification of such portions of a facility shall include certification of the actual cost of the portion of the facility to the person receiving the certification. The actual cost certified for all portions of a facility separately certified under this subsection shall not exceed the total cost of the facility that would have been certified under one certificate. The provisions of ORS 316.097(8) or 317.116 whichever is applicable, shall apply to any sale, exchange or other disposition of a certified portion to a facility.

(c) Rejection

If the Commission rejects an application for certification, or certifies a lesser actual cost of the facility or a lesser portion of the actual cost properly allocable to pollution control, [resource] material recovery or recycling than was claimed in the application for certification, the Commission shall cause written notice of its action, and a concise statement of the findings and reasons therefore, to be sent by registered or certified mail to the applicant [within 120 days after the filing of the application. Failure of the Commission to act constitutes rejection of the application.]

(3) Appeal

If the application is rejected for any reason, or if the applicant is dissatisfied with the certification of actual cost or portion of

the actual cost properly allocable to pollution control, material recovery or recycling, the applicant may appeal from the rejection as provided in ORS 468.110. The rejection of the certification is final and conclusive on all parties unless the applicant takes an appeal therefrom as provided in ORS 468.110 before the 30th day after notice was mailed by the Commission.

340-16-025 QUALIFICATION OF FACILITY FOR TAX CREDITS

(1) "Pollution control facility" or "facility" shall include any land, structure, building, installation, excavation, machinery, equipment or device, or alternative methods for field sanitation and straw utilization and disposal as approved by the Field Burning Advisory Committee and the Department, or any addition to, reconstruction of or improvement of, land or an existing structure, building, installation, excavation, machinery, equipment or device reasonably used, erected, constructed or installed by any person, which will achieve compliance with Department statutes and rules or Commission orders or permit conditions, where applicable, if:

(a) The principal purpose of the facility is to comply with a requirement imposed by the Department, the Federal Environmental Protection Agency or regional air pollution authority to prevent, control or reduce air, water or noise pollution or solid or hazardous waste or to recycle or provide for the appropriate disposal of used oil; or

(b) The sole purpose of the facility is to prevent, control or reduce a substantial quantity of air, water or noise pollution or solid or hazardous waste or to recycle or provide for the appropriate disposal of used oil.

(2) Such prevention, control or reduction required by this subsection shall be accomplished by:

(a) The disposal or elimination of or redesign to eliminate industrial waste and the use of treatment works for industrial waste as defined in ORS 468.700;

(b) The disposal or elimination of or redesign to eliminate air contaminants or air pollution or air contamination sources and the use of air cleaning devices as defined in ORS 468.275;

(c) The substantial reduction or elimination of or redesign to eliminate noise pollution or noise emission sources as defined by rule of the commission;

(d) The use of a [resource] material recovery process which obtains useful material [or energy resources] from material that would otherwise be solid waste as defined in ORS 459.005, hazardous waste as defined in ORS [459.410] 466.005, or used oil as defined in ORS 468.850;

[(e) Subsequent additions to a solid waste facility, made either to an already certified facility or to an operation which would have qualified as a facility but for the fact that it was erected, constructed or installed before January 1, 1973, which will increase the production or recovery of useful materials or energy over the amount being produced or recovered by the original facility whether or not the materials or energy produced or recovered are similar to those of the original facility.]

(e) [f] The treatment, substantial reduction or elimination of or redesign to treat, substantially reduce or eliminate hazardous waste as defined in ORS [459.410] 466.005; or

(f) [g] Approved alternative field burning methods and facilities which shall be limited to:

(A) Equipment, facilities, and land for gathering, densifying, processing, handling, storing, transporting and incorporating grass straw or straw based products which will result in reduction of open field burning;

(B) Propane flamers or mobile field sanitizers which are alternatives to open field burning and reduce air quality impacts; and

(C) Drainage tile installations which will result in a reduction of grass seed acreage under production.

(3) "Pollution control facility" or "facility" does not include:

(a) Air conditioners;

(b) Septic tanks or other facilities for human waste;

(c) Property installed, constructed or used for moving sewage to the collecting facilities of a public or quasi-public sewerage system;

(d) Any distinct portion of a solid waste, hazardous waste or used oil facility that makes an insignificant contribution to the purpose of utilization of solid waste, hazardous waste or used oil including the following specific items:

(A) Office buildings and furnishings;

(B) Parking lots and road improvements;

(C) Landscaping;

(D) External lighting;

(E) Company signs;

(F) Artwork; and

(G) Automobiles.

(e) Facilities not directly related to the operation of the industry or enterprise seeking the tax credit;

(f) Replacement or reconstruction of all or a part of any facility for which a pollution control facility certificate has previously been issued under ORS 468.170, except:

(A) If the cost to replace or reconstruct the facility is greater than the like-for-like replacement cost of the original facility due to a requirement imposed by the department, the federal Environmental Protection Agency or a regional air pollution authority, then the facility may be eligible for tax credit certification up to an amount equal to the difference between the cost of the new facility and the like-for-like replacement cost of the original facility; or

(B) If a facility is replaced or reconstructed before the end of its useful life then the facility may be eligible for the remainder of the tax credit certified to the original facility.

(g) Property installed, constructed or used for cleanup of emergency spills or unauthorized releases.

(4) Any person may apply to the commission for certification under ORS 468.170 of a pollution control facility or portion thereof erected, constructed or installed by the person in Oregon if:

(a) The air or water pollution control facility was erected, constructed or installed on or after January 1, 1967.

(b) The noise pollution control facility was erected, constructed or installed on or after January 1, 1977.

(c) The solid waste facility was under construction on or after January 1, 1973, or the hazardous waste, used oil, [resource] material recovery, or recycling facility was under construction on or after October 3, 1979, and if:

(A) The facility's principal or sole purpose conforms to the requirements of ORS 468.155(1);

(B) The facility will utilize material that would otherwise be solid waste as defined in ORS 459.005, hazardous waste as defined in ORS [459.410] 466.005 or used oil as defined in ORS 468.850:

(i) By burning, mechanical processing or chemical processing; or

(ii) Through the production, processing, presegregation, or use of:

(I) Materials for their heat content or other forms of energy of or from the material; or

(II) Materials which have useful chemical or physical properties and which may be used for the same or other purposes; or

(III) Materials which may be used in the same kind of application as its prior use without change in identity;

(C) The end product of the utilization is a usable source of power or other item of real economic value;

(D) The end product of the utilization, other than a usable source of power, is competitive with an end product produced in another state; and

(E) The Oregon law regulating solid waste imposes standards at least substantially equivalent to the federal law.

(d) The hazardous waste control facility was erected, constructed or installed on or after January 1, 1984 and if:

(A) The facility's principal or sole purpose conforms to the requirements of ORS 468.155(1) and

(B) The facility is designed to treat, substantially reduce or eliminate hazardous waste as defined in ORS [459.410] 466.005.

(5) The Commission shall certify a pollution control, solid waste, hazardous waste or used oil facility or portion thereof, for which an application has been made under ORS 468.165, if the Commission finds that the facility:

(A) Was erected, constructed or installed in accordance with the requirements of ORS 468.165(1) and 468.175;

(B) Is designed for, and is being operated or will operate in accordance with the requirements of ORS 468.155; and

(C) Is necessary to satisfy the intents and purposes of and is in accordance with the applicable Department statutes, rules and standards.

340-16-030 DETERMINATION OF PERCENTAGE OF CERTIFIED FACILITY COST ALLOCABLE TO POLLUTION CONTROL

(1) Definitions

(a) "Annual operating expenses" means the estimated costs of operating the claimed facility including labor, utilities, property taxes, insurance, and other cash expenses, less any savings in expenses attributable to installation of the claimed facility. Depreciation, interest expenses, and state and federal taxes are not included.

(b) "Average annual cash flow" means the estimated average annual cash flow from the claimed facility for the first five full years of operation calculated as follows:

(A) Calculate the annual cash flow for each of the first five full years of operation by subtracting the annual operating expenses from the gross annual income for each year and

(B) Sum the five annual cash flows and divide the total by five. Where the useful life of the claimed facility is less than five years, sum the annual cash flows for the useful life of the facility and divide by the useful life.

(c) "Claimed facility cost" means the actual cost of the claimed facility minus the salvage value of any facilities removed from service.

(d) "Gross annual income" means the estimated total annual income from the claimed facility derived from sale or reuse of recovered materials or energy or any other means.

(e) "Salvage value" means the value of a facility at the end of its useful life minus what it costs to remove it from service. Salvage value can never be less than zero.

(2) In establishing the portion of costs properly allocable to the prevention, control or reduction of air, water or noise pollution or solid or hazardous waste or to recycling or properly disposing of used oil for facilities qualifying for certification under ORS 468.170, the Commission shall consider the following factors[, if applicable]:

(a) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity;

(b) The estimated annual percent return on the investment in the facility;

(c) The alternative methods, equipment and costs for achieving the same pollution control objective;

(d) Related savings or increase in costs which occur or may occur as a result of the installation of the facility; or

(e) Other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to the prevention, control or reduction of air, water or noise pollution or solid or hazardous waste or to recycling or properly disposing of used oil.

[(3) For facilities that have received preliminary certification and on which construction has been completed before January 1, 1984, the portion of actual costs properly allocable shall be:

(a) Eighty percent or more.

(b) Sixty percent or more but less than 80 percent.

(c) Forty percent or more but less than 60 percent.

(d) Twenty percent or more but less than 40 percent.

(e) Less than twenty percent.]

3 [(4)] [For facilities on which construction has been completed after December 31, 1983,] The portion of actual costs properly allocable shall be from zero to 100 percent in increments of one percent. If zero percent, the Commission shall issue an order denying certification.

4 [(5)] In considering the factors listed in 340-16-030, [to establish the portion of costs allocable to pollution control, the Commission will use the factor, or combination of factors, that results in the smallest portion of costs allocable.] the Commission may determine that one or more factors are more important than others and may assign different weight to the factors when determining the portion of costs properly allocable to pollution control.

5 [(6)] When considering the estimated annual percent return on investment in the facility, 340-16-030(2)(b), [is used to establish the portion of costs allocable to pollution control,] the following steps will be used:

(a) Determine the claimed facility cost, average annual cash flow and useful life of the claimed facility.

(b) Determine the return on investment factor by dividing the claimed facility cost by the average annual cash flow.

(c) Determine the annual percent return on investment by using Table 1. At the top of Table 1, find the number equal to the useful life of the claimed facility. In the column under this useful life number, find the number closest to the return on investment factor. Follow this row to the left until reaching the first column. The number in the first column is the annual percent return on investment for the claimed facility. For a useful life greater than 30 years, or percent return on investment greater than 25 percent, Table 1 can be extended by utilizing the following equation:

$$I_R = \frac{1-(1+i)^{-n}}{i}$$

Where: I_R is the return on investment factor.
i is the annual percent return on investment.
n is the useful life of the claimed facility.

(d) Determine the reference annual percent return on investment from Table 2. Select the reference percent return from Table 2 that corresponds with the year construction was completed on the claimed facility. For each future calendar year not shown in Table 2, the reference percent return shall be the five-year average of the rate of return before taxes on stockholders' equity for all United States manufacturing corporations for the five years prior to the calendar year of interest.

(e) Determine the portion of actual costs properly allocable to pollution control from the following equation:

$$P_A = \frac{RROI - ROI}{RROI} \times 100\%$$

Where: P_A is the portion of actual costs properly allocable to pollution control in percent, rounded off to the nearest whole number.

ROI is the annual percent return on investment from Table 1.

RROI is the reference annual percent return on investment from Table 2.

If ROI is greater than or equal to RROI, then the portion of actual costs properly allocable to pollution control shall be zero percent.

340-16-035 PROCEDURE TO REVOKE CERTIFICATION

(1) Pursuant to the procedures for a contested case under ORS 183.310 to 183.550, the Commission may order the revocation of the final tax credit certification if it finds that:

(a) The certification was obtained by fraud or misrepresentation or

(b) The holder of the certificate has failed substantially to operate the facility for the purpose of, and to the extent necessary for, preventing, controlling or reducing air, water or noise pollution or solid waste, hazardous wastes or recycling or disposing of used oil as specified in such certificate, or has failed to operate the facility in compliance with Department or Commission statutes, rules, orders or permit conditions where applicable.

(2) As soon as the order of revocation under this section has become final, the Commission shall notify the Department of Revenue and the county assessor of the county in which the facility is located of such order.

(3) If the certification of a pollution control or solid waste, hazardous wastes or used oil facility is ordered revoked pursuant to paragraph (a) of subsection (1) of this section, all prior tax relief provided

to the holder of such certificate by virtue of such certificate shall be forfeited and the Department of Revenue or the proper county officers shall proceed to collect those taxes not paid by the certificate holder as a result of the tax relief provided to the holder under any provision of ORS 307.405, 316.097 and 317.116.

(4) Except as provided in subsection (5) of this section, if the certification of a pollution control or solid waste, hazardous wastes or used oil facility is ordered revoked pursuant to paragraph (b) of subsection (1) of this section, the certificate holder shall be denied any further relief provided under ORS 307.405, 316.097 or 317.116 in connection with such facility, as the case may be, from and after the date that the order of revocation becomes final.

(5) The commission may only revoke tax credits for the specific facility or piece of equipment for which findings are made under paragraph (a) or (b) of subsection (1) of this section.

(6) Upon notification by the certificate holder that the facility has been inspected by DEQ and found to be in compliance, the commission may reinstate a tax credit certification revoked under paragraph (b) of subsection (1) of this section if the commission finds the facility has been brought into compliance.

(7) If the commission reinstates certification, the commission shall notify the Department of Revenue or the county assessor of the county in which the facility is located that the tax credit certification is reinstated for the remaining period of the tax credit, less the period of revocation. The period of revocation would be from the date the Commission revokes the certificate to the date the Commission reinstates the certificate.

(9) [5] The [Department] commission may withhold revocation of a certificate when operation of a facility ceases if the certificate holder indicates in writing that the facility will be returned to operation within five years time. In the event that the facility is not returned to operation as indicated, the [Department] commission shall revoke the certificate.

(8) Reinstatement of a certificate shall be according to the procedures for a contested case under ORS 183.310 to 183.550.

340-16-040 PROCEDURES FOR TRANSFER OF A TAX CREDIT CERTIFICATE

To transfer a tax credit certificate from one holder to another, the Commission shall revoke the certificate and grant a new one to the new holder for the balance of the available tax credit following the procedure set forth in ORS 307.405, 316.097, and 317.116.

340-16-045 FEES FOR FINAL TAX CREDIT CERTIFICATION

(1) An application processing fee of one-half of one percent of the cost claimed in the application of the pollution control facility to a maximum of $5,000 shall be paid with each application. However, if the application processing fee is less than $50, no application processing fee shall be charged. A non-refundable filing fee of $50 shall be paid with each application. No application is complete until the filing fee and processing fee are submitted. An amount equal to the filing fee and processing fee shall be submitted as a required part of any application for a pollution control facility tax credit.

(2) Upon the Department's receipt of an application, the filing fee becomes non-refundable.

(3) The application processing fee shall be refunded in whole if the application is rejected.

(4) The fees shall not be considered by the Environmental Quality Commission as part of the cost of the facility to be certified.

(5) All fees shall be made payable to the Department of Environmental Quality.

340-16-050 TAXPAYERS RECEIVING TAX CREDIT

(1) A person receiving a certificate under this section may take tax relief only under ORS 316.097 or 317.116, depending upon the tax status of the person's trade or business except if the taxpayer is a corporation organized under ORS Chapter 61 or 62, or any predecessor to ORS Chapter 62 relating to incorporation of cooperative associations, or is a subsequent transferee of such a corporation, the tax relief may be taken only under ORS 307.405.

(2) If the person receiving the certificate is an electing small business corporation as defined in section 1361 of the Internal Revenue Code, each shareholder shall be entitled to take tax credit relief as provided in ORS 316.097, based on that shareholder's pro rata share of the certified cost of the facility.

(3) If the person receiving the certificate is a partnership, each partner shall be entitled to take tax credit relief as provided in ORS 316.097, based on that partner's pro rata share of the certified cost of the facility.

(4) Upon any sale, exchange or other disposition of a facility written notice must be provided to the Department of Environmental Quality by the company, corporation or individual for whom the tax credit certificate has been issued. Upon request, the taxpayer shall provide a copy of the contract or other evidence of disposition of the property to the Department of Environmental Quality.

(5) The company, corporation or individual claiming the tax credit for a leased facility must provide a copy of a written agreement between the lessor and lessee designating the party to receive the tax credit and a copy of the complete and current lease agreement for the facility.

(6) The taxpayer claiming the tax credit for a facility with more than one owner shall provide a copy of a written agreement between the owners designating the party or parties to receive the tax credit certificate.

64th OREGON LEGISLATIVE ASSEMBLY-1987 Regular Session

B-Engrossed
House Bill 2023

Ordered by the House June 4
Including House Amendments dated May 14 and June 4

Ordered printed by the Speaker pursuant to House Rule 12.00A (5). Presession filed (at the request of Joint Interim Committee on Hazardous Materials)

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.

Allows pollution control facility tax credit on facility if erection, construction or installation was completed before December 31, 1990. Extends tax credit of 50 percent of certified cost of facility through June 30, 1989. Extends tax credit for facilities **commenced after June 30, 1989, and** completed before December 1, 1990, at 25 percent of certified cost. **Clarifies that yearly tax credit is still one-half of certified cost multiplied by percentage allocable to pollution and divided by 10 years for facilities started before July 1, 1989. Clarifies that only owner or lessee, and not both, can claim tax credit.** Disallows credits for property installed or used for clean up of emergency spills or unauthorized releases. Authorizes reinstatement of revoked tax credit if facility is brought into compliance.

A BILL FOR AN ACT

Relating to pollution control tax credits; amending ORS 307.405, 316.097, 317.116, 468.155, 468.170 and 468.185.

Be It Enacted by the People of the State of Oregon:

SECTION 1. ORS 307.405 is amended to read:

307.405. (1) A pollution control facility or facilities which have been constructed in accordance with the requirements of ORS 468.165 (1), and have been certified by the Environmental Quality Commission pursuant to ORS 468.170 are exempt to the extent of the highest percentage figure certified by the Environmental Quality Commission as the portion of the actual cost properly allocable to the prevention, control or reduction of pollution. The exemption shall be allowed only if the taxpayer is a corporation organized under ORS chapter 61 or 62, or any predecessor to ORS chapter 62 relating to incorporation of cooperative associations, or is a subsequent transferee of such a corporation. If the subsequent transferee is organized under other than ORS chapter 61 or 62, the exemption shall only be allowed if the transfer occurs after the expiration of five years from the date of original certification by the commission.

(2) To qualify for the ad valorem tax relief:

(a) The pollution control facility must be erected, constructed or installed in connection with the trade or business conducted by the taxpayer on Oregon property owned or leased by said taxpayer.

(b) The taxpayer must be the owner of the trade or business that utilizes Oregon property requiring a pollution control facility to prevent or minimize pollution or a person who, as a lessee under a written lease or pursuant to a written agreement, conducts the trade or business that operates or utilizes such property and who by the terms of such lease or agreement is obliged to pay the ad valorem taxes on such property. As used in this subsection, "owner" includes a contract

NOTE: Matter in **bold face** in an amended section is new; matter *[italic and bracketed]* is existing law to be omitted.

purchaser.

(3) The ad valorem exemption of a facility shall expire, in any event: [,]

(a) Twenty [*20*] years from the date of its first certification **for any owner or lessee by the Environmental Quality Commission; or**

(b) For a facility whose erection, construction or installation is commenced after June 30, 1989, and completed before December 31, 1990, 10 years from the date of its first certification for any owner or lessee by the Environmental Quality Commission.

(4) Upon any sale, exchange, or other disposition of a facility, notice thereof shall be given to the Environmental Quality Commission who shall revoke the certification covering such facility as of the date of such disposition. The transferee may apply for a new certificate under ORS 468.170, but the number of years of ad valorem tax exemption that may be claimed by the transferee is the remainder of the exemption period specified in subsection (3) of this section.

(5) If the facility also functions to prevent pollution from operations conducted on other property owned or leased by the taxpayer the Environmental Quality Commission shall state in its certification of the facility the percentage of the facility used to prevent pollution from such qualifying trade or business conducted on such qualifying property. The exemption from ad valorem taxes under this section shall be limited to such percentage of the value of the facility.

SECTION 2. ORS 316.097 is amended to read:

316.097. (1) A credit against taxes imposed by this chapter for a pollution control facility or facilities certified under ORS 468.170 shall be allowed if the taxpayer qualifies under subsection (4) of this section.

(2) For a facility certified under ORS 468.170, the maximum credit allowed in any one tax year shall be the lesser of the tax liability of the taxpayer or **either of the following:**

(a) For a facility whose erection, construction or installation is commenced before July 1, 1989, and completed before December 31, 1990, one-half of the certified cost of the facility **multiplied by the certified percentage allocable to pollution control, divided by the number of years of the facility's useful life. The number of years of the facility's useful life used in this calculation shall be the remaining number of years of useful life at the time the facility is certified but not less than one year or more than 10 years.**

(b) For a facility whose erection, construction or installation is commenced after June 30, 1989, and completed before December 31, 1990, one-quarter of the certified cost of the facility multiplied by the certified percentage allocable to pollution control, divided by the number of years of the facility's useful life. The number of years of the facility's useful life used in this calculation shall be the remaining number of years of useful life at the time the facility is certified but not less than one year or more than 10 years.

(3) To qualify for the credit the pollution control facility must be erected, constructed or installed in accordance with the provisions of ORS 468.165 (1).

(4)(a) The taxpayer who is allowed the credit must be:

(A) The owner of the trade or business that utilizes Oregon property requiring a pollution control facility to prevent or minimize pollution;

(B) A person who, as a lessee or pursuant to an agreement, conducts the trade or business that operates or utilizes such property; or

(C) A person who, as an owner[,] **or** lessee [*or pursuant to an agreement,*] owns[,] or leases [*or has a beneficial interest in*] a pollution control facility used for resource recovery as defined in ORS

459.005. Such person may, but need not, operate such facility or conduct a trade or business that utilizes property requiring such a facility. If more than one person has an interest under this subparagraph in a resource recovery facility, **only one may claim the credit allowed under this section.** [*and without regard to ORS 468.170 (9), one or more persons receive a certificate, such person or persons may allocate all or any part of the certified cost of such facility among any persons and their successors or assigns having an interest under this subparagraph. Such allocation shall be evidenced by a written statement signed by the person or persons receiving the certificate and designating the persons to whom the certified costs have been allocated and the amount of certified cost allocated to each*] **The person claiming the credit as between an owner and lessee under this subparagraph shall be designated in a written statement signed by both the lessor and lessee of the facility**; this statement shall be filed with the Department of Revenue not later than the final day of the first tax year for which a tax credit is claimed. [*pursuant to such agreement. In no event shall the aggregate certified costs allocated between or among more than one person exceed the amount of the total certified cost of the facility.*] As used in this paragraph, "owner" includes a contract purchaser; and

(b) The facility must be owned or leased during the tax year by the taxpayer claiming the credit[, *except as otherwise provided in subparagraph (C) of paragraph (a) of this subsection,*] and must have been in use and operation during the tax year for which the credit is claimed.

(5) Regardless of when the facility is erected, constructed or installed, a credit under this section may be claimed by a taxpayer:

(a) For a facility qualifying under ORS 468.165 (1)(a) or (b), only in those tax years which begin on or after January 1, 1967.

(b) For a facility qualifying under ORS 468.165 (1)(c), in those tax years which begin on or after January 1, 1973.

(c) For a facility qualifying under ORS 468.165 (1)(d), in those tax years which begin on or after January 1, 1984.

(6) For a facility certified under ORS 468.170, the maximum total credit allowable shall not exceed:

(a) One-half of the certified cost of the facility **multiplied by the certified percentage allocable to pollution control; or**

(b) For a facility whose erection, construction or installation is commenced after June 30, 1989, and completed before December 31, 1990, one-quarter of the certified cost of the facility multiplied by the certified percentage allocable to pollution control.

(7) The credit provided by this section is not in lieu of any depreciation or amortization deduction for the facility to which the taxpayer otherwise may be entitled under this chapter for such year.

(8) Upon any sale, exchange, or other disposition of a facility, notice thereof shall be given to the Environmental Quality Commission who shall revoke the certification covering such facility as of the date of such disposition. The transferee may apply for a new certificate under ORS 468.170, but the tax credit available to such transferee shall be limited to the amount of credit not claimed by the transferor. The sale, exchange or other disposition of shares in an electing small business corporation as defined in section [*1371*] **1361** of the Internal Revenue Code or of a partner's interest in a partnership shall not be deemed a sale, exchange or other disposition of a facility for purposes of this subsection.

(9) Any tax credit otherwise allowable under this section which is not used by the taxpayer in a particular year may be carried forward and offset against the taxpayer's tax liability for the next succeeding tax year. Any credit remaining unused in such next succeeding tax year may be carried forward and used in the second succeeding tax year, and likewise, any credit not used in that second succeeding tax year may be carried forward and used in the third succeeding tax year, but may not be carried forward for any tax year thereafter. Credits may be carried forward to and used in a tax year beyond the years specified in ORS 468.170.

(10) The taxpayer's adjusted basis for determining gain or loss shall not be further decreased by any tax credits allowed under this section.

(11) If the taxpayer is a shareholder of an electing small business corporation, the credit shall be computed using the shareholder's pro rata share of the corporation's certified cost of the facility. In all other respects, the allowance and effect of the tax credit shall apply to the corporation as otherwise provided by law.

SECTION 3. ORS 317.116 is amended to read:

317.116. (1) A credit against taxes imposed by this chapter for a pollution control facility or facilities certified under ORS 468.170 shall be allowed if the taxpayer qualifies under subsection (4) of this section.

(2) For a facility certified under ORS 468.170, the maximum credit allowed in any one taxable year shall be the lesser of the tax liability of the taxpayer or **either of the following:**

(a) For a facility whose erection, construction or installation is commenced before July 1, 1989, and completed before December 31, 1990, one-half of the certified cost of the facility **multiplied by the certified percentage allocable to pollution control, divided by the number of years of the facility's useful life. The number of years of the facility's useful life used in this calculation shall be the remaining number of years of useful life at the time the facility is certified but not less than one year or more than 10 years.**

(b) For a facility whose erection, construction or installation is commenced after June 30, 1989, and completed before December 31, 1990, one-quarter of the certified cost of the facility multiplied by the certified percentage allocable to pollution control, divided by the number of years of the facility's useful life. The number of years of the facility's useful life used in this calculation shall be the remaining number of years of useful life at the time the facility is certified, but not less than one year or more than 10 years.

(3) To qualify for the credit the pollution control facility must be erected, constructed or installed in accordance with the provisions of ORS 468.165 (1).

(4)(a) The taxpayer who is allowed the credit must be:

(A) The owner of the trade or business that utilizes Oregon property requiring a pollution control facility to prevent or minimize pollution;

(B) A person who, as a lessee or pursuant to an agreement, conducts the trade or business that operates or utilizes such property; or

(C) A person who, as an owner[,] **or** lessee [*or pursuant to an agreement,*] owns[,] **or** leases [*or has a beneficial interest in*] a pollution control facility used for resource recovery as defined in ORS 459.005. Such person may, but need not, operate such facility or conduct a trade or business that utilizes property requiring such a facility. If more than one person has an interest under this subparagraph in a resource recovery facility, **only one may claim the credit allowed under this section.** [*and without regard to ORS 468.170 (9), one or more persons receive a certificate, such person*

or persons may allocate all or any part of the certified cost of such facility among any persons and their successors or assigns having an interest under this subparpgraph. Such allocation shall be evidenced by a written statement signed by the person or persons receiving certification and designating the persons to whom the certified costs have been allocated and the amount of certified cost allocated to each] **The person claiming the credit as between an owner and lessee under this subparagraph shall be designated in a written statement signed by both the lessor and lessee of the facility;** this statement shall be filed with the Department of Revenue not later than the final day of the first tax year for which a tax credit is claimed. [*pursuant to such agreement. In no event shall the aggregate certified costs allocated between or among more than one person exceed the amount of the total certified cost of the facility.*] As used in this paragraph, "owner" includes a contract purchaser; and

(b) The facility must be owned or leased during the tax year by the taxpayer claiming the credit [*except as provided in subparagraph (C) of paragraph (a) of this subsection,*] and must have been in use and operation during the tax year for which the credit is claimed.

(5) Regardless of when the facility is erected, constructed or installed, a credit under this section may be claimed by a taxpayer:

(a) For a facility qualifying under ORS 468.165 (1)(a) or (b), only in those tax years which begin on or after January 1, 1967.

(b) For a facility qualifying under ORS 468.165 (1)(c), only in those tax years which begin on or after January 1, 1973.

(c) For a facility qualifying under ORS 468.165 (1)(d), in those tax years which begin on or after January 1, 1984.

(6) For a facility certified under ORS 468.170, the maximum total credit allowable shall not exceed:

(a) One-half of the certified cost of the facility **multiplied by the certified percentage allocable to pollution control; or**

(b) For a facility whose erection, construction or installation is commenced after June 30, 1989, and completed before December 31, 1990, one-quarter of the certified cost of the facility multiplied by the certified percentage allocable to pollution control.

(7) The credit provided by this section is not in lieu of any depreciation or amortization deduction for the facility to which the taxpayer otherwise may be entitled under this chapter for such year.

(8) Upon any sale, exchange, or other disposition of facility, notice thereof shall be given to the Environmental Quality Commission who shall revoke the certification covering such facility as of the date of such disposition. The transferee may apply for a new certificate under ORS 468.170, but the tax credit available to such transferee shall be limited to the amount of credit not claimed by the transferor. The sale, exchange or other disposition of a partner's interest in a partnership shall not be deemed a sale, exchange or other disposition of a facility for purposes of this subsection.

(9) Any tax credit otherwise allowable under this section which is not used by the taxpayer in a particular year may be carried forward and offset against the taxpayer's tax liability for the next succeeding tax year. Any credit remaining unused in such next succeeding tax year may be carried forward and used in the second succeeding tax year, and likewise, any credit not used in that second succeeding tax year may be carried forward and used in the third succeeding tax year, but may not be carried forward for any tax year thereafter. Credits may be carried forward to and used in a tax

year beyond the years specified in ORS 468.170.

(10) The taxpayer's adjusted basis for determining gain or loss shall not be further decreased by any tax credits allowed under this section.

SECTION 4. ORS 468.155 is amended to read:

468.155. (1)(a) As used in ORS 468.155 to 468.190, unless the context requires otherwise, "pollution control facility" or "facility" means any land, structure, building, installation, excavation, machinery, equipment or device, or any addition to, reconstruction of or improvement of, land or an existing structure, building, installation, excavation, machinery, equipment or device reasonably used, erected, constructed or installed by any person if:

(A) The principal purpose of such use, erection, construction or installation is to comply with a requirement imposed by the department, the federal Environmental Protection Agency or regional air pollution authority to prevent, control or reduce air, water or noise pollution or solid or hazardous waste or to recycle or provide for the appropriate disposal of used oil; or

(B) The sole purpose of such use, erection, construction or installation is to prevent, control or reduce a substantial quantity of air, water or noise pollution or solid or hazardous waste or to recycle or provide for the appropriate disposal of used oil.

(b) Such prevention, control or reduction required by this subsection shall be accomplished by:

(A) The disposal or elimination of or redesign to eliminate industrial waste and the use of treatment works for industrial waste as defined in ORS 468.700;

(B) The disposal or elimination of or redesign to eliminate air contaminants or air pollution or air contamination sources and the use of air cleaning devices as defined in ORS 468.275;

(C) The substantial reduction or elimination of or redesign to eliminate noise pollution or noise emission sources as defined by rule of the commission;

(D) The use of a [*resource*] **material** recovery process which obtains useful material [*or energy resources*] from material that would otherwise be solid waste as defined in ORS 459.005, hazardous waste as defined in ORS 466.005, or used oil as defined in ORS 468.850[. *For the purposes of ORS 468.155 to 468.190, "solid waste facility" shall also include subsequent additions, made either to an already certified facility or to an operation which would have qualified as a facility but for the fact that it was erected, constructed or installed before January 1, 1973, which will increase the production or recovery of useful materials or energy over the amount being produced or recovered by the original facility whether or not the materials or energy produced or recovered are similar to those of the original facility*]; or

(E) The treatment, substantial reduction or elimination of or redesign to treat, substantially reduce or eliminate hazardous waste as defined in ORS 466.005.

(2) "Pollution control facility" or "facility" does not include:

(a) Air conditioners;

(b) Septic tanks or other facilities for human waste;

(c) Property installed, constructed or used for moving sewage to the collecting facilities of a public or quasi-public sewerage system;

(d) Any distinct portion of a solid waste, hazardous waste or used oil facility that makes an insignificant contribution to the purpose of utilization of solid waste, hazardous waste or used oil including the following specific items:

(A) Office buildings and furnishings;

(B) Parking lots and road improvements;

(C) Landscaping;

(D) External lighting;

(E) Company signs;

(F) Artwork; and

(G) Automobiles; [*or*]

(e) Replacement or reconstruction of all or a part of any facility for which a pollution control facility certificate has previously been issued under ORS 468.170, except:

(A) If the cost to replace or reconstruct the facility is greater than the like-for-like replacement cost of the original facility due to a requirement imposed by the department, the federal Environmental Protection Agency or a regional air pollution authority, then the facility may be eligible for tax credit certification up to an amount equal to the difference between the cost of the new facility and the like-for-like replacement cost of the original facility; or

(B) If a facility is replaced or reconstructed before the end of its useful life then the facility may be eligible for the remainder of the tax credit certified to the original facility; **or** [.]

(f) Property installed, constructed or used for clean up of emergency spills or unauthorized releases, as defined by the commission.

SECTION 5. ORS 468.170 is amended to read:

468.170. (1) The commission shall act on an application for certification before the 120th day after the filing of the application under ORS 468.165. The action of the commission shall include certification of the actual cost of the facility and the portion of the actual cost properly allocable to the prevention, control or reduction of air, water or noise pollution or solid or hazardous waste or to recycling or properly disposing of used oil as set forth in ORS 468.190 (2). Each certificate shall bear a separate serial number for each such facility.

(2) If the commission rejects an application for certification, or certifies a lesser actual cost of the facility or a lesser portion of the actual cost properly allocable to the prevention, control or reduction of air, water or noise pollution or solid or hazardous waste or to recycling or properly disposing of used oil than was claimed in the application for certification, the commission shall cause written notice of its action, and a concise statement of the findings and reasons therefor, to be sent by registered or certified mail to the applicant before the 120th day after the filing of the application. [*Failure of the commission to act constitutes rejection of the application.*]

(3) If the application is rejected for any reason, including the information furnished by the applicant as to the cost of the facility, or if the applicant is dissatisfied with the certification of actual cost or portion of the actual cost properly allocable to prevention, control or reduction of air, water or noise pollution or solid or hazardous waste or to recycling or properly disposing of used oil the applicant may appeal from the rejection as provided in ORS 468.110. The rejection or the certification is final and conclusive on all parties unless the applicant takes an appeal therefrom as provided in ORS 468.110 before the 30th day after notice was mailed by the commission.

(4)(a) The commission shall certify a pollution control, solid waste, hazardous waste or used oil facility or portion thereof, for which an application has been made under ORS 468.165, if the commission finds that the facility:

(A) Was erected, constructed or installed in accordance with the requirements of ORS 468.165 (1) and 468.175;

(B) Is designed for, and is being operated or will operate in accordance with the requirements of ORS 468.155 (1) and (2); and

(C) Is necessary to satisfy the intents and purposes of ORS 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745, ORS chapters 459 and 467 and this chapter and rules thereunder.

(b) No determination of the proportion of the actual cost of the facility to be certified shall be made until receipt of the application.

(c) If one or more facilities constitute an operational unit, the commission may certify such facilities under one certificate. A certificate under this section is effective for purposes of tax relief in accordance with ORS 307.405, 316.097 and 317.072 if erection, construction or installation of the facility was [*begun*] **completed** before December 31, [*1988*] **1990**.

(5) A person receiving a certificate under this section may take tax relief only under ORS 316.097 or 317.116, depending upon the tax status of the person's trade or business except if the taxpayer is a corporation organized under ORS chapter 61 or 62, or any predecessor to ORS chapter 62 relating to incorporation of cooperative associations, or is a subsequent transferee of such a corporation, the tax relief may be taken only under ORS 307.405.

(6) If the person receiving the certificate is an electing small business corporation as defined in section 1371 of the Internal Revenue Code, each shareholder shall be entitled to take tax credit relief as provided in ORS 316.097, based on that shareholder's pro rata share of the certified cost of the facility.

(7) If the person receiving the certificate is a partnership, each partner shall be entitled to take tax credit relief as provided in ORS 316.097, based on that partner's pro rata share of the certified cost of the facility.

(8) Certification under this section of a pollution control facility qualifying under ORS 468.165 (1) shall be granted for a period of 10 consecutive years which 10-year period shall begin with the tax year of the person in which the facility is certified under this section, except that if ad valorem tax relief is utilized by a corporation organized under ORS chapter 61 or 62 the facility shall be exempt from ad valorem taxation for a period of 20 consecutive years, **or 10 years if construction is commenced after June 30, 1989, and completed before December 31, 1990,** from the date of its first certification by the commission.

(9) Portions of a facility qualifying under ORS 468.165 (1)(c) may be certified separately under this section if ownership of the portions is in more than one person. Certification of such portions of a facility shall include certification of the actual cost of the portion of the facility to the person receiving the certification. The actual cost certified for all portions of a facility separately certified under this subsection shall not exceed the total cost of the facility that would have been certified under one certificate. The provisions of ORS 316.097 (8) or 317.116 (8), whichever is applicable, shall apply to any sale, exchange or other disposition of a certified portion of a facility.

SECTION 6. ORS 468.185 is amended to read:

468.185. (1) Pursuant to the procedures for a contested case under ORS 183.310 to 183.550, the commission may order the revocation of the certification issued under ORS 468.170 of any pollution control or solid waste, hazardous wastes or used oil facility, if it finds that:

(a) The certification was obtained by fraud or misrepresentation; or

(b) The holder of the certificate has failed substantially to operate the facility for the purpose of, and to the extent necessary for, preventing, controlling or reducing air, water or noise pollution or solid waste, hazardous wastes or used oil as specified in such certificate.

(2) As soon as the order of revocation under this section has become final, the commission shall

notify the Department of Revenue and the county assessor of the county in which the facility is located of such order.

(3) If the certification of a pollution control or solid waste, hazardous wastes or used oil facility is ordered revoked pursuant to paragraph (a) of subsection (1) of this section, all prior tax relief provided to the holder of such certificate by virtue of such certificate shall be forfeited and the Department of Revenue or the proper county officers shall proceed to collect those taxes not paid by the certificate holder as a result of the tax relief provided to the holder under any provision of ORS 307.405, 316.097 and 317.116.

(4) **Except as provided in subsection (5) of this section,** if the certification of a pollution control or solid waste, hazardous wastes or used oil facility is ordered revoked pursuant to paragraph (b) of subsection (1) of this section, the certificate holder shall be denied any further relief provided under ORS 307.405, 316.097 or 317.116 in connection with such facility, as the case may be, from and after the date that the order of revocation becomes final.

(5) The commission may reinstate a tax credit certification revoked under paragraph (b) of subsection (1) of this section if the commission finds the facility has been brought into compliance. If the commission reinstates certification under this subsection, the commission shall notify the Department of Revenue or the county assessor of the county in which the facility is located that the tax credit certification is reinstated for the remaining period of the tax credit, less the period of revocation as determined by the commission.

NEIL GOLDSCHMIDT
GOVERNOR

Department of Environmental Quality

811 SW SIXTH AVENUE, PORTLAND, OREGON 97204-1334 PHONE (503) 229-5696

MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Agenda Item E , October 9, 1987, EQC Meeting

Request for Authorization to Conduct a Public Hearing on Proposed Amendments to Rules Concerning Hazardous Waste Disposal Fee to Support the Remedial Action Program

Purpose

In 1985, ORS 466.685 established a $10 per ton fee on the treatment by incineration and the land disposal of hazardous wastes and PCBs at facilities subject to a license for that purpose. The EQC adopted OAR 340-105-120 to implement procedures for collecting that fee. Senate Bill 122, which is now known as Chapter 735, Oregon Laws 1987, repeals ORS 466.685 but under a new section reestablishes the hazardous waste fee at $20 per ton, effective July 1, 1987. The Department proposes to amend OAR 340-105-120 to incorporate the fee increase required by SB 122 and other minor changes.

Background

Prior to the 1987 Legislative Session, the Department convened the Remedial Action Advisory Committee for the purpose of evaluating proposed legislation to establish a state program for the cleanup of hazardous waste sites. The Advisory Committee was composed of representatives from industry, environmental groups, and citizens.

The Advisory Committee supported the continuation of the existing hazardous waste fee but at the higher rate of $20 per ton. The 1987 Legislature approved the $20 per ton fee to support the state remedial action program established by SB 122.

NEIL GOLDSCHMIDT
GOVERNOR

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Background

Prior to the 1987 Legislative Session, the Department convened the Remedial Action Advisory Committee for the purpose of evaluating proposed legislation to establish a state program for the cleanup of hazardous waste sites. The Advisory Committee was composed of representatives from industry, environmental groups, and citizens.

The Advisory Committee supported the continuation of the existing hazardous waste fee but at the higher rate of $20 per ton. The 1987 Legislature approved the $20 per ton fee to support the state remedial action program established by SB 122.

The Advisory Committee and the Legislature also supported the establishment of a new fund for deposits and expenditures of this fee revenue. Chapter 735 repeals the previous fund--the CERCLA (Comprehensive Environmental Response, Compensation and Liability Act) Matching Fund and establishes the Hazardous Substances Remedial Action Fund.

The CERCLA Matching Fund could be used only to: (1) provide the state match for federal Superfund grants and (2) investigate potential Superfund sites. The new Hazardous Substances Remedial Action Fund may be used to support the administration of the remedial action program and for conducting or overseeing cleanups at federal superfund sites and at any other contaminated site.

Discussion

The proposed rule amendment makes the following changes:

- Amends the rule to increase the fee to $20 per ton.
- Changes the implementation date to July 1, 1987.
- Renames the fee from the "Hazardous Waste Management Fee" to the "Hazardous Substances Remedial Action Fee" to be consistent with the name of the new fund.
- Updates statutory references.
- Makes minor grammatical and textual changes.

Summation

1. Senate Bill 122 repealed ORS 466.685, reestablished the fee at the higher rate of $20 per ton, and made other minor changes.

2. OAR 340-120-105, which implemented ORS 466.685, must be amended to clarify the new statutory authority conferred by Chapter 735, to increase the fee and to reflect other minor changes.

3. The Commission is authorized by Section 4 of Chapter 735 to adopt rules to implement the law.

Director's Recommendation

Based upon the findings in the summation above, it is recommended that the Commission authorize a public hearing, to take testimony on the proposed amendments to the rule concerning the Hazardous Substances Remedial Action Fee, OAR 340-105-120, as presented in Attachment I.

Fred Hansen
Director

Attachments:

I. Draft rule amendments, OAR 340-105-120
II. Statement of Need for Rulemaking
III. Statement of Land Use Consistency
IV. Draft Hearing Notice
V. Oregon Revised Statutes 466.685
VI. Senate Bill 122, Section 18 (also known as Chapter 735, Oregon Laws 1987) establishing the $20/ton fee

Allan Solares
229-5071
September 8, 1987

Attachment I
Agenda Item
October 9, 1987 EQC Meeting

PROPOSED AMENDMENTS TO OREGON ADMINISTRATIVE RULE 340-105-120

(1) {Except as provided by subsection (2) of this section, b}Beginning {January 1, 1986} July 1, 1987, every person who operates a facility for the purpose of disposing of hazardous waste or polychlorinated biphenyl (PCB) that is subject to interim status or a {license} permit issued under ORS {459.410 to 459.450 and 459.460 to 459.690} Chapter 466 shall pay a monthly {h}Hazardous {waste management} Substances Remedial Action {f}Fee by the 45th day after the last day of each month in the amount {of $10 per dry weight} authorized by statute. Chapter 735 Oregon Laws of 1987 authorizes a fee of $20 per ton of hazardous waste or PCB brought into the facility for treatment by incinerator or for disposal by landfill at the facility. For purposes of calculating the Hazardous {Waste Management} Substances Remedial Action Fee required by this section, the facility operator does not need to include hazardous waste resulting from on-site treatment processes used to render a waste less hazardous or reduced in volume prior to land disposal.

{(2) When the balance in the Comprehensive Environmental Response, Compensation and Liability Act Matching Fund reaches $500,000 minus any moneys approved for obligation under subsection 3 of Section 20 of Chapter 733, Oregon Laws 1985, payment of fees required by subsection (1) of this section shall by suspended upon written notice from the Department. Payment of fees shall resume upon written notice from the Department when approval of funds by the Legislative Assembly or the Emergency Board decrease the balance in the fund to $150,000 or lower.}

{(3)} (2) The term "hazardous waste" means any hazardous waste as defined by rules adopted by the Environmental Quality Commission and includes any hazardous waste as defined in OAR 340 - Division 100 or 101 or 40 CFR Part 261 handled under the authority of interim status or a management facility permit.

{(4)} (3) The term "PCB" shall have the meaning given to it in OAR 340 - Division 110.

{(5)} (4) The term "ton" means 2000 pounds {.}

{(6) The term "dry weight ton" as used in Chapter 733, Oregon Laws 1985} and means the weight of hazardous waste or PCBs in tons as determined at the time of receipt at a hazardous waste or PCB management facility. The term {dry weight} "ton" shall include the weight of any containers treated or disposed of along with the hazardous wastes being held by the container.

Attachment I
Agenda Item
October 9, 1987 EQC Meeting

{(7)} (5) In the case of a fraction of a ton, the fee imposed by subsection (1) of this section shall be the same fraction multiplied by {of} the amount of such fee imposed on a whole ton.

{(8)} (6) Every person subject to the fee requirement of subsection 1 of this section shall record the actual weight of any hazardous waste and PCB received for treatment by incinerator or disposal by landfilling in tons at the time of receipt. Beginning January 1, 1986, the scale shall be licensed in accordance with ORS Chapter 618 by the Weights and Measures Division of the Department of Agriculture.

{(9)} (7) Accompanying each monthly payment shall be a detailed record identifying the basis for calculating the fee that is keyed to the monthly waste receipt information report required by OAR 340-104-075(2)(c) and (2)(d).

{(10)} (8) All fees shall be made payable to the Department of Environmental Quality. All fees received by the Department of Environmental Quality shall be paid into the State Treasury and credited to the [Comprehensive Environmental Response, Compensation and Liability Act Matching Fund,] Hazardous Substances Remedial Action Fund.

Attachment II
Agenda Item
October 9, 1987 EQC Meeting

Before the Environmental Quality Commission
of the State of Oregon

In the Matter of Amending OAR 340-105-120	}	Statement of Need for Rule Amendment and Fiscal and Economic Impact.

1. Statutory Authority

In 1985, ORS 466.685 established a $10 per ton fee on the treatment by incineration and the land disposal of hazardous wastes and PCBs at facilities subject to a license for that purpose. The EQC adopted OAR 340-105-120 to implement that fee.

Section 27 of Senate Bill 122, Chapter 735, Oregon Laws 1987, repeals ORS 466.685. However section 18 reestablishes the fee at $20 per ton.

Section 4 authorizes the commission to adopt any rules necessary to carry out Chapter 735.

2. Statement of Need

The Legislature has already authorized the fee increase to $20 per ton. The amendments also reflect minor changes made to the original statute (ORS 466.685) for purposes of clarification or accuracy.

3. Principal Documents Relied Upon

Oregon Revised Statutes, Chapter 735, Oregon Laws 1987.
Oregon Administrative Rules, Chapter 340, Division 105.

4. Fiscal and Economic Impact

The rule amendment would implement the fee already authorized by the Legislature's approval of Senate Bill 122. The proposal does not otherwise change the fiscal method, form, timing or any other aspect of fee collection.

Attachment III
Agenda Item
October 9, 1987 EQC Meeting

Before the Environmental Quality Commission
of the State of Oregon

In the Matter of Amending OAR 340-105-120	} }	Land Use Consistency

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

Attachment IV
Agenda Item
October 9, 1987 EQC Meeting

A CHANCE TO COMMENT

Hearing Authorized:	Oct. 9, 1987
Hearing Date:	Dec. 2, 1987
Comments Due:	Dec. 2, 1987

WHO IS AFFECTED: Persons who operate a hazardous waste facility, for the purpose of disposing of hazardous waste or polychlorinated biphenyl (PCB), which is subject to interim status or a license issued under ORS 466.005 to 466.385 and 466.890.

WHAT IS AFFECTED: The Department of Environmental Quality (DEQ) proposes to amend rules concerning the payment and collection of a remedial action fee, OAR 340-105-120. The amendments are proposed to be consistent with changes already authorized by Chapter 735, Oregon Laws 1987, including a fee increase and its effective date (7/1/87). The amendments are also necessary to reflect changes in statutory references and other minor grammatical changes for clarification purposes.

WHAT ARE THE HIGHLIGHTS: The proposed rule amendment makes the following changes:

- Amends the rule to increase the fee to $20 per ton, effective July 1, 1987.
- Renames the fee from the "Hazardous Waste Management Fee" to the "Hazardous Substances Remedial Action Fee".
- Updates statutory references.
- Makes minor grammatical and textual changes.

HOW TO COMMENT: A Public Hearing is scheduled for:

9:00 am
Wednesday, December 2, 1987
DEQ's Portland Headquarters
811 S.W. Sixth Avenue
4th Floor Conference Room

Attachment IV
Agenda Item
October 9, 1987 EQC Meeting

WHAT IS THE NEXT STEP

After the public hearing, DEQ will evaluate the comments, prepare a response to comments and make a recommendation to the Environmental Quality Commission in January 1988. The Commission may adopt the amendments as proposed, adopt modified amendments as a result of the testimony received or decline to adopt any amendments.

For more information, or to receive a copy of the proposed rule amendments, call 229-5733 or toll free at 1-800-452-4011 in the State of Oregon.

Attachment V
Agenda Item
October 9, 1987 EQC Meeting

OREGON REVISED STATUTES (CHAPTER 733 OREGON LAWS OF 1985)

ORS 466.685 Monthly fee; suspension of fees; notice of suspension or resumption of fees. (1) Except as provided by subsection (2) of this section, beginning on January 1, 1986, every person who operates a facility for the purpose of disposing of hazardous waste or PCB that is subject to interim status or a license issued under ORS 466.005 to 466.385 and 466.890 shall pay a monthly hazardous waste management fee by the amount of $10 per dry-weight ton of hazardous waste or PCB brought into the facility for treatment by incinerator or for disposal by landfill at the facility. Fees under this section shall be calculated in the same manner as provided in section 231 of the federal Comprehensive and Liability Act. P.L. 96-510, as amended.

(2) When the balance in the Comprehensive Environmental Response, Compensation and Liability Act Matching Fund established in ORS 466.690 reaches $500,000 minus any moneys approved for obligation under ORS 466.690 (3), payment of fees under subsection (1) of this section shall be suspended. Payment of fees shall resume upon approval of funds by the Legislative Assembly or the Emergency Board to the department sufficient to decrease the balance in the fund to $150,000 or lower.

(3) If payment of fees is to be suspended or resumed under subsection (2) of this section, the department shall give reasonable notice of the suspension or resumption to every person obligated to pay a fee under subsection (1) of this section. (1985 c.733 S.9)

Attachment VI
Agenda Item
October 9, 1987 EQC Meeting

SENATE BILL 122 (CHAPTER 755 OREGON LAWS OF 1987)

SECTION 18. Beginning on July 1, 1987, every person who operates a facililty for the purpose of disposing of hazardous waste or PCB that is subject to interim status or a license issued under ORS 466.005 to 466.385 and 466.890 shall pay a monthly hazardous waste management fee by the 45th day after the last day of each month in the amount of $20 per ton of hazardous waste or PCB brought into the facility for treatment by incinerator or for disposal by landfill at the facility.

NEIL GOLDSCHMIDT
GOVERNOR

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 , October 9, 1987, EQC Meeting

Request for Authorization to Conduct a Public Hearing on Proposed Rules to Establish Chapter 340, Division 130, Procedures Governing the Issuance of Environmental Hazard Notices.

Background:

During the 1985 session, the Oregon Legislature enacted a law which was later codified as ORS 466.360 to 466.385. This legislation, called "Notice of Environmental Hazards," authorizes the Environmental Quality Commission to list sites for which environmental hazard notices must be given and use restrictions must be imposed. ORS 466.360 to 466.385 is attached (see Attachment II.).

Sites containing waste or contamination exist throughout the state. Many of these sites are former solid waste disposal sites. These are generally known to the Department and are not considered a threat to the public health or the environment in their present state. However, some of these sites could be a problem if they were altered or disturbed.

Other sites containing waste or contamination exist which are generally not well known but may be a threat to the public health or the environment. Many of these sites will be investigated and cleaned up under the Department's hazardous waste and remedial action programs. At some point following cleanup, they will not be considered a threat to the public health or environment unless they are altered or disturbed.

By passing the "Notice of Environmental Hazards" statute, the legislature determined that present and future owners should not use or modify these sites without taking into consideration the environmental hazards posed by the remaining waste or contamination. The legislature recognized that permits authorizing waste disposal upon real property protect the health,

safety and welfare of Oregon citizens only if "post-permit" use restrictions are imposed. It noted that use restrictions may also be needed on disposal sites created prior to regulation. Finally, the legislature found that proper precautions and maintenance cannot be taken at these sites unless their locations and the use restrictions are known to local governments and those who own and occupy the properties.

The legislature created the environmental hazard notice as a tool to regulate a site which, if altered, is potentially hazardous to the health, safety and welfare of Oregon citizens. The law creates a process by which the Environmental Quality Commission may identify a site where an environmental hazard notice is appropriate. In addition, use restrictions are to accompany or be a part of the environmental hazard notice. The property owner is given an opportunity to remove the waste or contamination and to appeal the use restrictions.

The environmental hazard notice is filed with the appropriate city or county to be included in the local comprehensive plan and on zoning maps. Then, the use restrictions are imposed through a zoning ordinance. The legislation allows a procedure to modify or remove the environmental hazard notice or specific use restrictions, if they are no longer necessary.

The "Notice of Environmental Hazards" law specifically authorizes the Commission, at its discretion, to place environmental hazard notices on solid waste disposal sites, hazardous waste disposal sites and radioactive waste disposal sites. The legislation is generally intended to apply to these sites after they are closed and not under the regular scrutiny of the Department.

For example, many solid waste landfills have closed and are not now regulated by the Department. Some of these landfills could be potentially hazardous to public health or the environment if they are altered. The legislature passed the 1985 law to ensure that local government, neighbors and future purchasers of property know about these sites, and to allow use restrictions to be placed on these sites.

During the 1987 legislative session, the Department asked that its proposed remedial action legislation (SB 122) include a provision to amend ORS 466.365(1)(a). It was felt that an environmental hazard notice might be appropriate for a site where remedial action has occurred, even if the site did not meet the definition of a solid waste, hazardous waste or radioactive waste disposal site. The legislature approved the Department's proposed language which added "facility" as defined in SB 122 to ORS 466.365(1)(a). Oregon Laws 1987 Chapter 735 (SB122), which contains this amendment, is attached (see Attachment III.).

To assist the Department in drafting rules, the Director appointed a nine person advisory committee. Chaired by attorney Steve Schell, the committee met six times to discuss the policy questions created by ORS 466.360 to 466.385. The committee provided the Department's staff with excellent guidance during the rule drafting process, and reviewed three drafts of the

proposed rules. A list of the advisory committee members is attached (see Attachment IV.). Staff also received assistance from the Department of Land Conservation and Development (DLCD) and the Health Division in drafting these rules.

The "Notice of Environmental Hazards" statute requires the Department and DLCD to develop model language for comprehensive plans and land use regulations for use by cities and counties. The advisory committee is assisting the Department and DLCD in development of the model language. The statute also mandates that the Department and the Oregon Department of Energy sign an interagency agreement to address the procedures for issuing environmental hazard notices for radioactive waste disposal sites. The two departments have been working on the agreement.

The Department requests authorization to conduct a public hearing concerning the adoption of rules to implement ORS 466.360 to 466.385. A draft hearing notice, Statement of Need and Statement of Land Use Consistency are attached (see Attachments V. and VI.). ORS 466.365(1) authorizes the Commission to adopt rules necessary for the Department to implement ORS 466.360 to 466.385.

Alternatives and Evaluation:

ORS 466.365(1) authorizes, but does not require, the Commission to adopt rules to implement the "Notice of Environmental Hazards" statute. The statute is not self implementing; rules are needed to address the issuance of an environmental hazard notice, the form and content of use restrictions, modifications and rescission of notices and use restrictions, and the filing of notices with local governments. The Department is proposing these rules because the public health, safety and the environment may not be adequately protected at some sites without utilizing environmental hazard notices. If the Commission does not adopt implementing rules, the statute would not be utilized.

Early in this rule drafting process, staff concluded that the best option was to adopt implementing rules first, then apply the rules to various sites which the Department believes are appropriate for environmental hazard notices. The statute allows the choosing of sites that receive environmental hazard notices at the time procedural rules are adopted. However, the Department prefers to have procedural rules to work with when identifying which sites may be appropriate for environmental hazard notices.

As stated previously, the statute allows, but does not require, the use of environmental hazard notices. In turn, the proposed rules allow, but do not require, the Department to recommend sites to receive environmental hazard notices to the Commission. The environmental hazard notice process is new and the Department desires to approach it with some caution. As with any new program, it is probable that experience will necessitate adjustments in these implementing rules. The Department desires to keep

the process as simple as possible during its implementation, and to utilize notices only where they are most needed.

Oregon Laws 1987 Chapter 735 (SB 122) requires the Department to conduct a statewide program to identify sites where waste or contamination exist. This law adds a new dimension to the environmental hazard notice process. It is anticipated that the site discovery program will review closed disposal sites and areas where hazardous substances have been released. Before passage of the 1987 law creating the site discovery program, the Department estimated that perhaps 30 to 50 environmental hazard notices would be proposed over the next two years. The site discovery program will be shaped during the next six months and following that period, the Department will be better able to estimate when and how many environmental hazard notices will be necessary.

Under the schedule contemplated by the Department, the Commission would consider these proposed rules for adoption at its January 1988 meeting. The process to issue an environmental hazard notice for a site will take at least six months, which includes a three-month period for an owner to clean up a site. Thus, the Commission would not be asked to issue any environmental hazard notices until the fall of 1988.

The Department has considered where best to place these rules. Notices may be used by the solid waste program (governed by OAR 340 Division 61), the hazardous waste program (governed by OAR 340 Divisions 100 to 110), and the remedial action/state superfund program (presently without rules). Rather than fit these proposed rules into an existing division, the Department is proposing that a new division (OAR 340 Division 130) be created. The proposed Division 130 is attached (see Attachment I.).

Division 130 would establish the procedures whereby the Commission would issue environmental hazard notices. A flow chart summarizes the steps that would be required by the proposed rules. The flow chart is included as Attachment VII.

A general description of the environmental hazard notice process begins with the Department choosing to identify a site for consideration. Citizens could recommend a site to the Department. The Department would then consider if a notice is appropriate, using factors listed in the rules. If the Department believes a notice is appropriate, the site owner would be notified and given the opportunity to clean up the waste or contamination.

If the site owner fails to act, the Department would propose that an environmental hazard notice be issued, and offer the public an opportunity to comment on the proposal. Following the comment period the Department would consider the comments and then forward the proposed notice to the Commission for consideration.

The Commission would consider if an environmental hazard notice is appropriate, utilizing factors in the proposed rules. The decision to issue or not issue a notice would be appealable by the aggrieved person back to the Commission in a contested case proceeding. Once the issuance is final, the environmental hazard notice would be filed with the city or county with land use jurisdiction over the site.

This report summarizes the important elements of what is being proposed and the alternatives considered by the Department and the advisory committee. The principal effects of what is being proposed are discussed, where appropriate.

1. Rule 340-130-010(1) would, with exceptions, allow an environmental hazard notice to be used only after the Department completes work at a site under other regulatory authorities. Many sites containing waste or contamination are currently regulated by the Department. About one hundred thirty solid waste landfills are under permit. The Department is also or will soon be requiring investigations or cleanups at several sites through the new remedial action program. Several other sites may need hazardous waste disposal permits if hazardous waste cannot be removed.

   The Department has adequate tools to protect the public health, safety and the environment at sites with permits, or undergoing investigations or cleanups required by the Department. The sites will remain on disposal permits or on orders requiring remedial action, closure or corrective action until the sites are adequately controlled or cleaned up. However, waste or contamination may remain at these sites, and they could become a hazard to the public health or the environment if altered or disturbed at a later date.

   Under the proposed rules, the environmental hazard notice process would generally apply when other Department regulatory authorities end. Rule 340-130-010(1) presumes that the Department's existing authorities have ensured that the sites are adequately controlled or cleaned up before the Department considers a notice for the site. The environmental hazard notice is the tool that provides long-term protection to the public health and the environment at sites where waste or contamination remain.

   During the early stages of rule development, the advisory committee discussed using the environmental hazard notice as a means to identify sites which could contain hazardous substances. Oregon Laws 1987 Chapter 735, which creates a state remedial action program, includes a site discovery and investigation program. That program is best used for these "unknown" sites. The environmental hazard notice is best used for sites where the waste or contamination is known and has already been addressed under the Department's existing authorities.

2. Rule 340-130-015 would list factors to be considered when the Commission is considering the issuance of an environmental hazard notice. This rule would be used to determine which sites qualify for receiving environmental hazard notices and which sites do not. Staff and the advisory committee addressed whether notices were appropriate on all sites. The Department introduced the legislation in 1985 with the desire to use a notice for only those sites that needed lasting regulation. The legislature supported that desire and the legislation contemplates use of the notice in that manner.

   As an example, two solid waste landfill sites could be reviewed, using the factors of rule 340-130-015. Let us assume that one landfill was operated for several years in Deschutes County; the other landfill was operated for several years in Washington County. Both have been closed for several years.

   The Deschutes County site receives about ten inches of rain per year; no surface water is near the site; groundwater is very deep; and the landfill received a relatively moderate volume of waste when it was open. The Washington County site receives about 40 inches of rain per year; surface water is adjacent to the site and leachate from the landfill has contaminated the surface water in the past; groundwater is very shallow; and the landfill received relatively large volumes of waste when it was open. When the factors of 340-130-015 are considered, it is likely that they would support the issuance of an environmental hazard notice for the Washington County site, but would not support one for the Deschutes County site.

   Another example which helps visualize consideration of the factors is any site listed on the National Priority List (NPL) for superfund cleanup. During the investigation and cleanup, the site is controlled by an order requiring the remedial action. The order may include a requirement for a cap or liner to be placed over the site. Following cleanup, when the factors of 340-130-015 are considered, it is likely that they would support issuance of an environmental hazard notice for the site.

   The factors contained in 340-130-015 are similar to those already existing in OAR 340 Division 108, the Department's spill cleanup rules. When determining whether to issue an environmental hazard notice for a site, the Commission and Department would consider the factors of 340-130-015. The Commission would include findings in the environmental hazard notice for each factor used to justify issuance of the notice for a particular site.

3. The use restrictions that would accompany an environmental hazard notice are contained in 340-130-020. Staff and the advisory committee studied two options for use restrictions. The list of use restrictions of 340-130-020(3) is relatively simple, short and general. The other option was to include a more lengthy detailed list of use restrictions.

More detailed use restrictions may be easier to administer and may be favored by local governments, which must enforce the use restrictions through local land use processes. Also, a more inclusive list of use restrictions can be modified or deleted accordingly.

4. Rule 340-130-025 would define the process used by the Department and Commission to issue an environmental hazard notice. The advisory committee and staff discussed whether the Commission or the Department should issue the notice. An informal opinion from the State Attorney General's office concluded that either option is feasible. The memo from the Assistant Attorney General is attached (see Attachment VIII).

   The advisory committee recommended that the Department issue the environmental hazard notice for several reasons. The issuance of the notice and the associated use restrictions would be appealable under contested case proceeding to the Commission under the proposed rules. The proposed rules are procedural rules and they set the framework for issuance of notices. The Department's case-by-case determinations would conform to the procedural rules. Finally, the Commission perhaps should not focus on the specifics of a site, unless, of course, through a contested case appeal.

   The Department believes the advisory committee recommendation is workable, but recommends that the Commission issue the environmental hazard notice. The notice process is outside of the Department's usual sphere of responsibilities, and is more closely associated with land use than other Department actions. The action to place use restrictions on properties is not taken lightly by the Department. The Commission's decision making process affords the most openness and perception of fairness.

5. Rule 340-130-025 would allow the site owner and any person who in the Commission's judgment would be adversely affected to appeal in a contested case proceeding the Commission's decision to issue or not issue an environmental hazard notice. ORS 466.370 mandates that an appeal be open to the site owner. The Department supports expanding the appeal to adversely affected persons to allow site occupants, persons with water rights or a recorded interest in the site, and adjacent property owners maximum involvement in the process.

6. Rule 340-130-030 would establish procedures for rescinding or modifying environmental hazard notices, including use restrictions, after the notice is issued. ORS 466.365 allows the Department to modify or delete use restrictions if particular findings are made. Rule 340-130-030(6) would add spill cleanup as another activity justifying the modification or rescission of one or more use restrictions.

7. Rule 340-130-035 would implement ORS 466.385, which refers to local governments. The rule would require a city or county to amend its comprehensive plan and land use regulations to address the

environmental hazard notice requirements once it receives a notice. If a city or county receives an environmental hazard notice before the first periodic review of its comprehensive plan, the city or county could wait until that periodic review to adopt the amendments. This could be as much as seven years. Both the committee and the Department would prefer to have the local government act when it receives an environmental hazard notice. However, the statute does not provide that flexibility.

Another issue is whether a city or county must amend its plan and regulations if it does not receive an environmental hazard notice by its first periodic review. The Attorney General's office provided informal guidance on this question, explaining that the statute provides some flexibility (see Attachment VIII).

There are 36 counties and 241 incorporated cities in Oregon. Most of the cities will likely never receive an environmental hazard notice. The advisory committee recommends that local governments not be forced to amend their comprehensive plans and land use regulations until they receive an environmental hazard notice. The Department supports this interpretation of ORS 466.385 as the most practical option for cities and counties.

Summation:

1. In 1985, the legislature enacted the "Notice of Environmental Hazards" law, which was later codified as ORS 466.360 to 466.385. This statute gives the Commission authority to issue environmental hazard notices and use restrictions for sites containing waste or contamination. The statute also gives the Commission the authority to adopt rules necessary for its implementation.

2. The 1985 legislation specifically authorized the Commission, at its discretion, to place environmental hazard notices on solid waste disposal sites, hazardous waste disposal sites and radioactive waste disposal sites. ORS 466.365 was amended at the 1987 legislature to include any additional sites where hazardous substances have been released.

3. The Department proposes that the Commission adopt a new rule division for procedures governing the issuance of environmental hazard notices.

4. The proposed rules address the issuance of environmental notices, the form and content of use restrictions, modification and rescission of notices and use restrictions, and the filing of notices with local governments. The purposes of ORS 466.360 to 466.385 cannot be met without implementing rules.

5. The Department does not propose that the Commission issue any environmental hazard notices at this time. The proposed rules create the framework where notices can be issued in the future.

6. The proposed rules do not require the Commission to issue environmental hazard notices for all sites. Moreover, the proposed rules do not require the Department to recommend sites to the Commission.

7. With exceptions, an environmental hazard notice is to be used only after the Department completes work at a site under its existing regulatory authorities. A notice is a long-term tool for sites which contain waste or contamination but which are generally not a threat to health or the environment unless disturbed.

8. The Commission shall consider one or more factors when determining whether an environmental hazard notice should be issued. The Commission shall include findings at the time of issuance of a notice for each factor used to justify the issuance of the notice.

9. Use restrictions shall accompany each environmental hazard notice issued by the Commission. The proposed rules list the use restrictions to accompany each notice. The Commission can add to, modify or delete one or more use restrictions when it issues a notice. The Department may modify or delete use restrictions after a notice is issued under specific circumstances and if findings are made.

10. The site owner and any person who in the Commission's judgment would be adversely affected may appeal a decision by the Commission to issue or not issue an environmental hazard notice. Appeals shall occur according to the contested case procedures of ORS Chapter 183 and OAR Chapter 340 Division 11.

11. After receiving an environmental hazard notice, local governments must adopt comprehensive land use plan language and land use regulations to implement the "Notice of Environmental Hazards" law and these proposed rules. If a local government does not receive a notice, no action is required.

Director's Recommendation

Based upon the Summation, it is recommended that the Commission authorize the Department to conduct a public hearing and to take testimony on the proposed rules establishing procedures governing the issuance of

Fred Hansen

Attachments
I. Proposed Chapter 340 Division 130.
II. ORS 466.360 to 466.385.
III. Oregon Laws 1987, Chapter 735, Sections 1 and 25.
IV. The Environmental Hazard Notice Advisory Committee.
V. Draft Hearing Notice
VI. Rulemaking Statements.
VII. Environmental Hazard Notice Flow Chart.
VIII. Memo from the Assistant Attorney General.

Robert Danko:f
ZF2407
229-6266
September 17, 1987

Attachment I
Agenda Item
October 9, 1987 EQC Meeting

PROPOSED

Division 130

ENVIRONMENTAL HAZARDS NOTICE

340-130-001	Purpose and Policies.
340-130-005	Definitions.
340-130-010	Exclusions
340-130-015	Factors for Issuing a Notice.
340-130-020	Use Restrictions to Accompany a Notice.
340-130-025	Procedures for Issuing a Notice.
340-130-030	Procedures for Rescinding or Modifying a Notice.
340-130-035	Procedures for Cities and Counties.

Authority: ORS 466, including 466.360 to 385; ORS 468, including 468.020; and ORS 183.

Attachment I
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Purpose and Policies

340-130-001(1) These rules implement ORS 466.360 to 466.385 (Notice of Environmental Hazards).

(2) Recognizing that sites with waste or contamination exist in the state that, if altered, are potentially hazardous to the health, safety and welfare of Oregon's citizens, the Commission declares that:

(a) Locations of potentially hazardous sites should be made known to local governments, property owners and occupants, and neighbors and future purchasers of property;

(b) Use restrictions may be necessary on potentially hazardous sites to protect the public health, safety, and the environment;

(c) Changes in uses on potentially hazardous sites should be reviewed; and

(d) An environmental hazard notice is a long-term tool to ensure a potentially hazardous site is not altered without first considering the impacts of the activity on the public health, safety and the environment.

(3) An environmental hazard notice is not required for every site. An environmental hazard notice shall be issued by the Commission to protect the public health, safety and the environment. The factors of OAR 340-130-015 shall be considered by the Commission when it determines whether to issue an environmental hazard notice for a particular site.

Attachment I
Agenda Item
October 9, 1987 EQC Meeting

Definitions

340-130-005 For the purposes of this Division, the following definitions apply:

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

(2) "Council" means the Energy Facility Siting Council.

(3) "Department" means the Department of Environmental Quality.

(4) "Director" means the Director of the Department of Environmental Quality.

(5) "Dispose" or "Disposal" has the meaning contained in ORS 466.005(4).

(6) "Environmental hazard notice" means a document prepared by the Department and issued by the Commission containing:

(a) The legal description of the lot or parcel, or lots or parcels, where the potential hazardous site is located;

(b) A specific description of the site, if different than the legal description of subsection (a) of this section, for which the notice applies;

(c) A general map of the area where the site is located;

(d) A description of the types of waste and levels of contamination identified or known to be present at the site;

(e) The use restrictions that apply to the site; and

(f) Findings which support the decision to issue an environmental hazard notice for the site.

(7) "Hazardous substance" has the meaning contained in Oregon Laws 1987, Chapter 735, Section 1(9).

(8) "Hazardous waste" has the meaning contained in OAR 340-100-010(o).

(9) "Hazardous waste disposal site" means the geographical site in which or upon which hazardous waste is disposed.

(10) "Land disposal site" means a disposal site in which the method of disposing of solid waste is by landfill, dump, pit, pond or lagoon.

(11) "Person" means the United States, the state or a public or private corporation, local government unit, public agency, individual, partnership, association, firm, trust, estate or any other legal entity.

(12) "Potentially hazardous site" means a site where an alteration could create a condition which is hazardous to the public health, safety or welfare.

(13) "Radioactive waste" has the meaning contained in ORS 469.300(17).

(14) "Recorded interest" means any interest of a person in a site as recorded in the deed or mortgage records or the miscellaneous documents of the county.

(15) "Release" has the meaning contained in Oregon Laws 1987, Chapter 735, Section 1(15).

(16) "Site" means a land disposal site, a hazardous waste disposal site, a disposal site containing radioactive waste, or an area where a hazardous substance has been released.

(17) "Solid waste" has the meaning contained in OAR 340-61-010(41).

Exclusions

340-130-010(1) Subject to section (2) of this rule, an environmental hazard notice shall not be issued for a site:

(a) Where investigation or cleanup activities are occurring or where the Department has determined will occur; or

(b) Which presently is regulated by a solid waste disposal permit, a hazardous waste management permit or an order requiring remedial action, closure or corrective action issued by the Department or Commission; or

(c) Where spills and releases have been or are being cleaned up pursuant to ORS 466.205, 466.645, 468.795, Oregon Laws 1987 Chapter 735, or the cleanup standards provided in OAR 340-108-030.

(2) An exception to section (1) of this rule may be made by the Commission if it finds that an environmental hazard notice is necessary to protect the public health, safety or the environment. This finding shall be included with the findings which support the decision to issue an environmental hazard notice for a site.

Factors for Issuing a Notice

340-130-015(1) One or more of the following factors shall be considered by the Commission when determining whether to issue an environmental hazard notice for a particular site:

(a) The likelihood that the site could threaten public health, safety or the environment if altered;

(b) Population at risk;

(c) Routes of exposure;

(d) The amount, concentration and hazardous, toxic and radioactive properties of the waste or contamination present at the site;

(e) The environmental impact of the waste or contamination (including, but not limited to, the impact on air and water quality, flora, and fauna) if the site is altered;

(f) Surface water and groundwater hydrological factors (including, but not limited to, soil permeability, depth to saturated zone, hydrologic gradients, proximity to drinking water aquifers, floodplains and wetlands proximity);

(g) Current and potential surface water and groundwater impacts and use;

(h) Climate;

(i) The requirements which were or are part of the closure and post-closure program for the site (including, but not limited to, final cover and cap, liners, leachate or gas collection, control or treatment systems, surface water control systems, any other components of containment, control or monitoring systems);

(j) The degree to which any deed or recording already provides notice or is required to provide notice of environmental hazards at a site.

(k) Level of regulatory control during the active life of the site;

(l) History of impacts to the public health, safety or the environment resulting from the waste or contamination at the site.

Use Restrictions to Accompany a Notice

340-130-020(1) The Commission shall include use restrictions when it issues an environmental hazard notice. Use restrictions are included with a notice to ensure that uses at a potentially hazardous site do not cause

the site to be altered in a manner that threatens the public health, safety or the environment.

(2) Subject to section (3) of this rule, the list of use restrictions contained in section (4) of this rule shall accompany an environmental hazard notice issued by the Commission.

(3) When the Commission issues an environmental hazard notice, it may:

(a) Delete or modify one or more use restrictions of Section (4) of this rule if it finds that the public health, safety, and the environment are sufficiently protected, and

(b) Add or modify one or more use restrictions of section (4) of this rule if it finds that the public health, safety or the environment is not sufficiently protected.

(4) Use Restrictions:

(a) No cover relocation or penetration through the cover;

(b) No modifications of surface drainage;

(c) No installation of surface water impoundments;

(d) No removal of waste or contaminated materials;

(e) No disturbance of gas or leachate collection, control or treatment systems or monitoring wells;

(f) No construction of enclosed structures;

(g) No disturbance of or penetration through an engineered liner or cap;

(h) No borings, pilings or well construction through the cover or an engineered liner or cap.

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Procedures for Issuing a Notice

340-130-025(1) In addition to sites identified by the Department, any person may request, in writing, that the Department ask the Commission to issue an environmental hazard notice for a particular site. The request must include information which supports the request. Following receipt of a request, the Department shall review it and act upon the request. Within 30 days of receiving the request, the Department shall notify the person making the request when the Department plans to consider the request.

(2) Any request from the Oregon Department of Energy to issue an environmental hazard notice for a site, and any subsequent Department and Commission action in response to the request, shall conform to an interagency agreement consistent with these rules and approved by the Department of Energy and the Department.

(3) At least 90 days before the Commission considers issuance of an environmental hazard notice for a site, the Department shall notify the site owner of the lot or parcel, or lots or parcels, where the site is located of the proposed action. This notification shall include preliminary proposed findings which would be used to support a decision to issue an environmental hazard notice for the site.

(4) Within 30 days following the notification of section (3) of this rule, an owner desiring to clean up a site or more clearly define the waste or contamination at a site may submit a proposed plan to the Department. The Department may extend the 30 day period for submission of the plan if the Department is satisfied that the owner needs more time to complete the plan. The Commission shall not issue an environmental

hazard notice for a site during implementation of a plan approved by the Department for cleanup or more accurate definition of the waste or contamination, if the plan is being followed.

(5) The Department shall issue a public notice as to its intent to request that the Commission issue an environmental hazard notice, allowing at least 30 days for written comment. The public notice shall be sent to at least the following persons:

(a) The owner of the lot or parcel, or lots or parcels, where the site is located;

(b) Property owners within 250 feet of the site;

(c) Any water right holders on the site;

(d) Any person with a recorded interest in the site;

(e) The affected city and/or county;

(f) Other interested persons who have requested in writing that the Department notify them.

(6) The Department shall hold a public hearing before the Commission considers issuance of the environmental hazard notice if:

(a) Ten or more persons or a group having a membership of 10 or more persons request a public hearing in writing within 20 days of issuance of the public notice; or

(b) In the Department's judgment, significant issues are raised during the public comment period.

(7) The Commission shall include findings in an environmental hazard notice for each factor of OAR 340-130-015 used to justify issuance of an environmental hazard notice for a particular site.

(8) The Department shall notify those persons submitting comments in

response to the public notice of section (5) of this rule, and those persons listed in section 5(a) to 5(e) of this rule, of the Commission's decision to issue an environmental hazard notice. The Department shall notify be certified mail the owner of the site. The notification shall:

(a) Include a copy of the environmental hazard notice;

(b) Explain that the notice will be sent to the appropriate city and/or county with land use jurisdiction over the lot or parcel;

(c) Advise the persons of the procedure for requesting a hearing under section (9) of this rule.

(9) The site owner, and any person who in the Commission's judgment has an interest that would be adversely affected when the Commission issues or declines to issue an environmental hazard notice may request a hearing before the Commission. The request shall be in writing and must be submitted to the Department within 20 days following mailing of the notification under section (8) of this rule. The hearing shall be conducted according to the provisions for a contested case hearing under ORS Chapter 183 and OAR Chapter 340, Division 11.

(10) The Department shall file the environmental hazard notice with the appropriate city and/or county and mail a copy of the notice to those persons receiving notice of section (8) of this rule:

(a) If no hearing is requested by an aggrieved person within 20 days after notification under section (8) of this rule; or

(b) Upon resolution of the hearing or hearings request under section (9) of this rule; if the final decision is to issue the notice.

Attachment I
Agenda Item
October 9, 1987 EQC Meeting

Procedures for Rescinding or Modifying a Notice

340-130-030(1) Except as provided by sections (2) through (5) of this rule, any modification or rescission of an environmental hazard notice shall follow the requirements for issuance of an environmental hazard notice in OAR 340-130-025.

(2) The owner of a site for which an environmental hazard notice has been issued and who is proposing an alteration or change of use on the site may request that the Department delete or modify one or more use restrictions contained in the environmental hazard notice. The request shall be in writing and include any information which aids the Department in acting upon the request.

(3) The Department shall issue a public notice as to its intent to modify or delete one or more use restrictions contained in an environmental hazard notice, allowing at least 30 days for written comment. The public notice shall be sent to at least the following persons:

(a) The owner of the lot or parcel, or lots or parcels, where the site is located;

(b) Property owners within 250 feet of the site;

(c) Any water right holders on the site;

(d) Any person with a recorded interest in the site;

(e) The affected city and/or county;

(f) Other interested persons who have requested in writing that the Department notify them.

(4) The Department shall hold a public hearing before modifying or rescinding one or more use restrictions if:

(a) Ten or more persons or a group having a membership of 10 or more persons request a public hearing in writing within 20 days of issuance of the public notice; or

(b) In the Department's judgment, significant issues are raised during the public comment period.

(5) The Department may delete or modify one or more use restrictions contained in an environmental hazard notice for a site if it finds that a proposed alteration or change or use:

(a) Will not increase the potential hazard to human health and the environment; or

(b) Is necessary to reduce a threat to human health or the environment; or

(c) Is necessary to complete a cleanup approved by the Department.

(6) The Department may require plans, studies and mitigation measures to be completed and approved before deleting or modifying one or more use restrictions contained in an environmental hazard notice.

(7) The Department shall notify, in writing, the appropriate city and/or county, those persons listed in section (3)(a) to 3(e) of this rule and those persons submitting comments in response to the public notice of section (3) of this rule of any action it takes to delete or modify use restrictions.

(8) The site owner, and any person who in the Commission's judgment has an interest that would be adversely affected by the Department's action to delete or modify one or more use restrictions may request a hearing before the Commission. The request shall be in writing and must be submitted to the Department within 20 days following mailing of the

notification under section (7) of this rule. The hearing shall be conducted according to the provisions for a contested case hearing under ORS Chapter 183 and OAR Chapter 340 Division 11.

Procedures for Cities and Counties

340-130-035(1) Following the adoption of OAR 340 Division 130 by the Commission, the Department shall notify cities and counties of their responsibilities to carry out the provisions of ORS 466.360 to 466.385 and this rule. The notification shall include:

(a) A copy of ORS 466.360 to 466.385 and OAR 340 Division 130;

(b) Model ordinances for amending local comprehensive plans and land use regulations to incorporate procedures to address environmental hazard notices; and

(c) Information describing how to obtain technical assistance from the Department of Land Conservation and Development and the Department of Environmental Quality to assist cities and counties in complying with this rule.

(2) All cities and counties receiving an environmental hazard notice issued by the Commission shall amend their comprehensive plans, land use regulations and zoning maps in accordance with the requirements of ORS 466.385 and section (3) of this rule. This amendment shall occur:

(a) By the first periodic review under ORS 197.640 following adoption of these rules, if the city or county receives an environmental hazard notice prior to this first periodic review; or

(b) Within 120 days of receiving an environmental hazard notice, if the city or county receives the environmental hazard notice after its first periodic review.

(3) A city or county shall not approve a proposed use of a site, parcel or lot for which the city or county has received an environmental hazard notice until the Department has been notified and provided the city or county with comments on the proposed use. The Department shall be notified not less than 21 days before the final date established by the city or county for submission of information. If no comment is received before final action is taken by the city or county, the Department shall be deemed to have no comment on the application.

(3) If the facility is closed before the fees reach an amount equal to the financial assurance, appropriate adjustment shall be made and the reduced portion of the financial assurance may be withdrawn. [1985 c.670 §32]

466.350 Post-closure license; fee. (1) At the time a PCB disposal facility is closed, the person licensed under ORS 466.025 to 466.065, 466.250, 466.255 (2) and (3) and 466.260 to 466.350 to operate the facility must obtain a post-closure license from the department.

(2) A post-closure license issued under this section must be maintained until the end of the post-closure period established by the commission by rule.

(3) In order to obtain a post-closure license the licensee must provide post-closure care which shall include at least the following:

(a) Monitoring and security of the PCB disposal facility; and

(b) Any remedial action necessary to protect the public health and safety and environment.

(4) The commission may by rule establish a post-closure license application fee. [1985 c.670 §33]

NOTICE OF ENVIRONMENTAL HAZARDS

466.360 Policy. (1) The Legislative Assembly finds that:

(a) Disposal sites exist on certain lots or parcels of real property within Oregon that may restrict future land development or constitute a potential hazard to the health, safety and welfare of Oregon's citizens, particularly if present or future owners use or modify the parcels without taking into consideration the use restrictions or environmental hazards posed by the former disposal activity.

(b) Permits, licenses and approvals that have been or may be granted by the Environmental Quality Commission, the Department of Environmental Quality or the Energy Facility Siting Council authorizing disposal of waste upon real property protect the health, safety and welfare of Oregon citizens only if adequate notice of post-closure use restrictions is given to future purchasers of the real property.

(c) Disposal sites created prior to regulation may be potentially hazardous if use restrictions are not imposed.

(d) Proper precautions and maintenance cannot be taken and continued unless the location of the disposal site, the nature and extent of its potential hazard and use restrictions are known to cities and counties and those who own and occupy the property.

(2) It is hereby declared to be the public policy of this state to give notice to local governments of potential hazardous disposal sites and to impose use restrictions on those sites. [1985 c.273 §2]

466.365 Commission authority to establish sites for which notice is required; rulemaking; report to Legislative Assembly. (1) The commission may establish by rule adopted under ORS 183.310 to 183.550:

(a) A list of sites for which environmental hazard notices must be given and use restrictions must be imposed. The list shall be consistent with the policy set forth in ORS 466.360 and may include any of the following sites that contain potential hazards to the health, safety and welfare of Oregon's citizens:

(A) A land disposal site as defined by ORS 459.005;

(B) A hazardous waste disposal site as defined by ORS 466.005; and

(C) A disposal site containing radioactive waste as defined by ORS 469.300 (17).

(b) The form and content of use restrictions to be imposed on the sites, which shall require at least that post-closure use of the site not disturb the integrity of the final cover, liners or any other components of any containment system or the function of the facility's monitoring systems, unless the department finds that the disturbance:

(A) Will not increase the potential hazard to human health or the environment; or

(B) Is necessary to reduce a threat to human health or the environment.

(c) The form and content of the environmental hazard notices to be filed with cities and counties.

(d) The circumstances allowing and procedures for removal or amendment of environmental hazard notices and use restrictions provided by the department.

(e) Any other provisions the commission considers necessary for the department to accomplish the purpose of ORS 466.360 to 466.385.

(2) Spills and releases cleaned up pursuant to ORS 466.205 and 468.795 shall not be listed as sites to be regulated under subsection (1) of this section.

(3) Before hearings on and adoption of rules under subsection (1) of this section, the department shall notify each person who owns a disposal site of the rulemaking proceedings.

mined by the department to be reasonably necessary to protect the public health or safety or the environment.

(i) Grant the commission the first opportunity to purchase the PCB disposal facility if the licensee offers the facility for sale.

(j) Maintain records of any PCB identified under provisions of ORS 466.025 to 466.065, 466.250, 466.255 (2) and (3) and 466.260 to 466.350 which is stored, treated or disposed of at the facility and the manner in which the PCB was stored, treated, transported or disposed of. The records shall be retained for the period of time determined by the commission.

(k) Assure that all personnel who are employed by the licensee are trained in proper procedures for handling, transfer, transport, treatment, disposal and storage of PCB including but not limited to familiarization with all contingency plans.

(L) If disposal is by incineration, the facility must also incinerate a reasonable ratio of hazardous waste. [1985 c.670 §27]

466.325 Annual fee. An annual fee may be required of every PCB disposal facility licensee under ORS 466.025 to 466.065, 466.250, 466.255 (2) and (3) and 466.260 to 466.350. The fee shall be in an amount determined by the commission to be adequate to carry on the monitoring, inspection and surveillance program established under ORS 466.310 and to cover related administrative costs. All such fees are continuously appropriated to the department to pay the cost of the program under ORS 466.310. [1985 c.670 §28]

466.330 Acquisition by state of real property for disposal of PCB. The commission may acquire real property for the disposal of PCB by instituting condemnation proceedings therefor to be conducted in accordance with ORS chapter 35. [1985 c.670 §29]

466.335 Consequences of revocation of license. (1) If the commission revokes a PCB disposal facility license under ORS 466.170, the commission may:

(a) Close the existing PCB disposal site or facility; or

(b) Direct the department to acquire an existing facility or site for the disposal or treatment of PCB according to the provisions of subsection (2) of this section.

(2) The department may, upon direction from the commission and after payment of just compensation, acquire and own an existing facility for use in the disposal of PCB. In order to secure such a facility, the commission may modify or waive any of the requirements of ORS chapter 459 and ORS 466.005 to 466.385, 466.880 (1) and (2), 466.890 and 466.995 (1) and (2), but not ORS 469.375 or 469.525, if the commission finds that waiver or modification:

(a) Is necessary to make operation of the facility economically feasible; and

(b) Will not endanger the public health and safety or the environment. [1985 c.670 §30]

466.340 Restrictions on treatment or disposal of PCB at facility. (1) The department may limit, prohibit or otherwise restrict the treatment or disposal of PCB at a disposal facility if appropriate to protect public health and safety or the environment.

(2) The department shall monitor the origin and volume of PCB received at a disposal facility acquired and regulated under ORS 466.335, and may curtail or reduce the volume of the PCB that may be accepted for disposal as necessary to:

(a) Protect public health and safety or the environment; or

(b) Assure that the operation of the facility is economically feasible.

(3) The department shall not accept any PCB at a disposal facility owned by the state from a state that is not a party to the Northwest Interstate Compact on Low-Level Radioactive Waste Management as set forth in ORS 469.930. [1985 c.670 §31]

466.345 PCB facility license fee. (1) The PCB disposal facility license shall require a fee based either on the volume of PCB accepted at the facility or a percentage of the fee collected, or both. The fees shall be calculated in amounts estimated to produce over the facility use period a sum sufficient to:

(a) Secure performance of license requirements;

(b) Close the facility;

(c) Provide for any monitoring or security of the facility after closure; and

(d) Provide for any remedial action by the state necessary after closure to protect the public health and safety and the environment.

(2) The amount so paid shall be held in a separate account and when the amount paid in by the licensee together with the earnings thereon equals the amount of the financial assurance required under ORS 466.320 (2), the licensee shall be allowed to withdraw the financial assurance.

(4) The department shall report to each Legislative Assembly on any sites for which environmental hazard notices and use restrictions have been amended or removed as provided by rule adopted under paragraph (d) of subsection (1) of this section.

(5) The commission shall not list a site, spill or release under subsection (1) of this section, if the commission finds that within 90 days of receipt of notice under subsection (3) of this section, the owner cleaned up the site, spill or release so it is no longer a potential hazard to the health, safety and welfare of Oregon's citizens. [1985 c.273 §3]

466.370 Notice to owner; hearing; filing of notice if no objection. (1) The department shall notify by certified mail any person who owns a lot or parcel upon which a disposal site listed under ORS 466.365 exists. The notice shall:

(a) Describe the disposal site and potentially hazardous environmental conditions;

(b) Describe the use restrictions that will be imposed;

(c) Explain that an environmental hazard notice will be sent to the appropriate city or county under ORS 466.375; and

(d) Advise the person of the procedure for requesting a hearing under subsection (2) of this section.

(2) If any person receiving notice under subsection (1) of this section objects to the use restrictions, the person may request a hearing before the commission. The request shall be in writing and must be submitted to the department within 20 days after the person receives the notice under subsection (1) of this section. The hearing shall be conducted according to the provisions for a contested case hearing in ORS 183.413 to 183.497.

(3) If no hearing is requested within 20 days after receipt of the notice, the department shall file the environmental hazard notice with the appropriate city or county. [1985 c.273 §4]

466.375 Filing of notice; content of notice. The department shall file an environmental hazard notice with the city or county in which a site listed under ORS 466.365 (1) is located. The notice shall contain the following information:

(1) A description of the lot or parcel upon which the disposal site is located;

(2) The restrictions that apply to post-closure use of the property; and

(3) Information regarding the potential environment hazards posed by the disposal site to assist the city or county in complying with ORS 466.385. [1985 c.273 §5]

466.380 Interagency agreement for notices for radioactive waste disposal sites. The Department of Environmental Quality and the Department of Energy shall enter into an interagency agreement providing for the implementation of the provisions of ORS 466.360 to 466.385 relating to radioactive waste disposal sites. [1985 c.273 §6]

466.385 Amendment of comprehensive plan and land use regulations; model language; appeal of land use decision related to site requiring notice. (1) By the first periodic review under ORS 197.640 after development of model language under subsection (2) of this section, the governing body of a city or county shall amend its comprehensive plan and land use regulations as provided in ORS 197.610 to 197.640 to establish and implement policies regarding potentially hazardous environmental conditions on sites listed under ORS 466.365. The land use regulations shall provide that:

(a) The city or county shall not approve any proposed use of a disposal site for which the city or county has received notice under ORS 466.370 until the Department of Environmental Quality has been notified and provided the city or county with comments on the proposed use; and

(b) Within 120 days of receipt of an environmental hazard notice from the Department of Environmental Quality, the city or county shall amend its zoning maps to identify the disposal site.

(2) The Department of Environmental Quality and the Department of Land Conservation and Development shall:

(a) Develop model language for comprehensive plans and land use regulations for use by cities and counties in complying with this section; and

(b) Provide technical assistance to cities and counties in complying with ORS 466.360 to 466.385.

(3) The Department of Environmental Quality may appeal to the Land Use Board of Appeals any final land use decision made by a city or county regarding any proposed use of a disposal site that has been identified under its comprehensive plan and land use regulations pursuant to this section. [1985 c.273 §7]

USE OF PCB

466.505 Definitions for ORS 466.505 to 466.530. As used in ORS 466.505 to 466.530:

(1) "PCB" means the class of chlorinated biphenyl, terphenyl, higher polyphenyl, or mixtures of these compounds, produced by replacing two or more hydrogen atoms on the biphenyl, terphenyl, or higher polyphenyl molecule with chlorine atoms. "PCB" does not include chlorinated biphenyls, terphenyls, higher polyphenyls, or mixtures of these compounds, that have functional groups attached other than chlorine unless that functional group on the chlorinated biphenyls, terphenyls, higher polyphenyls, or mixtures thereof of these compounds, is determined to be dangerous to the public health under ORS 466.525.

(2) "Ppm" means parts per million. [Formerly 468.900]

466.510 Sale of items containing concentrations of PCB prohibited; exceptions. (1) Except as provided in ORS 466.515, beginning January 1, 1980, a person shall not sell, manufacture for sale, or use in this state an item, product or material if the item, product or material contains a concentration of PCB equal to or greater than 100 ppm.

(2) The commission by rule may prescribe a lower maximum concentration of PCB for specific items, products or materials if it finds the 100 ppm concentration specified in subsection (1) of this section to be inadequate to protect the public health from the toxic dangers of the PCB contained in that item, product or material. However, an item, product or material for which a lower maximum concentration of PCB is prescribed by federal law, rule or regulation shall not be allowed a concentration of PCB higher than that federal maximum. [Formerly 468.903]

466.515 Electric transformers or capacitors exempted. Notwithstanding ORS 466.510:

(1) PCB or an item, product or material containing PCB may be sold for use or used in this state if it is used in a closed system as a dielectric fluid for an electric transformer or capacitor pursuant to rules of the commission to insure the public health. However, upon adequate documentation of the availability of reasonable substitutes which meet performance standards and environmental acceptability, the commission after public hearing by rule may modify these exclusions in whole or in part by requiring the phasing in of the substitute or substitutes.

(2) An item, product or material containing PCB may be manufactured for sale, sold for use or used in this state pursuant to an exemption certificate issued by the department under ORS 466.520. [Formerly 468.906]

466.520 Exemption certificates; applications; conditions. (1) A person may make written application to the department for an exemption certificate on forms provided by the department. The department may require additional information or materials to accompany the application as it considers necessary for an accurate evaluation of the application.

(2) The department shall grant an exemption for residual amounts of PCB remaining in electric transformer cores after the PCB in a transformer is drained and the transformer is filled with a substitute approved under ORS 466.515.

(3) The department may grant an exemption for an item, product or material manufactured for sale, sold for use, or used by the person if the item, product or material contains incidental concentrations of PCB.

(4) In granting a certificate of exemption, the department shall impose conditions on the exemption in order that the exemption covers only incidental concentrations of PCB.

(5) As used in this section, "incidental concentrations of PCB" means concentrations of PCB which are beyond the control of the person and which are not the result of the person having:

(a) Exposed the item, product or material to concentrations of PCB.

(b) Failed to take reasonable measures to rid the item, product or material of concentrations of PCB.

(c) Failed to use a reasonable substitute for the item, product or material for which the exemption is sought. [Formerly 468.909]

466.525 Additional PCB compounds may be prohibited. The commission after hearing by rule may include as a PCB and regulate accordingly any chlorinated biphenyls, terphenyls, higher polyphenyls, or mixtures of these compounds that have functional groups attached other than chlorine if that functional group on the chlorinated biphenyls, terphenyls, higher polyphenyls, or mixtures of these compounds is found to constitute a danger to public health. [Formerly 468.912]

466.530 Prohibited disposal of waste containing PCB. After October 4, 1977, a person shall not dispose of solid or liquid waste resulting from the use of PCB or an item, product or material containing or which has contained a concentration equal to or greater than 100 ppm of

beginning July 1, 1987, out of the General Fund, the sum of $500,000 for the purpose of carrying out this Act, including but not limited to funding for watershed enhancement projects as approved by the board pursuant to section 6 of this Act.

SECTION 20. In addition to and not in lieu of other appropriations, there is appropriated to the Water Resources Department, for the biennium beginning July 1, 1987, out of the General Fund, the sum of $139,978 for the purpose of providing staff services for project oversight and the day-to-day operation of the Governor's Watershed Enhancement Board.

SECTION 21. This Act being necessary for the immediate preservation of the public peace, health and safety, an emergency is declared to exist, and this Act takes effect on its passage.

Approved by the Governor July 16, 1987
Filed in the office of Secretary of State July 20, 1987

CHAPTER 735

AN ACT SB 122

Relating to environment; creating new provisions; amending ORS 466.365 and 466.605; repealing ORS 466.650, 466.655, 466.685 and 466.690; appropriating money; and declaring an emergency.

Be It Enacted by the People of the State of Oregon:

SECTION 1. As used in sections 1 to 24 of this Act:

(1) "Claim" means a demand in writing for a sum certain.

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

(3) "Department" means the Department of Environmental Quality.

(4) "Director" means the Director of the Department of Environmental Quality.

(5) "Environment" includes the waters of the state, any drinking water supply, any land surface and subsurface strata and ambient air.

(6) "Facility" means any building, structure, installation, equipment, pipe or pipeline including any pipe into a sewer or publicly owned treatment works, well, pit, pond, lagoon, impoundment, ditch, landfill, storage container, above ground tank, underground storage tank, motor vehicle, rolling stock, aircraft, or any site or area where a hazardous substance has been deposited, stored, disposed of, or placed, or otherwise come to be located and where a release has occurred or where there is a threat of a release, but does not include any consumer product in consumer use or any vessel.

(7) "Fund" means the Hazardous Substance Remedial Action Fund established by section 19 of this Act.

(8) "Guarantor" means any person, other than the owner or operator, who provides evidence of financial responsibility for an owner or operator under sections 1 to 24 of this Act.

(9) "Hazardous substance" means:

(a) Hazardous waste as defined in ORS 466.005.

(b) Any substance defined as a hazardous substance pursuant to section 101(14) of the federal Comprehensive Environmental Response, Compensation and Liability Act, as amended, P.L. 96-510 and P.L. 99-499.

(c) Oil.

(d) Any substance designated by the commission under section 4 of this Act.

(10) "Natural resources" includes but is not limited to land, fish, wildlife, biota, air, surface water, ground water, drinking water supplies and any other resource owned, managed, held in trust or otherwise controlled by the State of Oregon or a political subdivision of the state.

(11) "Oil" includes gasoline, crude oil, fuel oil, diesel oil, lubricating oil, oil sludge or refuse and any other petroleum-related product, or waste or fraction thereof that is liquid at a temperature of 60 degrees Fahrenheit and pressure of 14.7 pounds per square inch absolute.

(12) "Owner or operator" means any person who owned, leased, operated, controlled or exercised significant control over the operation of a facility. "Owner or operator" does not include a person, who, without participating in the management of a facility, holds indicia of ownership primarily to protect a security interest in the facility.

(13) "Person" means an individual, trust, firm, joint stock company, joint venture, consortium, commercial entity, partnership, association, corporation, commission, state and any agency thereof, political subdivision of the state, interstate body or the Federal Government including any agency thereof.

(14) "Regulated substance" means:

(a) Any substance defined as a hazardous substance pursuant to section 101(14) of the federal Comprehensive Environmental Response, Compensation and Liability Act, as amended, P.L. 96-510 and P.L. 99-499, but not including any substance regulated as a hazardous waste under 40 CFR part 261 and OAR 340, Division 101.

(b) Oil.

(c) Any substance designated by the commission under ORS 466.630.

(15) "Release" means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping or disposing into the environment including the abandonment or discarding of barrels, containers and other closed receptacles containing any hazardous substance, or threat thereof, but excludes:

(a) Any release which results in exposure to a person solely within a workplace, with respect to a claim that the person may assert against the person's employer under ORS chapter 656;

Liability Act Matching Fund created under ORS 466.690 on June 30, 1987, shall be transferred to the Hazardous Substance Remedial Action Fund established under section 19 of this Act. Any fee revenue owed or paid to the Comprehensive Environmental Response, Compensation and Liability Act Matching Fund created under ORS 466.690 on or after June 30, 1987, shall be deposited in the Hazardous Substance Remedial Action Fund established under section 19 of this Act. Any such revenue shall be available for the purposes specified in section 19 of this Act. Beginning on July 1, 1987, any obligations which were incurred before July 1, 1987, by the Comprehensive Environmental Response, Compensation and Liability Act Matching Fund under ORS 466.690, shall be satisfied by moneys from the Hazardous Substance Remedial Action Fund created under section 19 of this Act.

SECTION 23. (1) In addition to any other penalty provided by law, any person who violates a provision of sections 1 to 22 of this Act, or any rule or order entered or adopted under sections 1 to 22 of this Act, shall incur a civil penalty not to exceed $10,000 a day for each day that such violation occurs or that failure to comply continues.

(2) The civil penalty authorized by subsection (1) of this section shall be established, imposed, collected and appealed in the same manner as civil penalties are established, imposed, collected and appealed under ORS 468.090 to 468.125, except that a penalty collected under this section shall be deposited in the Hazardous Substance Remedial Action Fund established under section 19 of this Act, if the penalty pertains to a release at any facility.

SECTION 24. (1) Any person who knowingly or wilfully violates any provision of sections 1 to 22 of this Act or any rule or order adopted or issued under sections 1 to 22 of this Act shall, upon conviction, be subject to a criminal penalty not to exceed $10,000 or imprisonment for not more than one year, or both.

(2) Each day of violation shall be deemed a separate offense.

→ **SECTION 25.** ORS 466.365 is amended to read:

466.365. (1) The commission may establish by rule adopted under ORS 183.310 to 183.550:

(a) A list of sites for which environmental hazard notices must be given and use restrictions must be imposed. The list shall be consistent with the policy set forth in ORS 466.360 and may include any of the following sites that contain potential hazards to the health, safety and welfare of Oregon's citizens:

(A) A land disposal site as defined by ORS 459.005;

(B) A hazardous waste disposal site as defined by ORS 466.005; [*and*]

(C) A disposal site containing radioactive waste as defined by ORS 469.300 (17); **and** [.]

(D) A facility.

(b) The form and content of use restrictions to be imposed on the sites, which shall require at least that post-closure use of the site not disturb the integrity of the final cover, liners or any other components of any containment system or the function of the facility's monitoring systems, unless the department finds that the disturbance:

(A) Will not increase the potential hazard to human health or the environment; or

(B) Is necessary to reduce a threat to human health or the environment.

(c) The form and content of the environmental hazard notices to be filed with cities and counties.

(d) The circumstances allowing and procedures for removal or amendment of environmental hazard notices and use restrictions provided by the department.

(e) Any other provisions the commission considers necessary for the department to accomplish the purpose of ORS 466.360 to 466.385.

(2) Spills and releases cleaned up pursuant to ORS 466.205 and 468.795 shall not be listed as sites to be regulated under subsection (1) of this section.

(3) Before hearings on and adoption of rules under subsection (1) of this section, the department shall notify each person who owns a disposal site **or an owner or operator of a facility** of the rulemaking proceedings.

(4) The department shall report to each Legislative Assembly on any [*sites*] **site or facility** for which environmental hazard notices and use restrictions have been amended or removed as provided by rule adopted under paragraph (d) of subsection (1) of this section.

(5) The commission shall not list a site, spill or release under subsection (1) of this section, if the commission finds that within 90 days of receipt of notice under subsection (3) of this section, the owner cleaned up the site, spill or release so it is no longer a potential hazard to the health, safety and welfare of Oregon's citizens.

(6) As used in this section, "facility" has the meaning given in section 1 of this 1987 Act.

SECTION 26. ORS 466.605 is amended to read:

466.605. As used in ORS 466.605 to 466.690, 466.880 (3) and (4) and 466.995 (3):

(1) "Barrel" means 42 U.S. gallons at 60 degrees Fahrenheit.

(2) "Cleanup" means the containment, collection, removal, treatment or disposal of oil or hazardous material; site restoration; and any investigations, monitoring, surveys, testing and other information gathering required or conducted by the department.

(3) "Cleanup costs" means all costs associated with the cleanup of a spill or release incurred by the state, its political subdivision or any person with written approval from the department when implementing ORS 466.205, 466.605 to 466.690, 466.880 (3) and (4) and 466.995 (3) or 468.800.

Oregon Department of Environmental Quality

Attachment V.
Agenda Item
October 9, 1987, EQC Meeting

A CHANCE TO COMMENT ON...

Public Hearing

Hearing Date: December 7, 1987
Comments Due: December 15, 1987

WHO IS AFFECTED:

Persons who own, occupy or utilize sites that are now, or were, used for solid waste disposal, hazardous waste disposal and radioactive waste disposal, or sites where hazardous substances have been released. Neighbors to such sites, and local governments.

WHAT IS PROPOSED:

The Department of Environmental Quality (DEQ) proposes to create rules (OAR Chapter 340, Division 130) to establish procedures for issuing environmental hazard notices and use restrictions on potentially hazardous sites. The proposed rules are needed to implement a law passed by the 1985 Oregon Legislature entitled "Notice of Environmental Hazards," now codified as ORS 466.360 to 466.385.

WHAT ARE THE HIGHLIGHTS:

Environmental hazard notices may be issued for sites with waste or contamination. Prior to issuance of a notice, a site owner will have an opportunity to clean up the site. The public will have an opportunity to comment on any proposal to issue an environmental hazard notice.

SPECIAL CONDITIONS:

Use restrictions will accompany these notices. Examples of use restrictions are:

- No disturbance of liners or caps
- No removal of waste or contaminated materials
- No construction of enclosed structures
- No modifications of surface drainage

Use restrictions may be modified or rescinded by the Environmental Quality Commission (EQC) at the time it issues an environmental hazard notice. After issuance of a notice, these use restrictions may be modified or rescinded by the DEQ only if certain conditions are met and findings made.

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.

The environmental hazard notices and associated use restrictions will be filed with cities and counties and be implemented through local zoning ordinances. The DEQ and the Department of Land Conservation and Development (DLCD) are required to prepare a model ordinance for local governments to use, and to provide technical assistance to local governments.

HOW TO COMMENT:

A Public Hearing is scheduled for:

Monday, December 7, 1987
1:30 p.m.
DEQ's Portland Office
811 S.W. Sixth Avenue
Fourth Floor Conference Room

Written comments should be sent to DEQ, Hazardous and Solid Waste Division, Attn: Bob Danko, 811 S.W. 6th Avenue, Portland, Oregon 97204 by December 15, 1987.

WHAT IS THE NEXT STEP:

After the public hearing and comment period, DEQ will evaluate the comments, prepare a response to comments and make a recommendation to the EQC in January 1988. The Commission may adopt the rules as proposed, adopt a modified version of the proposed rules, or decline to adopt any proposed rules.

For more information, or to receive a copy of the proposed rules, call Bob Danko at (503) 229-6266, or 1-800-452-4011, toll-free in Oregon.

ZF2413

NEIL GOLDSCHMIDT
GOVERNOR

Department of Environmental Quality

811 SW SIXTH AVENUE, PORTLAND, OREGON 97204-1334 PHONE (503) 229-5696

MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Agenda Item G, October 9, 1987

Request for Authorization to Conduct a Public Hearing on Proposed Rules for the Oregon Underground Storage Tank Program, OAR 340-150-010 to OAR 340-150-15

Background

The Problem

For reasons of safety, aesthetics or lack of available space, most petroleum products and some hazardous chemicals are stored in underground tanks. Leaks may be undetected for years. The problems associated with leaking underground tanks and associated piping include contamination of groundwater supplies, damage to underground structures (such as telephone and electric lines); fire and explosion hazards, and damage to crops and wildlife.

During the 1950's and 1960's, industrial and commercial construction led to the installation of thousands of underground tanks. At that time, environmental hazards were not associated with underground tanks. The most common tank construction material was unprotected steel. With recent reports indicating a 17 year average tank life, many of these tanks have reached or exceeded their life span, and now or will soon be leaking.

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For reasons of safety, aesthetics or lack of available space, most petroleum products and some hazardous chemicals are stored in underground tanks. Leaks may be undetected for years. The problems associated with leaking underground tanks and associated piping include contamination of groundwater supplies, damage to underground structures (such as telephone and electric lines); fire and explosion hazards, and damage to crops and wildlife.

During the 1950's and 1960's, industrial and commercial construction led to the installation of thousands of underground tanks. At that time, environmental hazards were not associated with underground tanks. The most common tank construction material was unprotected steel. With recent reports indicating a 17 year average tank life, many of these tanks have reached or exceeded their life span, and now or will soon be leaking.

Incidences of leaking underground tanks, and the environmental and public health damages caused across the nation by them have been well documented. Here in Oregon, similar but less dramatic problems have occurred. During the past five years, the department has been involved with groundwater contamination problems and combustion hazards associated with leaking underground storage tanks in all parts of the state involving gasoline, diesel fuels, and spent solvents with the most common situation being the loss of gasoline from service stations.

During 1985 and 1986 the department investigated 72 reported underground storage tank leaks. Of the those reported leaks, 93 percent involved release of petroleum products. In some cases, fumes from gasoline accumulated in residences and businesses forcing evacuation.

During February 1986, the department, as part of the requirements under Subtitle I of the 1984 Hazardous and Solid Waste Amendments to the Resource Conservation and Recovery Act (RCRA), conducted a state-wide survey of underground storage tanks used to store regulated substances. Under the 1984 federal law, all owners and operators of underground storage tanks are required to submit notification of the existence of such tanks to a designated state agency, such as the Oregon DEQ.

To initiate the survey, the department, during 1985, identified businesses in Oregon likely to own underground tanks through SIC codes, Department of Agriculture licensing information, trade association memberships, and department mailing lists. During February 1986, the department mailed notification forms and program information packets to over 50,000 businesses in Oregon. The form mailed by the department consisted of a tank ownership registration and a no-tank self mailer to identify businesses on the mailing list which do not own or operate underground tanks.

Of the 50,000 businesses contacted, the department has received 8,303 completed forms representing 22,409 tanks at 8,303 tank facility locations. Approximately, 20,000 no-tank forms were returned to the department indicating no-tanks or exempt tanks. Approximately, 22,000 forms were not returned. The department estimates a twenty (20) percent underreporting.

Results of the state-wide survey have identified 22,409 underground tanks. Seventy-nine percent of the registered tanks are constructed of unprotected steel with an average age of 13.5 years, and are now or will within four years reach the age when history shows leaks are likely to occur.

Federal Law

Subtitle I, of the Hazardous and Solid Waste Amendments of 1984 to the Resource Conservation and Recovery Act, authorizes the implementation of a national underground storage tank regulatory program.

The scope of the federal program is broad and applies to tanks and associated underground piping with 10 percent or more of their volume underground that are used to store petroleum products or other liquid materials defined as hazardous under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). The federal law further exempts certain tanks such as heating oil tanks, tanks used to store motor fuel at farms and residences providing the tank does not exceed 1,100 gallons capacity, certain tanks covered by other regulations, flow-through process tanks, and tanks located underground which allow for easy inspection. Under this federal law, the EPA is required to develop and promulgate:

1. Performance standards for new tank installations:
2. Performance standards for operating existing tanks;
3. Leak detection and overfill protection standards for new and existing systems;
4. Corrective action requirements; and
5. Inspection and enforcement;
6. Financial responsibility requirements, and
7. Interim rules banning the installation of underground tanks which do not meet certain minimum requirements.

The federal law further requires that EPA initiate a tank notification program and coordinate federal and state efforts. The new law encourages the development of state-operated programs and requires EPA to oversee state implementation. Congress intended that this program be run by State governments with minimum federal involvement and has further required EPA to develop requirements and procedures for state programs to operate in lieu of the federal program.

In the absence of a state program, however, EPA shall implement the program. Following adoption of the Federal State Program Authorization Rules, states may apply to EPA for authorization to operate an underground storage tank program. To receive authorization, state programs must include all the regulatory elements of the federal program.

State Law

The 1985 Oregon Legislature determined that the Department of Environmental Quality should carry out the program in Oregon. Under the authority of the 1985 legislation, the department began and is continuing to process notification forms. The first task was to gather information regarding the universe of underground tanks. Exempt from requirements, and therefore, not included in the survey are heating oil tanks, certain farm and residential tanks, and other tanks already regulated in other programs (e.g. hazardous waste tanks).

The 1985 State law (ORS 468.901 - 468.917) exempted underground tanks located at farms used to store motor fuel with a capacity of 10,000 gallons or more. Federal law, however, exempted motor fuel tanks located at farms of 1,100 gallons or less from regulation.

The 1987 Oregon Legislature passed Chapter 539, Oregon Law 1987 which expanded the authority of the department over underground storage tanks and amended State law (ORS 468.901 - 468.917) to conform to federal law. As an example, the farm tank exemption for motor fuel tanks was amended from 10,000 gallons to 1,100 gallons or less capacity.

Chapter 539, Oregon Law 1987 provides for the following:

1. Authorizes adoption by the Commission of technical standards for new installations and existing operations of underground storage tanks;

2. Establishes financial responsibility requirements for corrective action and third party damages on owners and permittees of underground tanks. The statute allows the Commission to create a state-administered insurance fund to meet federal financial responsibility requirements;

3. Preempts existing and future local underground storage tank programs which cover the same environmental regulations as the Department's state-wide program. The statute provides for local administration of the state program by contract with the department;

4. Creates a licensing program for underground storage tank installers and retrofitters, leak detection testers, and inspectors;

5. Requires adoption by the Environmental Quality Commission of permits and fees. Fees may include the following:

A. Permit fee to not exceed $25.00 per tank per year to support program administration;

B. If a state insurance fund is created by the Commission, an insurance fee or premium payable by owners or permittees to meet financial responsibility requirements;

C. Licensing fee payable by installers and retrofitters, leak detection testers, and inspectors to support the licensing program.

State Insurance Fund

The 1984 Hazardous and Solid Waste Amendments to RCRA required that all tank owners or operators be required to show evidence of financial responsibility for corrective actions and third party damages resulting from leaking underground storage tanks. The minimum financial responsibility required is 1 million dollars per occurrence, as established in the 1986 Superfund Amendments and Reauthorization Act (SARA). SARA provides however, an opportunity for EPA to defer regulation on classes of tanks if evidence is shown that insurance is unavailable to that class of tanks.

Financial responsibility requirements have been proposed in the April 17, 1987 EPA proposed rules for underground tanks. These rules conform to the provisions in federal law. If these rules become effective June 1988 (expected effective date for technical rules), then all owners and operators of regulated tanks in Oregon will be required to maintain financial responsibility.

Currently, private insurance covering liability for corrective action and third party damages incurred from leaking underground tanks, is unavailable to the majority of tank owners. While many large companies are either self-insured or able to afford the insurance available, most small businesses owning underground tanks will be unable to meet the federal requirements.

Establishing a State Insurance Fund for underground tanks is allowed for under Chapter 539, Oregon Law 1987, if financially feasible. Federal financial responsibility requirements can be deferred for up to 180 days by the EPA, if the State of Oregon is active in pursuing the establishment of an insurance fund.

responsibility requirements. The 1987 Oregon Legislature mandated that the department develop an action plan to satisfy federal financial responsibility requirements, and that prior to the adoption of state financial responsibility rules, the action plan be reviewed by the Legislative Assembly or the Emergency Board.

Rulemaking Schedule

On April 17, 1987, the Federal Government published Proposed Rules for the Underground Storage Tank Program. Early drafts of these proposed rules together with recommendations from the Underground Storage Tank Advisory Committee (Attachment VI), guided the development of these interim underground storage tank rules.

In addition to the federal financial responsibility, corrective action and installation requirements for new tanks, the EPA proposed rules create three additional minimum technical requirements for new installations and existing underground tanks: (1) must be protected from corrosion; (2) must be equipped with overfill and spill prevention; and (3) must have leak detection methods.

The goal of the proposed regulations for existing tanks is to improve underground tanks in the ground so that they meet the requirements for new installations. At the end of ten (10) years, all underground tanks will need to show the three minimum requirements, as described above.

The final Federal Underground Storage Tank Program Rules are scheduled to be adopted in April 1988 and to be effective in June 1988. At that time, the department will propose adoption of additional rules which encompass the federal rules. Ultimately, the department intends to seek federal approval for the Oregon Underground Storage Tank Program during 1989.

Proposed Rules

Although Chapter 539, Oregon Law 1987 provides for full regulation over underground tanks, until EPA adopts its final rules, the department is proposing interim rules which provide for regulation of six areas of immediate concern to the department:

(1) Establishment of a permit and fee program;
(2) Requirements for revocation and denial of a permit;

(3) Requirements for distributors of regulated substances and sellers of underground storage tanks;
(4) Interim performance standards governing the installation of underground tanks;
(5) Standards for decommissioning of underground storage tanks, and
(6) Penalty provisions.

DISCUSSION

Tanks are continuing to be installed, removed from the ground and abandoned in place. National studies conducted by the American Petroleum Institute and the EPA show that poor installation of underground tanks and corrosion of underground tanks are the two major causes of leaks. Since the enactment of the 1984 Hazardous and Solid Waste Amendments, the installation of underground storage tanks has been regulated by the Environmental Protection Agency under Interim Rules. Final Federal rules have been proposed and are scheduled for adoption in June 1988. In addition, statutes and rules of the Office of the State Fire Marshal regulate the installation of certain underground tanks used to store flammable or combustible substances. Potentially, these two sets of rules could conflict. However, the proposed Federal rules appear to compliment rather than conflict with the rules quiding the Fire Marshall. The Federal rules add additional requirements to improve environmental safety. The department will be working with our underground storage tank advisory committee and fire officials throughout the state to avoid conflicts in the rules and rule enforcement.

Removal of the tank from the ground or abandonment in place can either create public health and environmental hazards or reveal existing contamination. The department has no current authority to enforce the federal rules on underground storage tank installation. Additionally, there are no environmental rules regarding the removal of underground tanks.

The department is proposing Interim Underground Storage Tank rules to support the policy statement of Chapter 539, Oregon Law 1987; "public policy is to protect the public health, safety, welfare and the environment from the harmful effects of underground tanks used to store regulated substances".

Presently, the installation of underground tanks are governed by the Federal interim rules. These rules do not cover operation or decommissioning of underground tanks. However, the proposed

Federal rules contain retroactive requirements for tanks that are decommissioned prior to their adoption. These retroactive requirements would be a burden an owner who decommissions an underground tank prior to the their adoption. The department is proposing rules that require the owner to apply for a permit prior to the installation, bringing into operation, or decommissioning of a tank. This process will allow the department to provide guidance to the tank owner, thus minimize future conflicts with the Federal rules. In accordance with SB 115, the requirement to apply for a permit will become operative 90 days following the adoption of rules. Chapter 539, Oregon Law 1987 limits the effective date of the Underground Storage Tank Compliance Permit until one year after the adoption of rules. Rules are proposed that authorizes the Department to refuse to issue, modify, suspend, revoke, or renew a permit. These proposed rules allow the Department to revoke or deny a permit if it finds a false statement or misrepresentation in the permit application or finds violation of the conditions of the permit, rules, or statutes.

The 1987 Oregon Legislature mandated that the Underground Storage Tank Program be supported by fees. A proposed rule requires that a fee of $25 per tank be submitted to the department with the permit application and that an annual compliance fee of $25 per tank be paid for each year of operation. The proposed rules provide that these fees will reduce to $20 for any application received after July 1, 1989.

The proposed permit rules follow the Federal Interim Underground Storage Tank Regulations by requiring the owner of an underground storage tank currently in operation, the owner of a tank taken out of operation between January 1, 1974 and May 1, 1988 and the owner of a tank taken out of operation prior to January 1, 1974 that contains a regulated substance to apply for an underground storage tank permit. Additionally, the proposed rules require that the tank owner, the land owner in which a tank is located, and the proposed permittee sign the permit application. The owner or permittee is required to furnish information to the department relating to underground storage tanks on the permit application furnished by the department.

The requirement for an Underground Storage Tank Permit provides the opportunity for the department to control the use of the tank by limiting the delivery of a regulated substance into an underground storage tank without a current permit, and require that distributors of regulated substances and sellers of underground tanks inform their customers of permit requirements. The department is proposing rules that limit the distribution of regulated substances to only those tanks operating under a permit issued by the department. An additional proposed rule will require

that distributors and sellers of regulated substances and sellers of underground storage tanks inform their customers in writing of the permit requirements. Chapter 539, Oregon Law 1987 does not allow these rules to become operative until one year following the adoption of rules, therefore, both proposed rules will not become operative for one year.

The current Federal rules concerning the installation of underground storage tanks cannot be enforced by the department. The department is limited to providing guidance on the Federal rules. Adoption of tank installation rules would allow the department to provide firm direction to the people that are installing underground tanks in Oregon. The department is proposing rules that adopt the interim standards specified in Subtitle I, Section 9003(g) of the Resource Conservation and Recovery Act (RCRA), and use as guidance an EPA publication entitled The Interim Prohibition: Guidance for Design and Installation of Underground Storage Tanks.

As explained in a previous section, the proposed Federal rules on decommissioning underground storage tanks will be retroactive for certain tanks and will require an owner to complete an environmental site assessment if these proposed rules are not now followed. The department is proposing rules that will provide guidance for owners or permittees who decommission tanks prior to the adoption of the Federal rules. In addition, the proposed rules add requirements on disposing of the tank, disposing of the tank contents, reporting a release and cleaning up a release from an underground tank. Chapter 539, Oregon Law 1987 specifies that the environmental regulations adopted by the Commission governing underground storage tanks should not interfere with or abridge the authority of the State Fire Marshal with regard to regulation of combustible or explosion hazards. It is our opinion that these proposed limited rules on decommissioning do not conflict with the rules currently in effect within local fire jurisdictions. Future amendments to these rules on decommissioning will be developed jointly with local agencies so as to avoid conflicts, yet meet or exceed the final Federal underground storage tank rules.

Rules are proposed for civil penalties for any person who violates adopted underground storage tank rules, statutes or conditions of an order or permit.

The proposed rules discussed above are the subject of the proposed public hearings to be held in early December.

ALTERNATIVES AND EVALUATION

If the department does not proceed with rulemaking regulating underground storage tanks to include all federal provisions, then the federal EPA will administer the program in Oregon. However, both the Oregon Legislature and the the Underground Storage Tank Advisory Committee have considered the alternatives and have directed the department to run the underground storage tank program within Oregon.

The proposed rules are the minimum required to initiate the requirements of Chapter 539, Oregon Law 1987 and to provide funding for the State Underground Storage Tank Program. Delaying the adoption of State rules, until enactment of the Federal rules, was considered and rejected. Although state technical rules will not be proposed until mid-year 1988 following adoption of the federal rules, the department does need to move ahead with interim rules to implement its fee program. Without revenues from fees, program development will be limited to funds received from the EPA under the Federal UST Grant FFY'88. This will allow the department to develop rules but limit the scope of other activities such as certification of tank installers, testers and inspectors, developing a state financial responsibility mechanism, and performing compliance and cleanup activities; cited in (Chapter 539, Oregon Law 1987) and delay implementation of the program.

Implementation of technical standards, enforcement actions, corrective actions and certain other programs (e.g. financial responsibility) are requirements for EPA approval of the state program. If the department does not implement each of these areas as specified by Subtitle I of the 1984 Hazardous and Solid Waste amendments to RCRA, then operation of the state program in lieu of the federal program will be delayed.

The permit program is essential in the updating of the current information on the UST database (e.g. installation of new tanks, change in ownership of existing tanks, removal and abandonment of existing tanks). In addition, the UST Advisory Committee believed it essential to identify and inform the land owner in which the tanks were located, the tank owners, and the permittee of responsibilities and liabilities associated with underground storage tanks. Without this requirement, landowners and many tank owners may remain unaware of their responsibilities under the new underground storage tank program.

Additional provisions of the permit program require that owners of tanks not in operation but which still store regulated substances be required to complete a permit application. The department is

aware that many abandoned tanks have not been registered and are potential sources of environmental pollution. Delays in adopting the permit rule will delay the department's ability to keep current of tank information and its ability to inform all responsible parties of potential liabilities.

Technical standards for the installation of underground tanks are currently regulated by the EPA. The department is proposing to adopt these exact requirements. The EPA, however, is limited in its oversight of tank installations to registration of new tanks or investigations following complaints of improperly installed tanks. Precover inspections are not conducted by the EPA. If the interim technical standards are not adopted, then the department has no direct authority to inspect or enforce installation standards for compliance with the interim requirements.

The universe of underground storage tanks is extremely large. The proposed rule requires limiting distribution of regulated substances to tanks with valid permits. If the rule prohibiting distributors from depositing substances into tanks without permits is not adopted, then the department will be unable to adequately enforce its permit program. The regulation of distribution of substances to permitted tanks does not take effect until March 1, 1989 allowing ample time for tank owners and operators to become aware of permit requirements.

Since the passage of Subtitle I of the 1984 Hazardous and Solid Waste amendments to RCRA, the department has been aware of the many underground storage tanks being removed from the ground or abandoned in place. At the time of decommissioning, environmental damage can occur or be identified. The department is proposing minimal decommissioning requirements consistent with the proposed federal rules. If the rule is not adopted, then the department will not be informed as to which tanks have been removed, identification of releases, and corrective actions taken. Decommissioning information will enable the department to adequately assess future resource requirements. Furthermore, the EPA has proposed retroactive site assessment requirements for tanks decommissioned improperly and substantial record keeping. The proposed Federal rules require that, unless the tank is decommissioned using American Petroleum Institute Document 1604 as guidance, a complete environmental site assessment will be required. API 1604 is not an environmental guideline. Rather it specifies procedures that will reduce the structural, fire and explosion risks. The department is proposing decommissioning rules so that tank owners and operators may be able to avoid costly retroactive requirements.

The department has drafted the proposed rule based on recommendations from its Underground Storage Tank Advisory Committee. This committee is comprised of 38 individuals representing regulated industry, environmental groups, environmental attorneys, educators, engineers and scientists, the insurance industry, and the public.

The proposed rule defines the terms used herein, establishes who shall apply for a permit, revocation and denial requirements, permit fee, information to be contained in the permit application, installation standards, decommissioning requirements, and civil penalties.

SUMMARY

1. Subtitle I of the Resource Conservation and Recovery Act (RCRA) authorizes the implementation of a Federal underground storage tank program and encourages the development of state operated programs.

2. Since May of 1985, the EPA has regulated the installation of underground storage tanks and used as a guidance document, The Interim Prohibition: Guidance for Design and Installation of Underground Storage Tanks.

   The Office of the State Fire Marshal has regulated certain underground storage tank installations.

3. The 1985 Oregon Legislature passed HB 2142 (ORS 468.901 - 468.917) granting authority to the department to develop a state-wide and uniform underground storage tank program.

4. The 1987 Oregon Legislature passed SB 115 which expands the department's authority over underground storage tanks to include all federal provisions and certain additional state requirements.

5. Based on the authority of SB 115, the department proposes that certain interim underground storage tank rules be adopted enabling the department to begin development of an underground tank program which will ultimately meet all the provisions required for state program approval.

The subject of the interim rules includes the following:

(a) Adoption of interim rules comparable to the current federal rules regarding the installation of underground storage tanks;

(b) A fee program of $25.00 per tank per year allowing the department to fund program activities;

(c) A permit program to allow the department to continue to identify permittees, tank owners, and landowners in which tanks are located on an ongoing basis;

(d) Decommissioning rules to permit the oversight of underground tanks being abandoned in place or removed from the ground. This oversight is limited to reporting requirements for evidence of contamination, closure of tanks guided by the American Petroleum Institute Publication 1604, and a record keeping requirement of three years to document closure procedures.

(e) Revocation and permit denial rules to allow the department to refuse to issue a permit for certain violations or misrepresentation of information;

(f) Penalty provisions for violations of statutes, rules, or orders.

DIRECTOR'S RECOMMENDATION

Based upon the Summation, it is recommended that the Commission authorize public hearings to take testimony on the proposed underground storage tank rules.

Fred Hansen
Director

ATTACHMENTS:

Attachment I:	Proposed Rules
Attachment II:	Draft Statement of Need and Fiscal and Economic Impact
Attachment III:	Land Use Consistency Statement
Attachment IV:	Public Hearing Notice
Attachment V:	SB 115
Attachment VI:	UST Advisory Committee

Attachment I
Agenda Item
10-09-87 EQC Meeting

Proposed Rules
Underground Storage Tank Program
Chapter 539, Oregon Law 1987

Definitions

340-150-010 (1) "Corrective Action" means remedial action taken to protect the present or future public health, safety, welfare or the environment from a release of a regulated substance. "Corrective Action" includes but is not limited to:

(a) The prevention, elimination, removal, abatement, control, minimization, investigation, assessment, evaluation or monitoring of a hazard or potential hazard or threat, including migration of a regulated substance; or

(b) Transportation, storage, treatment or disposal of a regulated substance or contaminated material from a site.

(2) "Decommission" means to remove from operation an underground storage tank, including temporary or permanent removal from operation, abandonment in place or removal from the ground.

(3) "Fee" means a fixed charge or service charge.

(4) "Investigation" means monitoring, surveying, testing or other information gathering.

(5) "Oil" means gasoline, crude oil, fuel oil, diesel oil, lubrication oil, sludge, oil refuse and any other petroleum related product or fraction thereof that is liquid at a temperature of 60 degrees Fahrenheit and a pressure of 14.7 pounds per square inch absolute.

(6) "Owner" means the owner of an underground storage tank.

(7) "Permittee" means the owner or a person designated by the owner who is in control of or has responsibility for the daily operation or maintenance of an underground storage tank under a permit issued pursuant to these rules.

(8) "Person" means an individual, trust, firm, joint stock company, corporation, partnership, joint venture, consortium, association, state, municipality, commission, political subdivision of a state or any interstate body, any commercial entity and the Federal Government or any agency of the Federal Government.

(9) "Regulated substance" means:

(a) Any substance listed by the United States Environmental Protection Agency in 40 CFR Table 302.4 as ammended as of the

date October 1, 1987, but not including any substance regulated as a hazardous waste under 40 CFR Part 261 and OAR 340 Division 101, or

(b) Oil.

(10) "Release" means the discharge, deposit, injection, dumping, spilling, emitting, leaking or placing of a regulated substance from an underground storage tank into the air or into or on land or the waters of the state, other than as authorized by a permit issued under state or federal law.

(11) "Underground storage tank" means any one or combination of tanks and underground pipes connected to the tank, used to contain an accumulation of a regulated substance, and the volume of which, including the volume of the underground pipes connected to the tank, is 10 percent or more beneath the surface of the ground.

Underground Storage Tank Permit Required

340-150-020 (1) After February 1, 1989, no person shall install, bring into operation, operate or decommission an underground storage tank without first obtaining an underground storage tank permit from the department.

(2) Permits issued by the department will specify those activities and operations which are permitted as well as requirements, limitations and conditions which must be met.

(3) The duration of permits will be variable, but shall not exceed ten (10) years. The expiration date will be recorded on each permit issued. A new application must be filed with the department to obtain renewal or modification of a permit.

(4) After February 1, 1989, permits are issued to the official applicant of record for the activities and operations of record and shall be automatically terminated unless a new underground storage tank application is submitted in accordance with these rules:

(a) Within 60 days after any change of ownership of property in which the tank is located, ownership of tank or permittee.

(b) Upon change in the nature of activities and operations from those of record in the last application;

(c) Upon issuance of a new, renewal or modified permit for the same operation;

(d) Upon written request of the permittee.

Underground Storage Tank Permit Compliance Fee

340-150-030 (1) Beginning March 1, 1989, and annually thereafter, the permittee shall pay an underground storage tank permit compliance fee of $25 per tank per year.

(2) The underground storage tank permit compliance fee shall be paid for each calendar year (January 1 though December 30) or part of a calendar year that an underground storage tank is in operation.

(3) The compliance fee shall be made payable to the Department of Environmental Quality.

(4) Any compliance fee invoiced after July 1, 1989 shall not exceed $20 per tank per year.

Underground Storage Tank Permit Application Required

340-150-035 (1) On or before May 1, 1988 the following persons shall apply for an underground storage tank permit from the department.

(a) An owner of an underground storage tank currently in operation;

(b) An owner of an underground storage tank taken out of operation between January 1, 1974, and May 1, 1988; and

(c) An owner of an underground storage tank that was taken out of operation before January 1, 1974, but that still contains a regulated substance.

(2) After May 1, 1988 the owner of an underground storage tank shall apply for an underground storage tank permit from the department prior to installation of the tank, placing the tank in operation, or decommissioning the tank.

Authorized Signatures, Permit Application

340-150-040 (1) The following persons must sign an application for a permit submitted to the department.

(a) The owner of an underground storage tank storing a regulated substance;

(b) The owner of the real property in which an underground storage tank is located; and

(c) The proposed permittee, if a person other than the owner of the underground storage tank or the owner of the real property.

Underground Storage Tank Permit Application

340-150-045 (1) Any person wishing to obtain a new, modified, or renewal permit from the department shall submit a written application on a form provided by the department. Applications must be submitted at least 60 days before a permit is needed. All application forms must be completed in full, and accompanied by the specified number of copies of all required exhibits. The name of the applicant must be the legal name of the owner of the facilities or his agent or the lessee responsible for the operation and maintenance.

(2) Applications which are obviously incomplete, unsigned, or which do not contain the required exhibits (clearly identified) will not be accepted by the department for filing and will be returned to the applicant for completion.

(3) Applications which appear complete will be accepted by the department for filing.

(4) Within 30 days after filing, the department will review the application to determine adequacy of the information submitted:

(a) If the department determines that additional information is needed it will promptly request the needed information from the applicant. The application will not be considered complete for processing until the requested information is received. The application will be considered to be withdrawn if the applicant fails to submit the requested information within 90 days of the request;

(b) If, in the opinion of the Director, additional measures are necessary to gather facts regarding the application, the Director will notify the applicant of his intent to institute said measures and the timetable and procedures to be followed. The application will not be considered complete for processing until the necessary additional fact-finding measures are completed. When the information in the application is deemed adequate, the applicant will be notified that this application is complete for processing. Processing will be completed within 90 days after such notification.

(5) In the event the department is unable to complete action on an application within 90 days after notification that the application is complete for processing, the applicant shall be deemed to have received a temporary or conditional permit, such permit to expire upon final action by the department to grant or deny the original application. Such temporary or conditional permit does not authorize any construction, activity, operation, or discharge which will violate any of the laws, rules, or regulations of the State of Oregon or the Department of Environmental Quality.

(6) If, upon review of an application, the department determines that a permit is not required, the department shall notify the applicant in writing of this determination. Such

notification shall constitute final action by the department on the application.

(7) Following determination that it is complete for processing, each application will be reviewed on its own merits. Recommendations will be developed in accordance with the provisions of applicable statutes, rules and regulations of the State of Oregon and the Department of Environmental Quality.

(8) If the applicant is dissatisified with the conditions or limitations of any permit issued by the department, he may request a hearing before the Commission or its authorized representative. Such a request for hearing shall be made in writing to the Director within 20 days of the date of mailing of the notification of issuance of the permit. Any hearing held shall be conducted pursuant to the regulations of the department.

Information Required on the Permit Application

340-150-050 (1) The underground storage tank permit application shall include:

(a) The name and mailing address of the owner of the underground storage tank.

(b) The name and mailing address of the owner of the real property in which the underground storage tank is located.

(c) The name and mailing address of the proposed permittee of the underground storage tank.

(d) The signatures of the owner of the underground storage tank, the owner of the real property and the proposed permittee.

(e) The facility name and location.

(f) The substance currently or last stored.

(g) The operating status of the tank.

(h) The estimated age of the tank.

(i) Description of the tank, including tank design and construction materials.

(j) Description of piping, including piping design and construction materials.

(k) History of tank system repairs.

(l) Type of leak detection and overfill protection.

(m) Any other information that may be necessary to protect public health, safety, or the environment.

Underground Storage Tank Permit Application Fee

340-150-055 (1) The permit application fee of $25 shall accompany each underground storage tank application. For applications received after February 1, 1989, the permit application fee will also be considered the first compliance fee required by OAR340-150-030.

Denial of Underground Storage Tank Permit

340-150-060 (1) An underground storage tank permit application may be denied if the underground storage tank installation or operation is not in conformance with these underground storage tank rules or Chapter 539, Oregon Law 1987.

(2) An underground storage tank permit may be denied if the underground storage tank permit application is not complete or is determined to be inaccurate.

Revocation of Underground Storage Tank Permit

340-150-065 An underground storage tank permit may be revoked if the underground storage tank installation or operation is not in conformance with the underground tank rules or Chapter 539, Oregon Law, 1987.

Permit Procedures for Renewal, Denial, Modification and Revocation.

340-150-070 The permit procedures for renewal, denial, modification and suspension or revocation (OAR 340-14-030, 340-14-035, 340-14-040, 340-14-045) shall apply to permit issued under this section.

Depositing Regulated Substances in Underground Storage Tanks

340-150-075 (1) After February 1, 1989 no person owning an underground storage tank shall deposit or cause to be deposited a regulated substance into that tank without first having applied for and received an operating permit issued by the department.

(2) After February 1, 1989 no person selling or distributing a regulated substance shall deposit that substance into an underground storage tank unless the tank is operating under a valid permit issued by the department.

Requirement to Notify the Underground Storage Tank Owner and Operator

340-150-080 (1) After February 1, 1989 any person who sells or distributes regulated substances or sells an underground storage tank shall notify the purchaser of these products in writing of the requirements for obtaining an underground storage tank permit.

Underground Storage Tank Interim Installation Standards

340-150-100 (1) Upon the effective date of these rules no person shall install an underground storage tank for the purpose of storing regulated substances unless such tank installation;

(a) will prevent releases due to corrosion or structural failure for the operational life of the tank;

(b) is cathodically protected against corrosion, constructed of noncorrosive material, steel clad with a noncorrosive material, or designed in a manner to prevent the release or threatened release of any stored substance; and

(c) the material used in the construction or lining of the tank is compatible with the substance to be stored.

(2) For the purpose of determining compliance with these Interim Installation Standards, the department will use the guidelines published by the United State Environmental Protection Agence entitled "Hazardous Waste; Interpretive Rule on the Interim Prohibition Against Installation of Unprotected Underground Storage Tanks", 40 CFR Part 280. (Copies are available from the EPA or the department)

Permanent Decommissioning of an Underground Storage Tank

340-150-150 (1) Any underground storage tank that is permanently decommissioned must comply with the requirements of this section.

(2) When an underground storage tank is taken out of service for longer that 24 months, it must be permanently decommissioned.

(3) Prior to permanent decommissioning the tank owner or permittee must notify the department in writing.

(4) If evidence of a release is discovered the tank owner or permittee must;

(a) Notify the department within 24 hours. (Phone: 1-800-452-0311 or 1-800-452-4011)

(b) Assess the source and the extent of the release.

(c) Meet with the department to set up a cleanup standard and a schedule for cleanup.

(d) Cleanup the release.

(5) All tanks that are permanently decommissioned must be emptied and either removed from the ground or be filled with an inert solid material.

(6) Dispose of all liquids, solids and sludge removed from the tank by recycling or dispose in a manner approved by the department.

(7) Dispose of a tank removed from the ground in a manner approved by the department.

(8) The permanent decommissioning procedures described in API 1604 "Recommended Practice for Abandonment or Removal of Used Underground Service Station Tanks" may be used as guidelines for compliance with these rules.

(9) All underground storage tank owners and permittees must maintain records which are capable of demonstrating compliance with the permanent decommissioning requirement under this section. These records must be maintained for at least three years after permanent decommissioning and made available, upon request, to the department during business hours.

Underground Storage Tank Schedule of Civil Penalties

340-12-067 In addition to any liability, duty, or other penalty provided by law, the Director may assess a civil penalty for any violition pertaining to underground storage tank systems and releases from underground tank systems by service of a written Notice of Assessment of Civil Penalty upon the respondent. The amount of such civil penalty shall be determined consistent with the following schedule:

(1) Not less than two thousand five hundred dollars ($2,500) nor more than ten thousand dollars ($10,000) for each day of the violation upon any person owning or having control over a regulated substance who fails to immediately cleanup releases as required by Chapter 539, Oregon Law 1987 and OAR 340 - Division 150.

(2) Not less than one thousand dollars ($1,000) nor more than ten thousand dollars ($10,000) for each day of the violation upon any person owning or having control over a regulated substance who fails to immediately report all releases of a regulated substance as required by Chapter 539, Oregon Law 1987 and OAR 340 - Division 150.

(3) Not less than one hundred dollars ($100) nor more than ten thousand dollars ($10,000) per day of the violation upon any person who:

(a) Violates an order of the Commission or the Department,

(b) Violates any underground storage tank rule or Chapter 539, Oregon Law 1987.

DIVISION 14

PROCEDURES FOR ISSUANCE, DENIAL, MODIFICATION, AND REVOCATION OF PERMITS

Purpose

340-14-005 The purpose of these regulations is to prescribe uniform procedures for obtaining permits from the Department of Environmental Quality as prescribed by Oregon Revised Statutes (ORS) 449.083; Chapter 406, Oregon Laws 1971; and Chapter 648, Oregon Laws 1971.

Stat. Auth.: ORS Ch.
Hist: DEQ 42, f. 4-5-72, ef. 4-15-72

Exception

340-14-007 The procedures prescribed in this Division do not apply to the issuance, denial, modification and revocation of National Pollutant Discharge Elimination System (NPDES) permits issued pursuant to the Federal Water Pollution Control Act Amendments of 1972 and acts amendatory thereof or supplemental thereto. The procedures for processing and issuance of NPDES permits are prescribed in OAR Chapter 340, rules 340-45-005 through 340-45-065.

Stat. Auth.: ORS Ch.
Hist: DEQ 53(Temp), f. & ef. 6-21-73; DEQ 58, f. 9-21-73, ef. 10-15-73

Definitions

340-14-010 As used in these regulations unless otherwise required by context:

(1) "Department" means Department of Environmental Quality. Department actions shall be taken by the Director as defined herein.

(2) "Commission" means Environmental Quality Commission.

(3) "Director" means Director of the Department of Environmental Quality or his authorized deputies or officers.

(4) "Permit" means a written permit issued by the Department, bearing the signature of the Director, which by its conditions may authorize the permittee to construct, install, modify or operate specified facilities, conduct specified activities or emit, discharge or dispose of wastes in accordance with specified limitations.

Stat. Auth.: ORS Ch.
Hist: DEQ 42, f. 4-5-72, ef. 4-15-72

Type, Duration, and Termination of Permits

340-14-015 (1) Permits issued by the Department will specify those activities, operations, emissions and discharges which are permitted as well as the requirements, limitations and conditions which must be met.

(2) The duration of permits will be variable, but shall not exceed ten (10) years. The expiration date will be recorded on each permit issued. A new application must be filed with the Department to obtain renewal or modification of a permit.

(3) Permits are issued to the official applicant of record for the activities, operations, emissions or discharges of record and shall be automatically terminated:

(a) Within 60 days after sale or exchange of the activity or facility which requires a permit;

(b) Upon change in the nature of activities, operations, emissions or discharges from those of record in the last application;

(c) Upon issuance of a new, renewal or modified permit for the same operation;

(d) Upon written request of the permittee.

Stat. Auth.: ORS Ch.
Hist: DEQ 42, f. 4-5-72, ef. 4-15-72; DEQ 125, f. & ef. 12-16-76

Application for a Permit

340-14-020 (1) Any person wishing to obtain a new, modified, or renewal permit from the Department shall submit a written application on a form provided by the Department. Applications must be submitted at least 60 days before a permit is needed. All application forms must be completed in full, signed by the applicant or his legally authorized representative, and accompanied by the specified number of copies of all required exhibits. The name of the applicant must be the legal name of the owner of the facilities or his agent or the lessee responsible for the operation and maintenance.

(2) Applications which are obviously incomplete, unsigned, or which do not contain the required exhibits (clearly identified) will not be accepted by the Department for filing and will be returned to the applicant for completion.

(3) Applications which appear complete will be accepted by the Department for filing.

(4) Within 15 days after filing, the Department will preliminarily review the application to determine the adequacy of the information submitted:

(a) If the Department determines that additional information is needed it will promptly request the needed information from the applicant. The application will not be considered complete for processing until the requested information is received. The application will be considered to be withdrawn if the applicant fails to submit the requested information within 90 days of the request;

(b) If, in the opinion of the Director, additional measures are necessary to gather facts regarding the application, the Director will notify the applicant of his intent to institute said measures and the timetable and procedures to be followed. The application will not be considered complete for processing until the necessary additional fact-finding measures are completed. When the information in the application is deemed adequate, the applicant will be notified that this application is complete for processing. Processing will be completed within 45 days after such notification.

(5) In the event the Department is unable to complete action on an application within 45 days after notification that the application is complete for processing, the applicant shall be deemed to have received a temporary or conditional permit, such permit to expire upon final action by the Department to grant or deny the original application. Such temporary or conditional permit does not authorize any construction, activity, operation or discharge which will violate any of the laws, rules, or regulations of the State of Oregon or the Department of Environmental Quality.

(6) If, upon review of an application, the Department determines that a permit is not required, the Department shall notify the applicant in writing of this determination. Such notification shall constitute final action by the Department on the application.

Stat. Auth.: ORS Ch.
Hist: DEQ 42, f. 4-5-72, ef. 4-15-72

Issuance of a Permit

340-14-025 (1) Following determination that it is complete for processing, each application will be reviewed on its own merits. Recommendations will be developed in accordance with the provisions of all applicable statutes, rules and regulations of the State of Oregon and the Department of Environmental Quality.

(2) If the Department proposes to issue a permit, proposed provisions prepared by the Department will be forwarded to the applicant and other interested persons at the discretion of the Department for comment. All comments must be submit-

ted in writing within 14 days after mailing of the proposed provisions if such comments are to receive consideration prior to final action on the application.

(3) After 14 days have elapsed since the date of mailing of the proposed provisions, the Department may take final action on the application for a permit. The Department may adopt or modify the proposed provisions or recommend denial of a permit. In taking such action, the Department shall consider the comments received regarding the proposed provisions and any other information obtained which may be pertinent to the application being considered.

(4) The Department shall promptly notify the applicant in writing of the final action taken on his application. If the Department recommends denial, notification shall be in accordance with the provisions of rule 340-14-035. If the conditions of the permit issued are different from the proposed provisions forwarded to the applicant for review, the notification shall include the reasons for the changes made. A copy of the permit issued shall be attached to the notification.

(5) If the applicant is dissatisfied with the conditions or limitations of any permit issued by the Department, he may request a hearing before the Commission or its authorized representative. Such a request for hearing shall be made in writing to the Director within 20 days of the date of mailing of the notification of issuance of the permit. Any hearing held shall be conducted pursuant to the regulations of the Department.

Stat. Auth.: ORS Ch.
Hist: DEQ 42, f. 4-5-72, ef. 4-15-72

Renewal of a Permit

340-14-030 The procedure for issuance of a permit shall apply to renewal of a permit. If a completed application for renewal of a permit is filed with the Department in a timely manner prior to the expiration date of the permit, the permit shall not be deemed to expire until final action has been taken on the renewal application to issue or deny a permit.

Stat. Auth.: ORS Ch.
Hist: DEQ 42, f. 4-5-72, ef. 4-15-72

Denial of a Permit

340-14-035 If the Department proposes to deny issuance of a permit, it shall notify the applicant by registered or certified mail of the intent to deny and the reasons for denial. The denial shall become effective 20 days from the date of mailing of such notice unless within that time the applicant requests a hearing before the Commission or its authorized representative. Such a request for hearing shall be made in writing to the Director and shall state the grounds for the request. Any hearing held shall be conducted pursuant to the regulations of the Department.

Stat. Auth.: ORS Ch.
Hist: DEQ 42, f. 4-5-72, ef. 4-15-72

Modification of a Permit

340-14-040 In the event that it becomes necessary for the Department to institute modification of a permit due to changing conditions or standards, receipt of additional information or any other reason pursuant to applicable statutes, the Department shall notify the permittee by registered or certified mail of its intent to modify the permit. Such notification shall include the proposed modification and the reasons for modification. The modification shall become effective 20 days from the date of mailing of such notice unless within that time the permittee requests a hearing before the Commission or its authorized representative. Such a request for hearing shall be made in writing to the Director and shall state the grounds for the request. Any hearing held shall be conducted pursuant to the regulations of the Department. A copy of the modified permit shall be forwarded to the permittee as soon as the modification becomes effective. The existing permit shall remain in effect until the modified permit is issued.

Stat. Auth.: ORS Ch.
Hist: DEQ 42, f. 4-5-72, ef. 4-15-72

Suspension or Revocation of a Permit

340-14-045 (1) In the event that it becomes necessary for the Department to suspend or revoke a permit due to noncompliance with the terms of the permit, unapproved changes in operation, false information submitted in the application or any other cause, the Department shall notify the permittee by registered mail of its intent to suspend or revoke the permit. Such notification shall include the reasons for the suspension or revocation. The suspension or revocation shall become effective 20 days from the date of mailing of such notice unless within that time the permittee requests a hearing before the Commission or its authorized representative. Such a request for hearing shall be made in writing to the Director and shall state the grounds for the request. Any hearing held shall be conducted pursuant to the regulations of the Department.

(2) If the Department finds that there is a serious danger to the public health or safety or that irreparable damage to a resource will occur, it may, pursuant to applicable statutes, suspend or revoke a permit effective immediately. Notice of such suspension or revocation must state the reasons for such action and advise the permittee that he may request a hearing before the Commission or its authorized representative. Such a request for hearing shall be made in writing to the Director within 90 days of the date of suspension and shall state the grounds for the request. Any hearing shall be conducted pursuant to the regulations of the Department.

Stat. Auth.: ORS Ch.

Hist: DEQ 42, f. 4-5-72, ef. 4-15-72

Special Permits

340-14-050 The Department may waive the procedures prescribed in rule 340-14-025 and issue special permits of duration not to exceed 60 days from the date of issuance for unexpected or emergency activities, operations, emission or discharges. Said permits shall be properly conditioned to insure adequate protection of property and preservation of public health, welfare and resources. Application for such permits shall be in writing and may be in the form of a letter which fully describes the emergency and the proposed activities, operations, emissions or discharges.

Stat. Auth.: ORS Ch.
Hist: DEQ 42, f. 4-5-72, ef. 4-15-72

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United States
Environmental Protection
Agency

Office of
Underground Storage Tanks
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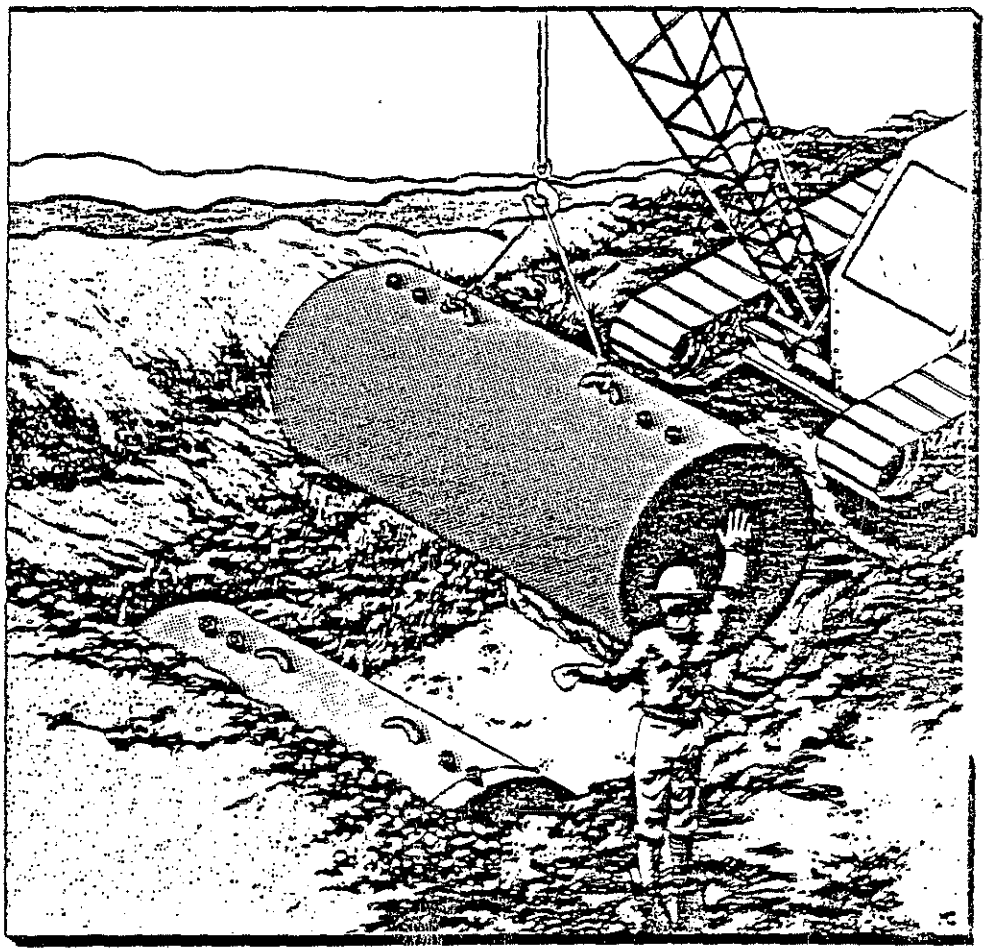
The Interim Prohibition: Guidance for Design and Installation of Underground Storage Tanks



DISCLAIMER

The mention of specific trade names is for informational purposes only and is not intended as an endorsement of a particular system.

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EXECUTIVE SUMMARY

The Hazardous and Solid Waste Amendments of 1984 (Public Law 98-616) were signed by the President on November 8, 1984. One part of this law requires EPA to establish a national regulatory program for the control of new and existing underground tanks and their associated piping that are used to store liquid petroleum products or other chemicals defined as "hazardous substances." Under the new law, an "Interim Prohibition" on the installation of underground tanks went into effect on May 7, 1985 that will continue until EPA promulgates permanent new tank performance standards. The Interim Prohibition is intended to prevent future leaks from newly installed underground tanks caused by three types of problems: corrosion, structural failure, and incompatibility of the contents with tank liner and construction materials.

Members of affected industries and other interested parties have posed many questions to EPA about how new underground tanks can meet the requirements of the Interim Prohibition. This guidance document was prepared to answer many of these questions and to aid owners and installers of new tanks in their efforts to comply with this Federal law. The document provides information on the types of technologies and practices that can be used to satisfy the requirements of the Interim Prohibition. Of course, owners and installers of new tanks must continue to comply with all State and local underground tank regulations. The introduction to this document contains a section on designs which EPA believes will comply with the Interim Prohibition.

The organization of this document parallels the requirements of the Interim Prohibition. Chapter 1 briefly describes specific features which comply with the Interim Prohibition. Chapter 2 addresses underground tank corrosion, including why metal tanks corrode and how to protect against corrosion. It includes discussions on cathodic protection, corrosion-resistant materials of construction and coatings, the exemption from the Interim Prohibition's corrosion protection requirement, and secondary containment systems. Chapter 3 discusses the causes of underground tank structural failure and the primary means of prevention, namely, proper tank installation practices. Chapter 4 provides guidance about the compatibility of tank liner and construction materials with the substances being stored.

This guidance also includes several appendices. Appendix A is the complete text of the federal law pertaining to the regulation of underground storage tanks. Appendix C provides the names and addresses of State personnel who can be contacted concerning the status of applicable State tank regulations. Appendix D contains a list of publications that cover in greater detail the topics introduced by this manual. Appendix E lists all regulated "hazardous substances," as defined by Section 101(14) of the Superfund act. These substances are included in the definition of "regulated substance" in Section 9001(2) of the statute, in establishing which tanks are subject to the requirements of the law.

This guidance document is the only technical information EPA intends to issue on corrosion, structural failure, and compatibility, as they relate to the Interim Prohibition. An "interpretive rule" on the Interim Prohibition, published in the *Federal Register* on June 4, 1986, should be used in conjunction with this manual. This Interpretive Rule is included as Appendix B in this manual.

INTRODUCTION

Background

The Hazardous and Solid Waste Amendments of 1984 (Public Law 98-616) were signed by the President on November 8, 1984. These amendments to the Resource Conservation and Recovery Act (RCRA) add a new Subtitle I entitled, "Regulation of Underground Storage Tanks.[1] Part of these

amendments require EPA to develop and establish a national regulatory program for the control of new and existing underground storage tanks containing "regulated substances" as defined by this Act. The scope of this new program is broad and applies to tanks and combinations of tanks with 10 percent or more of their volume underground, including the volume of underground piping, that are used to store petroleum products or other liquid materials defined as hazardous substances under Section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, commonly known as Superfund). The following tanks are excluded from the Interim Prohibition:

- Farm or residential tanks of 1,100 gallons or less capacity used for storing motor fuel for non-commercial purposes;
- Tanks used for storing heating oil for consumptive use on the premises where stored;
- Septic tanks;
- Flow-through process tanks; and
- Tanks above floor level but still underground.

Subtitle I does not regulate underground tanks containing hazardous waste. These tanks are regulated under Subtitle C of RCRA.

The U.S. Congress enacted Subtitle I out of concern for the risks that leaking underground tanks and piping pose to the nation's groundwater resources. Tank leaks can pose significant threats to public health and the environment.

Underground tank systems leak for several reasons. Corrosion, both external and internal, is one of the most common causes of leaks. Structural failure, primarily from improper installation, can also cause leaks. In addition, contents that are incompatible with a tank's liner and/or construction materials may induce leakage.

Subtitle I mandates a comprehensive program to address the tank leakage problem. Among the statute's provisions is the requirement that by May 8, 1986, underground tank owners notify designated State or local agencies of their tanks' existence. Under the law, EPA must also develop regulations for underground tanks addressing leak detection, corrective action, closure, recordkeeping and reporting, and new tank performance standards. Federal inspection and enforcement of tank regulations are also covered in Subtitle I.

In addition to these general mandates, the statute specifically establishes that an underground tank cannot be installed, or removed and reinstalled at the same or a different location, unless certain minimum requirements are met. These minimum requirements, known as the Interim Prohibition (Section 9003(g)), went into effect on May 7, 1985. They apply to all new tanks containing regulated substances until EPA establishes permanent new tank performance standards through regulation.

In summary, the Interim Prohibition requires that no underground storage tank may be installed after May 7, 1985 unless it:

[1]The full text of Subtitle I can be found in Appendix A of this document.

(1) Will prevent releases from corrosion for the operational life of the tank;

(2) Will prevent releases from structural failure for the operational life of the tank; and

(3) Is compatible with the product to be stored.

In its interpretive rule, EPA has interpreted the term "operational life" of a tank to be "the time during which the tank stores regulated substances." Also, "tank" is defined to include the attached piping and fittings.

The Interim Prohibition also has a limited exemption stating that a new tank does not have to be protected from corrosion if it is installed in a certain soil environment (as determined by a test specified in the statute or a more stringent standard promulgated by the EPA Administrator by rule). The statute provides for a maximum penalty of $10,000 per tank for each day the Interim Prohibition is violated.

Purpose of this Document

Since the 1984 RCRA Amendments became effective, people in the regulated community and other interested members of the public have posed numerous questions to EPA about how new tanks can meet the requirements of the Interim Prohibition. The Agency has prepared this guidance document to provide needed information concerning the types of technologies and practices that are currently available and are used to prevent releases due to corrosion, structural failure, or incompatibility. Although this document does not provide a detailed description of every technical option available for preventing releases from underground tanks, it is intended to give tank purchasers and installers enough information to foster sound technical decisions and compliance with the Interim Prohibition. Failure to discuss a particular technology or method in this guidance document should not be considered a judgement by EPA that such technology or method is not acceptable under the Interim Prohibition.

This guidance document also provides important background information about several problem areas associated with improper tank design and installation practices that the Interim Prohibition seeks to control. It discusses the major causes of tank leakage and some of the factors that must be properly managed to assure its prevention in new tank systems.

Organization of this Document

Each of the chapters of this guidance document focuses on one of the three major requirements of the Interim Prohibition. Accordingly, these chapters discuss the following topics:

- Chapter 1 briefly describes specific design features which can be used to comply with the Interim Prohibition.

- Chapter 2 addresses the corrosion of underground tanks. It provides background information on how and why tank systems corrode. The various technologies that can be used to prevent corrosion are presented, including descriptions of how they work and their limitations. The limited exemption from the statute's corrosion requirement for high soil resistivity is discussed. Secondary containment is briefly described as another means, besides corrosion protection, for preventing leaks into the environment.

- Chapter 3 considers structural failure, from causes other than corrosion. It provides background information on the causes of structural failure. Prevention of structural failure, primarily through proper installation of a tank system, is described.

- Chapter 4 examines the compatibility of the product being stored in a tank with tank liner and/or construction material. It provides background information on the problems associated with compatibility and discusses the consequences of storing a substance in an incompatible tank, methods for ensuring compatibility, examples of incompatible combinations, and the limitations of existing information and test procedures used to establish compatibility.

Several appendices are included in this guidance document to provide additional information that may be useful to someone considering installing an underground storage tank system:

- *Appendix A* provides a copy of the full text of Subtitle I of the Resource Conservation and Recovery Act. Subtitle I includes all the new law's requirements concerning the regulation of underground storage tanks.

- *Appendix B* contains EPA's Interpretive Rule.

- *Appendix C* lists State contact personnel who can provide information on State underground storage tank regulations.

- *Appendix D* provides a list of recommended publications that can be used to obtain more detailed guidance on subjects addressed by the Interim Prohibition.

- *Appendix E* provides a list of all the chemicals considered "hazardous substances" under Superfund section 101(14).

- *Appendix F* provides a description of the Wenner method of soil resistivity measurement, the test that will determine whether the exemption from corrosion protection that is allowed by the statute is applicable.

Use of this Document

We recommend that the user of this guidance document consider the material in all of the chapters because each of the requirements of the Interim Prohibition must be met to prevent leaks in newly installed tanks. If it is still unclear after reading this manual whether a particular approach is adequate to prevent leakage, EPA suggests that readers use the technical information reference list in Appendix C or call EPA. For additional technical information or clarification concerning the Interim Prohibition, the reader may call the EPA hotline at (800) 424-9346.

Compliance with State and Local Law

The user of this manual is cautioned to consider carefully requirements concerning the design and installation of new tanks that may apply under State and/or local law. Such requirements must be met if they are consistent with or are more stringent than the Interim Prohibition. In other words, compliance with the Interim Prohibition may not, in some instances, be adequate compliance for purposes of State or local law.

The Interim Prohibition

For the reader's reference and understanding, the text of the Federal Interim Prohibition governing the design and installation of new tanks (Section 9003(g) of RCRA, as amended) follows:

Section 9003(g) of RCRA, as amended

"INTERIM PROHIBITION—(1) Until the effective date of the standards promulgated by the Administrator under subsection (e) and after one hundred and eighty days after the date of enactment of the Hazardous and Solid Waste Amendments of 1984, no person may install an underground storage tank for the purpose of storing regulated substances unless such tank (whether of single or double wall construction)—

(A) Will prevent releases due to corrosion or structural failure for the operational life of the tank;

(B) Is cathodically protected against corrosion, constructed of noncorrosive material, steel clad with a noncorrosive material, or designed in a manner to prevent the release or threatened release of any stored substance; and

(C) The material used in the construction or lining of the tank is compatible with the substance to be stored.

(2) Notwithstanding paragraph (1), if soil tests conducted in accordance with ASTM Standard G57-78, or another standard approved by the Administrator, show that soil resistivity in an installation location is 12,000 ohm/cm or more (unless a more stringent standard is prescribed by the Administrator by rule), a storage tank without corrosion protection may be installed in that location during the period referred to in paragraph (1)."

1. DESIGNS FOR COMPLIANCE WITH THE INTERIM PROHIBITION

This document describes a variety of approaches to designing and installing underground storage tanks under the Interim Prohibition. The purpose of this section is to identify some specific designs or features which EPA believes will comply with the provisions of the Interim Prohibition.

1.1 Corrosion Protection

The Interim Prohibition provides the following three specific alternatives for preventing corrosion:

(1) Cathodic protection;

(2) Noncorrosive materials of construction; and

(3) Noncorrosive cladding of steel (coating).

A more complete description of these can be found in the text of this document.

Note that corrosion protection must be provided for the piping as well as for the tank. As stated in the Interpretive Rule, the provisions of the Interim Prohibition apply to the tank and its attached piping.

1.1.1 Cathodic Protection

Cathodic protection is a process by which corrosion of a metal surface is prevented by making that surface the cathode of an electrochemical cell. The metal surface referred to is any surface of the underground storage system, including the tank, piping, valves, pumps, and other appurtenances.

Note that merely installing a cathodic protection system does not ensure compliance with the law. The cathodic protection system must provide sufficient electrical current to protect the underground tanks and piping for their operational lives. This can be confirmed by measuring the structure-to-soil potential as described in NACE RP-02-85, Control of *External Corrosion on Metallic Buried, Partially Buried, or Submerged Liquid Storage Systems*, (National Association of Corrosion Engineers, 1985). Galvanized pipe, alone, does not satisfy this requirement for two reasons. First, there is not enough zinc coating on the pipe to provide sufficient protection under corrosive soil conditions. Second, it is extremely difficult to assess the level of protection provided by the zinc after the pipe has been buried. The bonding of the zinc to the pipe makes structure-to-soil potential measurement very difficult. Therefore, galvanized pipe must be supplemented with additional protection, such as coatings and/or cathodic protection.

1.1.2 Noncorrosive Materials of Construction

Fiberglass-reinforced plastic (FRP) is the most predominant noncorrosive material used to manufacture USTs and piping. Tank systems constructed from this material can satisfy the corrosion protection requirements of the Interim Prohibition. EPA is unaware of other materials which would satisfy this requirement. In general, using metals other than mild steel does not satisfy the corrosion protection requirement. All metals are subject to corrosion if buried, although the rate and mechanism of corrosion may vary with different metals. Only FRP possesses sufficient corrosion-resistance to satisfy the corrosion prevention provisions of the Interim Prohibition without coatings or cathodic protection.

1.1.3 Noncorrosive Cladding

Another type of system which can comply with the Interim Prohibition is the steel tank coated with FRP. There is currently some debate among corrosion control experts regarding the advisability of using any coating without cathodic protection. The reasons for this concern are described in Section 1 of this document. However, the Interim Prohibition allows the use of "steel clad with a noncorrosive material" which includes FRP-coated steel. The key factors in the success of this coating include its thickness, dielectric strength, durability, and good bonding to the steel. No national standards currently exist for this design. Manufacturers' standards, however, include the following:

(1) Minimum thickness of completed coating = .10 inch;

(2) Electric testing at a minimum of 10,000 volts to ensure complete coating of the tank.

These should be considered minimum standards for acceptability of FRP coatings. As consensus codes or national standards become available, they may supplement or replace these minimum standards.

1.2 Structural Integrity

The Interim Prohibition also requires that tanks be installed to prevent releases due to structural failure for their operational lives. Proper installation of underground storage systems is essential to preventing structural failure. Therefore all USTs, regardless of their design, must be properly installed to comply with the Interim Prohibition. Installation instructions provided by the tank manufacturer should

be followed. In addition, a document published by the Petroleum Equipment Institute provides a great deal of information on the proper installation of underground storage tanks. This document, entitled Recommended Practices for Installation of Underground Liquid Storage Systems (PEI/RP100-86), describes proper procedures for installing all the components of an underground storage system, including the tanks, pipes, fittings, and corrosion protection.

One of the keys to preventing structural failure, particularly for FRP tanks, is the proper selection and installation of the backfill material used to support the tank. As described more fully in Section 2 of the document and in PEI/RP100-86, the tank relies on the backfill for some of its support. For FRP tanks, the backfill provides as much as 90 percent of the tank's support. Therefore, failure to properly backfill the tank can cause releases due to structural failure and would be a violation of the Interim Prohibition. Tanks installed in accordance with the manufacturer's instructions and/or PEI/RP100-86 are likely to comply the Interim Prohibition.

1.3 Installation of "Used" Tanks

It is important to emphasize that anyone who installs a "used" tank is also subject to the Interim Prohibition. A used tank is one that was removed from the ground and is to be installed in the same or at another site. These tanks must meet all of the requirements of the Interim Prohibition.

1.4 Secondary Containment

Secondary containment does not eliminate the need for corrosion protection. Double-walled steel tanks must be coated with a noncorrosive material (FRP) or provided with cathodic protection to comply with the Interim Prohibition (unless installed under the 12,000 ohm-cm exclusion). Single-walled tanks installed within membrane liners must also be similarly protected from corrosion.

2. THE PROTECTION OF UNDERGROUND TANKS FROM CORROSION

Corrosion is one of the major causes of failure for underground storage tanks. Under the Interim Prohibition, no underground tank can be installed unless it will prevent releases from corrosion for the operational life of the tank. To ensure that such releases are prevented, the law requires that each new tank and its piping must either:

- Be cathodically protected;
- Be constructed of noncorrosive material;
- Be steel clad with noncorrosive material; or
- Be designed in a manner to prevent the release or threatened release of any stored substances.

This chapter contains a description of how and why an underground tank system corrodes and examines how to protect a tank system from corrosion. Different types of corrosion protection devices are identified and described, including how the devices work and their limitations. The concept of soil resistivity and its role in the corrosion of underground tanks is also explained. Finally, secondary containment practices are described briefly, as a possible means of satisfying the option provided by the Interim Prohibition permitting tanks to be designed in a manner that prevents the release or threatened release of stored substances.

2.1 Causes of Underground Tank Corrosion

A metal underground tank is susceptible to corrosion when it contacts oxygen and moisture. Over a period of time, the oxygen and moisture contribute to the breakdown of metal into its original state—an ore. The visible results of corrosion of a steel or iron tank are often rusted areas that become increasingly deep. This corrosion process can continue until it bores through a tank's metal thickness, creating a hole. Even underground tanks that show only minor traces of scaling or rust on their outer surfaces can have small holes that leak.

One of the most misunderstood aspects of the corrosion of underground tanks is that the forces of corrosion can be accelerated underground. In general, the speed and severity of corrosion underground depend on a number of factors, including soil conditions and tank characteristics. Corrosion may occur over an entire surface of exposed metal or may be localized at a few spots. When localized, the metal may corrode very quickly.

Localized corrosion is a result of uneven breakdown in the metal structure of an underground tank. The corrosion is focused in small areas and can cause severe damage in these areas, while leaving adjacent areas of a tank relatively untouched. This process can quickly create large holes in an otherwise sound and undamaged underground tank.

Corrosion can occur from inside or outside a tank. External corrosion can be caused by galvanic action or by stray currents. Internal corrosion is generally caused by galvanic action or is chemically induced. These processes are described in the subsections below.

2.1.1 Galvanic Corrosion

Galvanic corrosion occurs where an electric current flows from the surface of a metallic structure, such as a storage tank, into the surrounding environment, such as the soil. For this current to flow, there must be a complete circuit, consisting of an anode and a cathode that are electrically connected and placed in an electrolyte. This circuit, also called a corrosion cell, is demonstrated in Figure 2-1. In the circuit, the anode is the metal, or location, at which current leaves the structure (tank). Corrosion occurs at this spot. The cathode is where the current re-enters the structure to complete the circuit. Corrosion does not normally occur at the cathode. The electrolyte carries the current between the anode and cathode. For buried structures, soil is the electrolyte.

The final requirement for current to flow in the circuit is that differences must exist between the electrically-connected anode and cathode. Some examples of these differences are dissimilar metals (e.g., brass valve and steel pipe), scratched and clean surfaces, and varying soil composition along the surface of the tank or pipe. Figures 2-2, 2-3, and 2-4 illustrate some of these situations. There are other conditions under which these differences may occur, however, a complete catalog of these conditions is beyond the scope of this document. What is important for a user of this manual to understand is that the conditions necessary to allow the corrosion process to proceed can be brought about in many ways, and these conditions are almost always present. It is, therefore, best to assume that when a metal structure (tank or pipe) is buried, it will corrode. Measures to prevent this corrosion should then be taken. These measures are described in Section 2.2.

The galvanic corrosion process, shown in more detail in Figure 2-5, continues to widen a hole until the corroded tank or piping is repaired or replaced. In addition, other holes may also form simultaneously in the same general area. Corrosion points are usually highly localized in the corrosion process. It is important to note that even very slight differences within the metal on the surface of a tank or between different metals that are electrically connected in a tank system will cause galvanic corrosion.

FIGURES ARE FOR ILLUSTRATIVE PURPOSES ONLY. THEY ARE NOT INTENDED FOR USE AS CONSTRUCTION DRAWINGS.

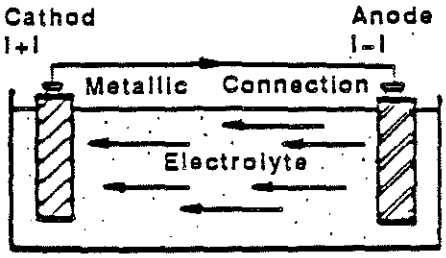

FIGURE 2-1 GALVANIC CELL

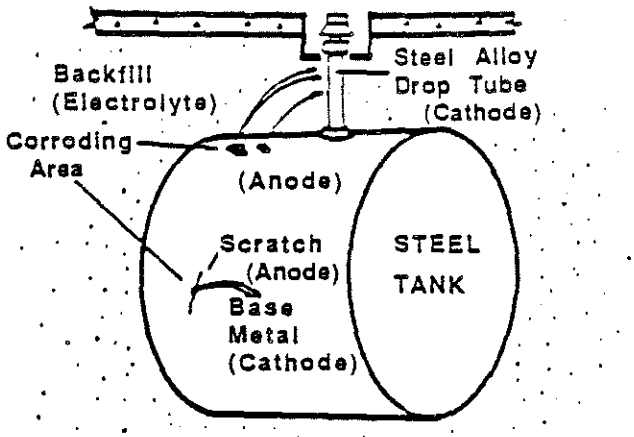

FIGURE 2-2 GALVANIC CORROSION ON AN UNDERGROUD TANK SYSTEM

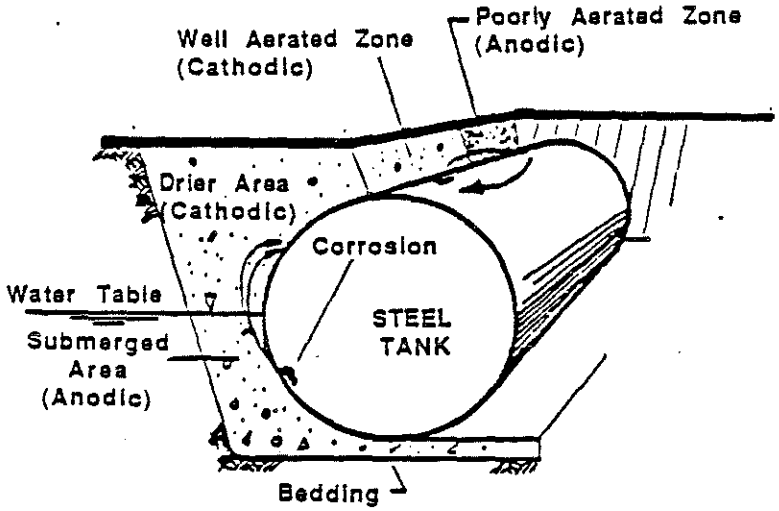

FIGURE 2-3 GALVANIC CORROSION CAUSED BY DIFFERENCES IN SOIL AERATION & MOISTURE

FIGURES ARE FOR ILLUSTRATIVE PURPOSES ONLY. THEY ARE NOT INTENDED FOR USE AS CONSTRUCTION DRAWINGS.

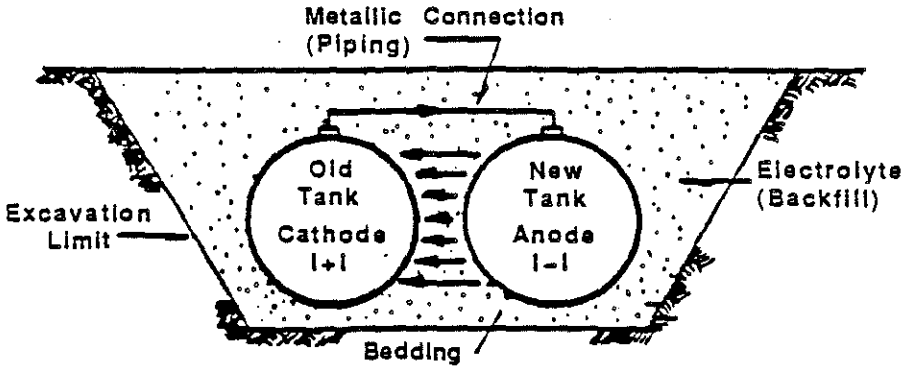

FIGURE 2-4 GALVANIC CORROSION BETWEEN A NEW TANK AND AN OLD TANK

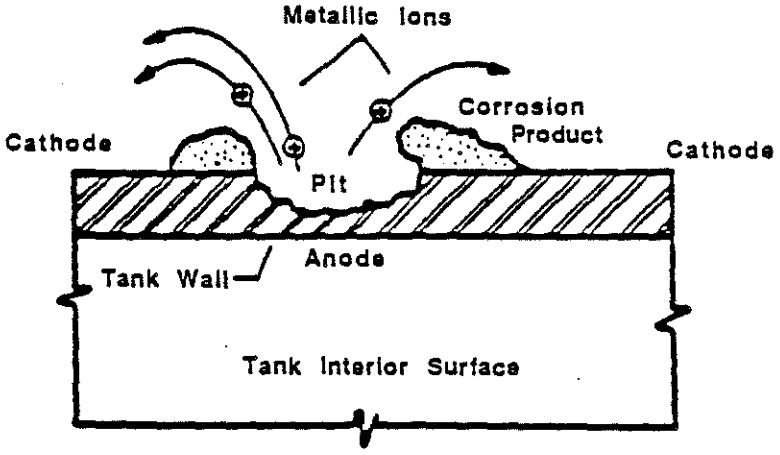

FIGURE 2-5 CORROSION PITTING ACTION

2.1.2 Stray Current Corrosion

If a subway system, gas distribution, power distribution, or some similar type of direct current power system is in the vicinity of an underground storage tank system, parts of the tank system may be subject to corrosion caused by stray currents. This type of corrosion results from direct currents flowing from an external power source, through an underground path of least resistance, and back to the source. If any portion of the metallic underground tank storage system is installed in the path of stray currents, the current can flow through the tank system. This type of corrosion occurs at the point where the current leaves the tank or piping (see Figure 2-6).

The rate at which this localized corrosion occurs is directly related to the intensity of the stray currents. The larger the currents are, the faster the corrosion rate of a tank. Stray currents are often many times stronger than the currents in galvanic corrosion. Therefore, stray currents can cause more severe damage to underground tanks in shorter periods of time than galvanic corrosion. Stray current corrosion may occur over a wide surface area of a tank and at some distance from a power source.

2.1.3 Internal Corrosion

Localized corrosion can occur inside underground tanks. This type of corrosion occurs in crevices, seams, corners, shielded areas in tank interiors, and directly under the fill pipe. Such corrosion is generally associated with small volumes of stagnant fluid (usually water) trapped by holes, gasket surfaces, pipe joints, and surface deposits. Over time, the chemical characteristics of the trapped fluid may change, leading to chemical corrosion and acceleration of galvanic corrosion at these locations. Impacts from tank dipstick operations and other internal stresses can form anodic areas, leading eventually to internal galvanic corrosion.

2.2 Types of Corrosion Protection

The Interim Prohibition identifies three specific methods intended to protect an underground tank storage system from corrosion: cathodic protection, corrosion-resistant materials, and corrosion-resistant coatings. According to the Interim Prohibition, such corrosion protection measures must be capable of preventing releases due to corrosion for the operational lives of tanks. Subsections 1.2.1 through 1.2.3 describe these alternatives.

Section 2.2.4 describes the role of soil resistivity in preventing corrosion. Finally, Section 2.2.5 examines an alternative tank system design that EPA believes will satisfy the requirement for a tank system "designed in a manner to prevent releases . . ." This alternative tank system design is secondary containment around a tank and its piping.

2.2.1 Cathodic Protection

As described earlier, underground tank corrosion is caused by an electrical current leaving a metal and flowing to another portion of the metal or the soil. If the flow of current is reversed, corrosion of the tank can be slowed or even stopped. Cathodic protection systems reverse current in one of two ways: through sacrificial anodes or impressed current.

A. *Sacrificial Anode Systems*. Sacrificial anode corrosion protection functions on the principle of galvanic corrosion: when two dissimilar metals in soil are connected to each other, a small current will flow from the more electrically active to the less active metal, causing the more active metal to corrode. Table 2-1 shows the Galvanic Series, which lists metals from top to bottom according to their

Table 2-1 Galvanic or Electromotive Force Series

Metal	Activity
Commercially Pure Magnesium	High (tends to corrode)
Magnesium Alloy	
Zinc	
Aluminum Alloy	
Commercially Pure Aluminum	
Mild Steel (clean)	
Mild Steel (rusted)	
Cast Iron	
Lead	
Copper, Brass, Bronze	
Carbon, Graphite, Coke	Low (tends not to corrode)

Source: American Petroleum Institute Publication 1632.

FIGURES ARE FOR ILLUSTRATIVE PURPOSES ONLY. THEY ARE NOT INTENDED FOR USE AS CONSTRUCTION DRAWINGS.

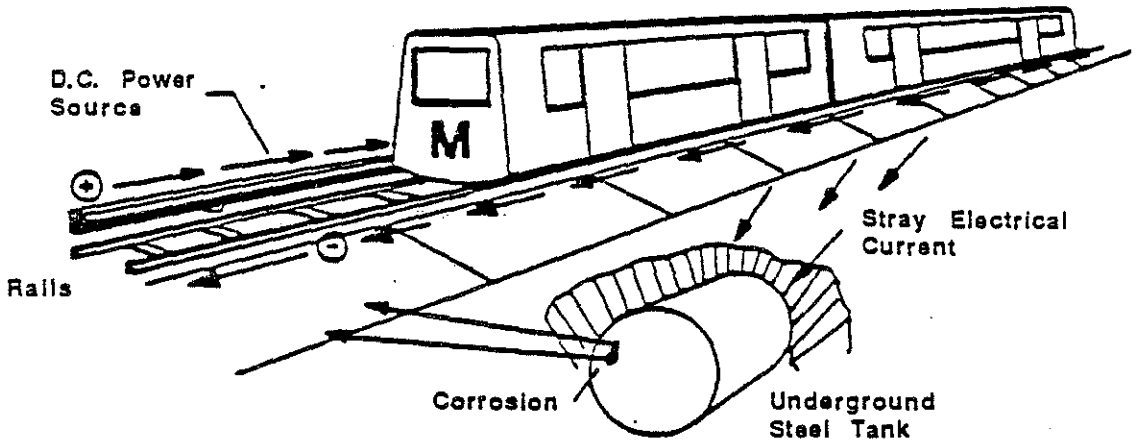

FIGURE 2-6 STRAY CURRENT CORROSION

tendency to corrode. When a metal near the top of the list is connected to a metal lower on the list, the metal which is higher on the list will corrode, sacrificing itself to protect the other metal.

Most sacrificial anode systems consist of a magnesium or zinc rod attached to an underground storage tank. Because magnesium and zinc are more active than steel, for example, they will corrode, rather than the tanks. By "sacrificing" themselves, the rods reverse the flow of current from the tank, thus protecting the tank from corrosion (see Figure 2-7).

Sacrificial anode systems are most useful when the current required to protect a tank from corrosion is low. The number, type, size, and location of anodes can be estimated based on the surrounding soil's resistivity (see Section 2.2.4), the amount of metal surface area to be protected, and the quality of a tank's coating.

Sacrificial anodes must be connected to a tank using a low resistance electrical connection. Welded or brazed connections to a tank wall provide the surest electrical bond. Safety considerations may, however, require the use of mechanical connections if flammable vapors are present that prevent welding. Care must be taken to ensure that a good electrical connection is achieved with mechanical connections. Connections must be protected from corrosion to prevent interruption of the cathodic protection system in the future.

A piping system may require its own cathodic protection system. Though galvanized piping has a limited amount of corrosion protection provided by its coating of zinc, this coating is often insufficient protection for the piping's operating lifetime. In addition, pipe threads that are not coated can provide potential areas of galvanic corrosion (see Figure 2-8).

If a sacrificial anode system is used, it is often best to isolate a tank from its piping and protect each separately. Figure 2-9 shows a tank system where separate sacrificial anodes cathodically protect the tank and the piping. It is also a good practice to isolate the electrical system that powers a tank pump. Because the current output from a sacrificial anode system is limited, the amount of metal on an underground tank to be protected should also be limited. To minimize the amount of protected metal, one may install insulating bushings in pipe connections. Without these bushings, a cathodic protection system would protect the piping as well as the tank. If the piping is connected to other structures, the burden on a protection system may be increased still more. As a result, there may be insufficient cathodic protection or a weak electrical circuit may be created that will cause corrosion on another attached metal structure.

The system pictured in Figure 2-10 is "pre-engineered," i.e., a tank comes from the manufacturer with the anodes attached. Pre-engineered underground tank cathodic protection systems are generally provided in a package consisting of anodes, insulating bushings, and a high-quality, corrosion-resistant coating. These systems were developed to satisfy a range of soil conditions. There may, however, be some sites that require systems designed specifically for the conditions at the sites. This may be particularly true for sites tested to have either very low or high soil resistivity or where stray currents are present. As with any system, pre-engineered systems should be handled and installed carefully to avoid damage to any of the systems' components.

B. Impressed Current Protection Systems. Impressed current systems use alternating current (AC) supplied from the electrical system at a site. The AC is converted to direct current (DC) by a rectifier, and then the current flows to an anode, commonly made of carbon-containing rods. The electric current supplied to this anode flows from the anode, through the soil, to the tank system. Corrosion of a tank is prevented because the current flowing to the tank is greater than that flowing away from the tank. Figure 2-11 illustrates an impressed current system.

FIGURES ARE FOR ILLUSTRATIVE PURPOSES ONLY. THEY ARE NOT INTENDED FOR USE AS CONSTRUCTION DRAWINGS.

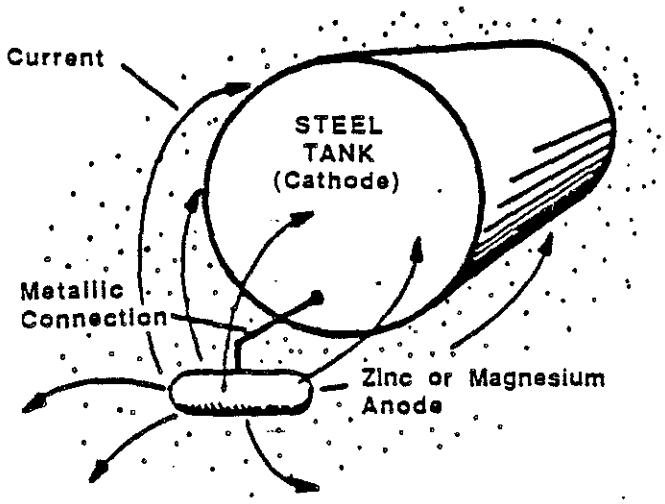

FIGURE 2-7 CATHODIC PROTECTION BY THE SACRIFICIAL ANODE METHOD

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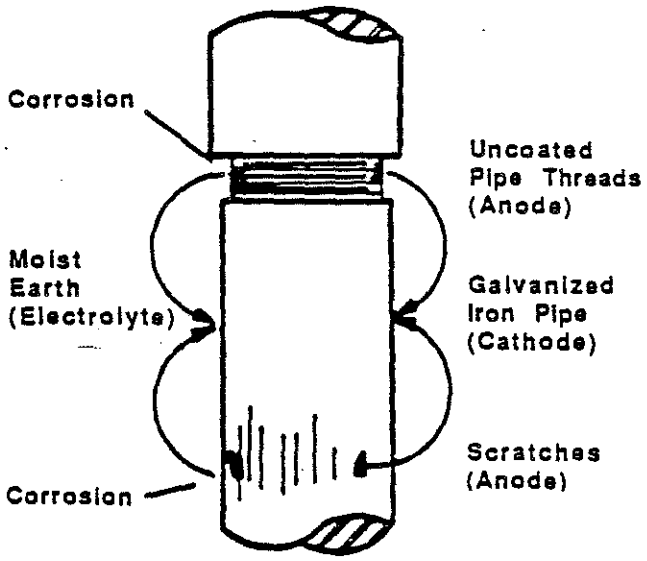

FIGURE 2-8 PIPE CORROSION

FIGURES ARE FOR ILLUSTRATIVE PURPOSES ONLY. THEY ARE NOT INTENDED FOR USE AS CONSTRUCTION DRAWINGS.

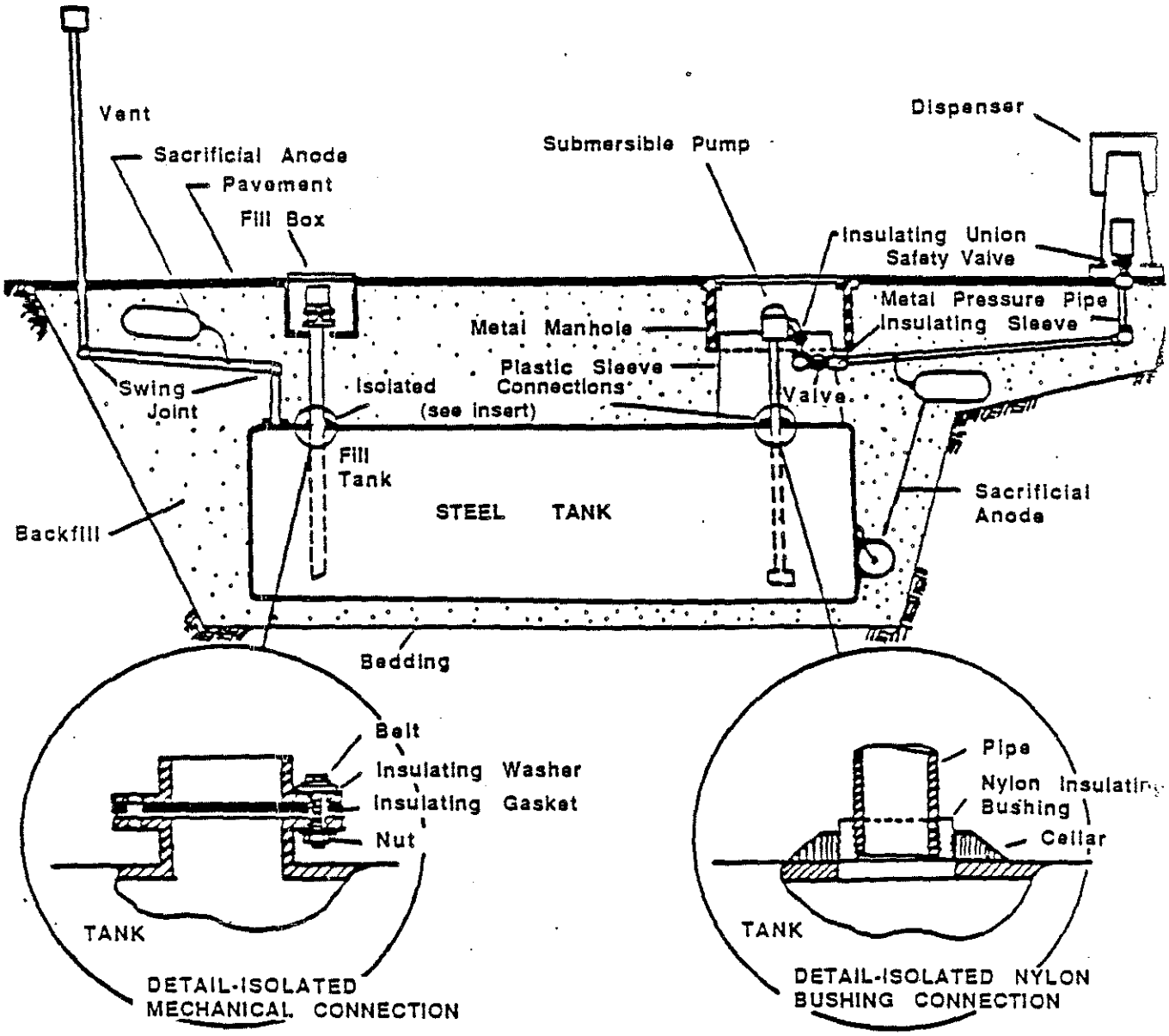

FIGURE 2-9 UNDERGROUND TANK AND PIPING SYSTEM

FIGURES ARE FOR ILLUSTRATIVE PURPOSES ONLY. THEY ARE NOT INTENDED FOR USE AS CONSTRUCTION DRAWINGS.

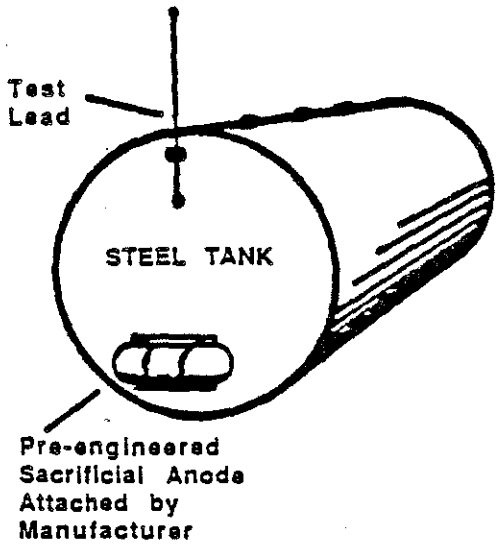

FIGURE 2-10 PRE-ENGINEERED SACRIFICIAL ANODE SYSTEM

FIGURES ARE FOR ILLUSTRATIVE PURPOSES ONLY. THEY ARE NOT INTENDED FOR USE AS CONSTRUCTION DRAWINGS.

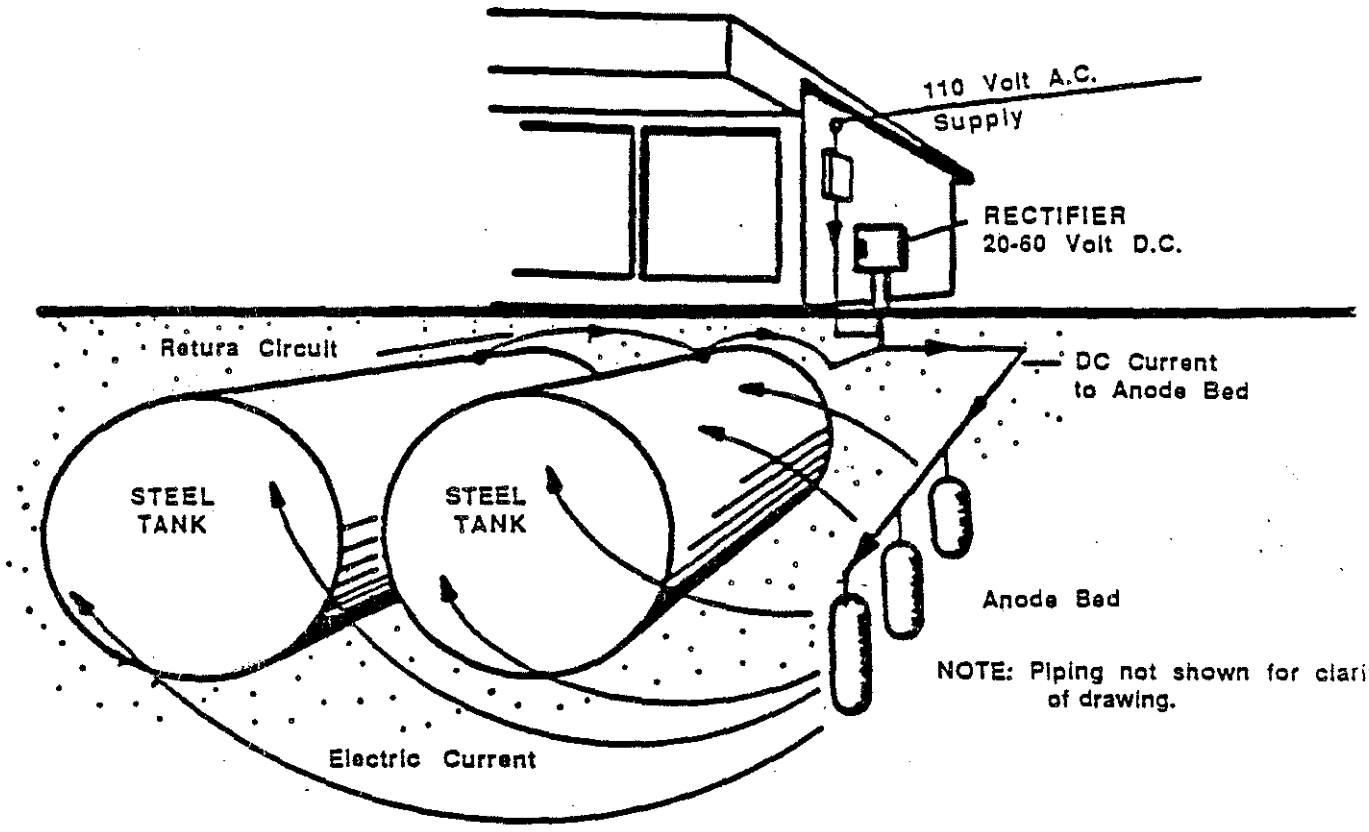

FIGURE 2-11 IMPRESSED CURRENT CATHODIC PROTECTION SYSTEM

The amount of electric current that must be supplied by a rectifier depends upon the current required to protect a tank and the voltage needed to cause current to flow from the anodes, through the soil, to the tank system. With an impressed current system, the current can be adjusted to meet the requirements imposed by varying conditions. Current requirements can change as soil conditions change, as a tank system is expanded, and as a tank's coating deteriorates. Impressed current may also be changed with fluctuations in stray currents from nearby sources. All metal structures within the electrical field created by an impressed current system must be properly connected to a tank system's circuit. Otherwise, stray currents created by the system will cause accelerated corrosion of the unconnected structures.

Users of impressed current systems are cautioned that limits should be placed on the output capacity of a rectifier to prevent overloading the rectifier, as well as to protect the coating on a tank. If more current is provided than is needed for corrosion protection, the excess current may cause coatings to separate from structures.

Impressed current systems are more flexible than sacrificial anode systems and are capable of providing more protection. Impressed current systems are, however, more expensive to install and operate. As long as a tank is adequately coated and is isolated from piping, sacrificial anodes are usually sufficient. If a tank is not coated or isolated, the coating is too thin, has holes in it, or deteriorates with time, impressed current systems may be required. Impressed current systems are often recommended to retrofit cathodic protection on older tanks, provided the tanks do not already leak.

C. Monitoring System Performance. Regardless of which cathodic protection system is selected, some means should be provided to monitor performance periodically. A cathodic protection system should be monitored because soil and tank conditions may change over the operational life of a tank, altering cathodic protection needs. In addition, problems with a cathodic protection system should be detected promptly.

Monitoring cathodic protection system performance is done by periodically measuring the structure-to-soil potential (the voltage between a tank and its surrounding soil). If the voltage is higher in the soil than in a tank, then current is flowing from the soil to the tank, thereby blocking corrosion. A generally accepted standard for providing adequate tank protection is that the structure-to-soil difference in voltage should be at least 850 millivolts negative, as measured by a copper-copper sulfate electrode. This device is commonly used by corrosion control engineers. Other types of devices are also available.

Figure 2-12 shows the use of an electrode to measure structure-to-soil potential. A lead from a tank is connected to a voltmeter, which is connected to an electrode. The electrode is then placed on the soil, as close to the tank as possible (but not over any sacrificial anodes). Although the measurement procedure itself is quite simple, it is best done by an experienced operator who understands the proper placement of the reference electrode. A common measurement error is placing the electrode on the concrete pad over the tank. This leads to erroneous readings. To avoid errors created by improper placement, a permanent electrode can be installed in the ground. This should be done by someone experienced in corrosion control. It must be noted that "permanent" electrodes have a limited service life and must be replaced as necessary.

In addition to proper placement of a reference electrode for measuring system performance, a good electrical connection to a tank is necessary to complete the electrical circuit. This can be done by attaching the measuring wire to a tank with a welding process. If the tank is coated (as it should be), the tank manufacturer should provide a connection point before applying the coating. When this is not done, it may be possible to connect the test lead to a lifting lug. Before doing this, however, the tank manufacturer should be consulted. Tampering with a tank in this way without the

FIGURES ARE FOR ILLUSTRATIVE PURPOSES ONLY. THEY ARE NOT INTENDED FOR USE AS CONSTRUCTION DRAWINGS.

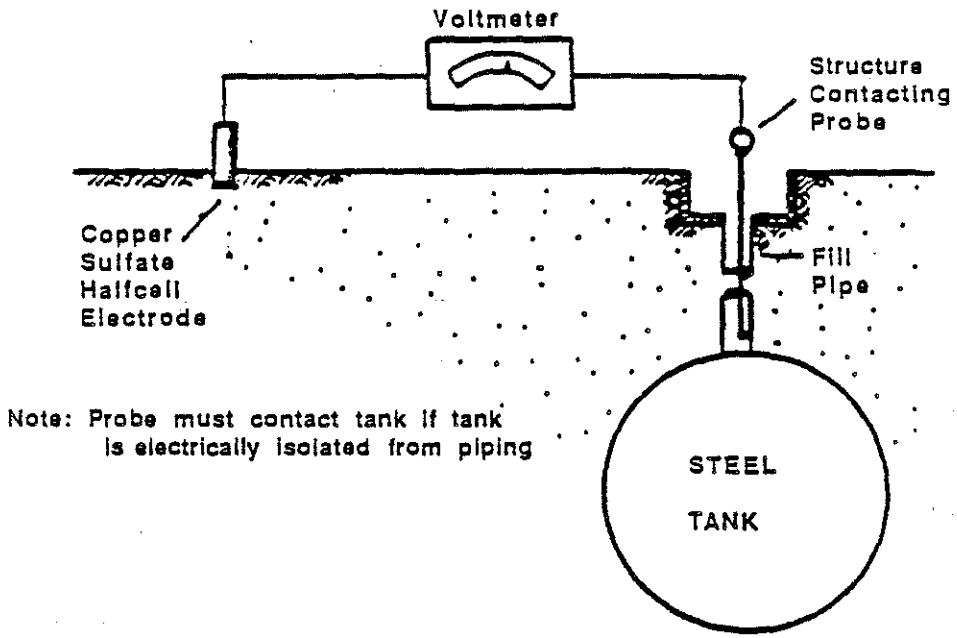

FIGURE 2-12 STRUCTURE TO SOIL MEASUREMENT SYSTEM

manufacturer's approval may void a tank's warranty. It is also a good idea to install permanent manholes to provide access to the soil near a tank when there are no permanent reference electrodes.

Additional information on structure-to-soil potential measurement and standards for determining adequate protection can be found in API Publication 1632, *Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems* (1983) and the National Association of Corrosion Engineers (NACE) Standard RP-02-85, *Recommended Practice for Control of External Corrosion on Metallic Buried, Partially Buried or Submerged Liquid Storage Systems* (1985).

2.2.2 Noncorrosive Materials of Construction

As an alternative to installing cathodically protected steel tanks, the Interim Prohibition allows tanks and piping to be constructed of noncorrosive materials. The most commonly used nonmetallic corrosion-resistant material is fiberglass-reinforced plastic (FRP). Although FRP tanks are generally referred to in a way that denotes a single type of storage tank they can, in fact, actually be fabricated from a wide variety of plastic resins. The selection of plastic resin depends upon the material to be contained and the conditions of storage. Tank material selection is discussed in more depth in Chapter 4 of this guidance document.

Most FRP tanks now in use are constructed from isophthalic polyester resin, which has been found suitable for petroleum product storage by Underwriters' Laboratories, Inc. (UL). These tanks are generally constructed to UL Standard 1316, *Standard for Safety—Glass-Fiber-Reinforced Plastic Underground Storage Tanks for Petroleum Products* (1983). This standard specifies tank capacities, fittings, and testing procedures.

The primary advantage of FRP is that, given its inherent noncorrosive nature, it can be installed in a wide range of soil conditions without concern for corrosion protection. On the other hand, FRP tanks may be somewhat more sensitive to mishandling during installation than steel tanks. FRP tanks are lighter and slightly less flexible than steel, relying on backfill to supply as much as 90 percent of their structural support. FRP tank manufacturers have developed detailed handling and installation procedures that should be followed by tank installers. When knowledgeable, well-trained installers carefully follow all these procedures, FRP tanks should retain their structural integrity during use. Chapter 3 contains further information on installation procedures.

FRP piping is also available. As with FRP storage tanks, FRP piping resists corrosion. FRP piping must be handled differently than steel piping, however, in order to provide effective containment. For example, FRP piping joints are sealed with adhesives that are temperature sensitive. During colder weather (lower than 60° F), adequate heating equipment must be used to ensure proper sealing. These joint adhesives may also be subject to chemical attack when used to store materials other than petroleum. When selecting an FRP piping system, one must consider compatibility of the piping joint adhesive with the stored substances.

2.2.3 Steel Clad with Noncorrosive Material

As discussed previously, galvanic corrosion only occurs when four elements are present: an anode, a cathode, an electrolyte, and an electrical connection between the anode and cathode. Nonconductive coatings can be used to separate a tank from the soil electrolyte. When this is done effectively, corrosion will not occur.

The effectiveness of any coating depends on its insulating characteristics, thickness, and the completeness of its coverage. If there is a flaw in a coating (known as a "holiday"), the corrosion-producing

electrical currents will concentrate at the flaw and corrosion will occur there at an accelerated rate. Scratches on the exterior of a tank from improper handling or installation can cause corrosion problems. To protect against this occurrence, a coating should be checked by an electronic holiday detector before a tank is placed in an excavation. Any damaged areas should be repaired using the same coating material that is on the tank. In actual practice, coatings are rarely perfect, and there are almost always some flaws. Thus, the primary function of a coating is to reduce rather than to eliminate the surface area of exposed metal, thereby decreasing the amount of cathodic protection needed.

An important factor in selecting a coating is its durability. Many coatings may be soluble in the products stored in the tanks. For example, the asphalt paints used on many gasoline tanks now in place are soluble, in varying degrees, in gasoline. This is a concern, even if a tank system is not leaking, because surface spills can occur during normal operations that can penetrate soil and damage a coating. The areas of a tank with damaged coating may then lose their protection from the surrounding soil and be subject to corrosion. Thus, asphalt paints on steel gasoline tanks do not meet the Interim Prohibition requirement for steel clad with non-corrosive material. A coating may also dry and crack during the normal operation of a tank, resulting in reduced protection.

Coal tar epoxy and FRP are becoming increasingly popular as tank coatings. A coating of coal tar epoxy is typically 15 mil. (15/1000 inch) minimum dry film thickness, while an FRP coating is about 125 mil. thick. These materials are durable and provide effective electrical insulating qualities but, as with other materials, they are subject to reduced effectiveness from inadequate surface preparation, improper application, too little material used (or too few coats), and excessive damage during shipment or installation. Asphalt and lead-based paints are generally poor coatings for tanks storing petroleum liquids or solvents because they are likely to dissolve if in contact with the stored product and do not provide adequate electrical isolation.

2.2.4 The Exemption from Corrosion Protection Requirements

The Interim Prohibition allows installation of tanks without corrosion protection in soil with a resistivity of 12,000 ohm-cm or higher (electrical resistance determined across a 1-centimeter cube of soil), measured using ASTM Method G57-78, the "Wenner Method." Resistivity measurements indicate a soil's ability to prevent the flow of electricity. Such measurements are used to estimate cathodic protection needs.

Although a tank can be installed legally without corrosion protection in soil with a resistivity of 12,000 ohm-cm or higher, the tank may still be subject to leaks from corrosion. Therefore, EPA encourages persons who are considering installing a metal tank under the exemption requirement to take other relevant soil characteristics into consideration prior to installing a nonprotected tank.

Since a copy of ASTM Method G57-78 is included in Appendix E. a detailed explanation of the testing method will not be included here. A brief description of the information provided by the test, along with the test's limitations is, however, provided below.

ASTM Method G57-78 provides an on-site means of measuring the resistivity of soil. The measurement yields an *average* resistivity of a hemisphere of soil with a radius equal to the distance between the method's electrodes. Because the resistivity measured is the average resistivity of the soil on the day of measurement, there are three limitations. First, soil is often not uniform throughout its depth or over a wide area. This means that over an 8- to 12-foot depth (the depth at which a tank is installed), there may be narrow strips or small areas of low resistivity soil within wider strips of high resistivity soil. Under these conditions, the method may yield results indicating a high average resistivity,

masking the areas of low resistivity. Should a tank without corrosion protection be installed under these conditions, it could corrode very quickly in the presence of the low resistivity soil layers.

The second limitation involves the wide variation of soil resistivity measurements in different levels of moisture. If the test is run during dry conditions, the measured resistivity could be very high. If, however, the location is subject to periodic rainfall or variations in ground water level, the resistivity could change dramatically with variations in these conditions. Resistivity can also differ widely from season to season, as well as with soil depth. An unprotected storage system could be subject to accelerated corrosion rates during periods of high soil moisture content.

A third limitation is that resistivity measurements do not account for other factors that cause corrosion, for example, stray currents and nitrate, sulfide, and chloride levels influence soil corrosivity. Nitrate and sulfide levels can indicate the potential for bacterial corrosion. While the bacteria themselves do not directly affect corrosion, their activity can create corrosive conditions around a tank storage system. High chloride levels increase a soil's electrical conductivity. Chloride levels can be increased by salt applied to streets and highways during the winter. These salts may penetrate the soil through cracks and joints in pavement and decrease soil resistivity. Although the effect would not be detected by resistivity testing when soil is dry, it causes the soil, when wet, to become an excellent electrolyte that fosters accelerated corrosion because the chlorides go into solution.

Additional factors that contribute to soil corrosivity besides sulfide and chloride levels include acidity (pH), dissolved oxygen content, oxygen level differentials between the bottom and top parts of tanks, and many others. Simple resistivity measurements will fail to discover many of these factors. A reliable method for combining all the relevant factors to predict corrosivity accurately has not been developed. Furthermore, detailed soil analysis is generally more expensive than providing corrosion protection. For this reason, many corrosion control engineers recommend assuming that all soils are corrosive and they use resistivity measurements to design appropriate cathodic protection systems.

2.2.5 Secondary Containment Systems

Another method commonly used to reduce environmental releases from underground tanks is installing a secondary containment system. These systems are designed to contain leaks or spills temporarily, preventing them from contaminating the surrounding environment. Secondary containment is not a long-term storage solution by itself. Such systems should always be coupled with a leak detection system within the secondary containment that informs a tank operator when a tank is leaking so that the situation can be rectified while the release is still within the secondary containment system. A tank with secondary containment is subject to the same need for corrosion protection as any other metal tank. To be effective, the secondary containment system must be installed with as much care as a properly installed tank.

Secondary containment systems may include:

- Double-walled tanks;
- Pit lining systems; and
- Vaults.

The following three subsections provide brief descriptions of these secondary containment systems. The last subsection briefly addresses secondary containment of piping.

A. *Double-Walled Tanks*. Double-walled tanks constructed of either steel or FRP represent one type of secondary containment. Several double-walled designs are now available, and more are

expected to become available in the near future. Double-walled tanks consist of a tank within an outer shell. The outer shell may completely surround an inner tank or, in some cases, leave the top of the inner tank exposed. Examples of double-walled tanks are shown in Figure 2-13.

The space between the inner and outer walls (the interstitial space), which may be used for leak detection, can either be pressurized or made into a vacuum in order to discover leaks. Other leak detection systems install a device in a standpipe that is able to detect any liquid entering the space. Still another type of detection device fills the space with a liquid (e.g., water) and uses a monitor that reflects any changes in liquid level or electrical properties. The interstitial leak detection system informs a tank operator when either the primary or secondary wall is leaking.

Double-walled tanks commonly available today provide a high degree of environmental protection along with a means for detecting leaks. They are, however, still subject to the corrosion and structural stresses that affect single-walled tanks. Under the Interim Prohibition, these tanks must be protected accordingly. Thus, a metal double-walled tank must be cathodically protected from corrosion and an FRP tank must be installed properly to prevent structural failure. Furthermore, the second wall increases the weight of a tank significantly, particularly if it is constructed of steel, thus requiring a more powerful crane for installation. A tank manufacturer should provide detailed installation instructions for double-walled tanks, particularly where the installation process differs from that for single-walled tanks.

B. *Pit Lining Systems.* Another means of secondary containment is to line the pit in which an underground tank is to be placed with a material impervious to the substance being stored. The materials usually used for such systems include the following:

- Low permeability constructed barriers—clay, soil cement, bentonites, asphalt, grouts, soil sealants; and
- Synthetic membrane liners.

Figure 2-14 illustrates a pit lining system.

It is important to include a liquid monitoring and removal system as part of this type of secondary containment system. The floor of a containment pit should be sloped to a sump from which a sample can be taken to determine if the contents of a tank are leaking into the secondary containment area.

The top of a secondary containment area should have an impervious cover (e.g., paving, clay cap, etc.) to prevent rainwater from accumulating within the pit liner. If no cover is provided, accumulated rainwater that percolates to the liner should be removed by pumping or by some other drainage system.

Selection of the proper pit lining material for a particular use depends on several factors including the following:

- *Type of Material Being Stored.* Consideration should be given to the compatibility of a liner with the liquid being stored. The lining material must be able to maintain its integrity and impermeability if exposed to stored product. Chapter 3 examines compatibility considerations in more detail.
- *Local Environmental Conditions.* The sensitivity of the environment in the vicinity of a storage facility can largely affect the choice of containment liner required. For example, a high water

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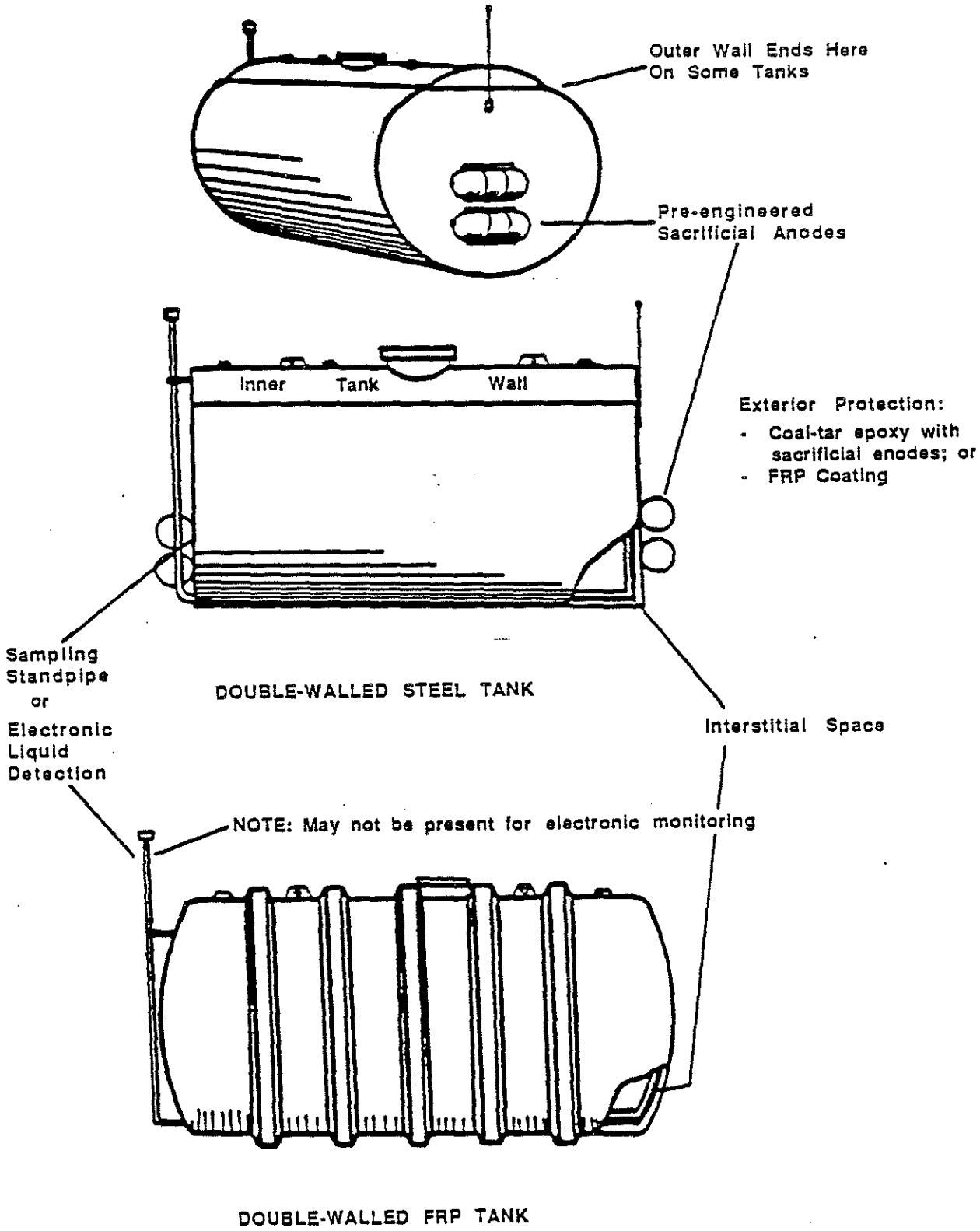

FIGURE 2-13 DOUBLE-WALLED TANK CONFIGURATION

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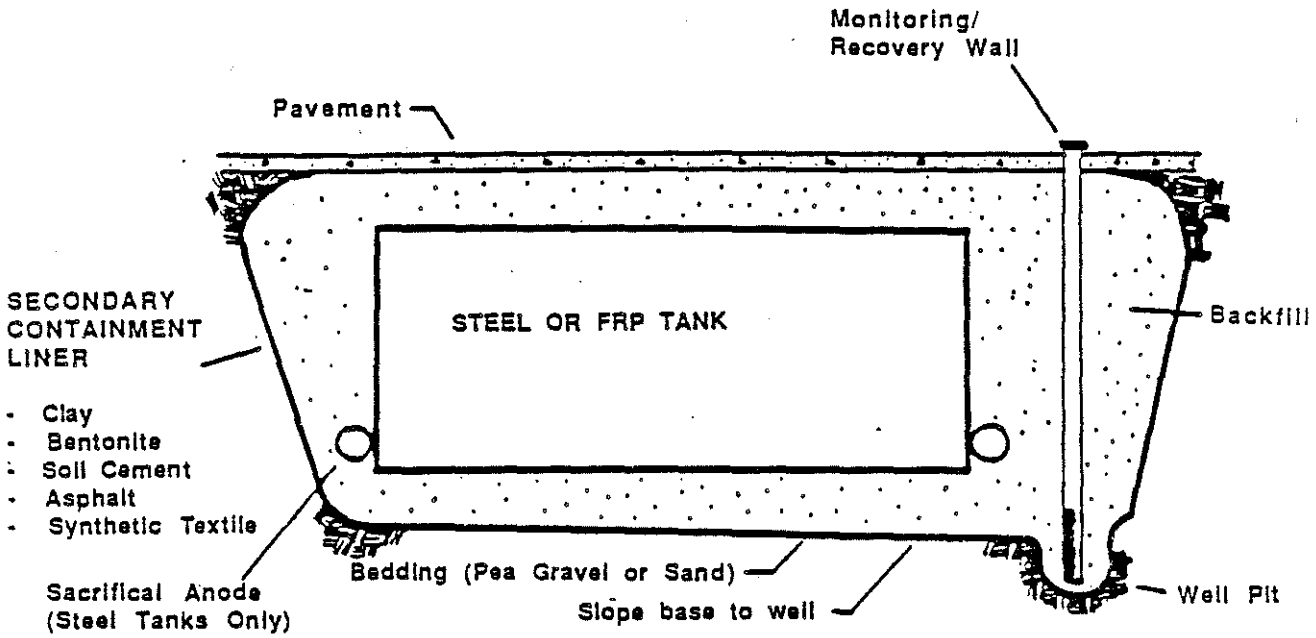

FIGURE 2-14 SECONDARY CONTAINMENT USING LINER TECHNOLOGY
(Dry installation-Not to be used in high ground water)

table might require a particularly strong, impermeable liner and ballasting system to protect the liner's physical integrity. Proximity to ground water used as a public drinking water supply may require greater care in the selection and installation of a containment liner. Extreme temperature conditions may also require selection of a liner with appropriate physical properties.

- *Legislative Requirements.* State and local governments and/or authorities may have regulations that are very detailed in terms of the type of containment barrier required.

- *Economics.* Some lining systems are very expensive in certain applications, particularly in high ground water situations. Economic analyses may show other secondary containment systems, such as well-designed, double-walled tanks or vaults, to be more cost effective.

- *Installation.* The performance of all pit lining systems is highly dependent on installation methods. Regardless of the lining system chosen, the installation process should be closely monitored for compliance with competent plans and specifications.

(1) *Low-Permeability Constructed Barriers.* The following materials can prevent liquids from passing through them to reach the ground water. The differences between the various barriers are described below.

(A) Clays. Clay is a relatively inexpensive material for secondary containment and is often readily available. Clay varies in composition and permeability and is subject to drying, cracking, and destabilization when exposed to some organic solvents. Clay may also be permeable to-some materials, particularly after exposure to water. Furthermore, installation of clay liners can be extremely complex, as it depends heavily on the characteristics of a site and of the clay itself. To be adequately designed to prevent releases, the excavation must be free of water, and the clay liner must be sufficiently thick, well compacted, and installed at the proper moisture content.

(B) Soil Cement. Soil cement is an engineered mixture of suitable native soil material, an appropriate grade of Portland cement, and water. Proper mixing and placement create a low compressive strength mixture that can be placed and compacted to make a barrier of medium to low permeability, depending on the type of soil used. Soil cement is durable and resists aging and weathering, but degrades rapidly in areas of high frost penetration. It can also serve as a base or foundation for a membrane liner.

(C) Bentonite. Bentonite is a natural material that is similar to clay in its low permeability, self-sealing, and good aging characteristics. Bentonite may deteriorate when exposed to some contaminants and organic solvents. In addition, use of bentonite requires a protective soil cover and low ground water conditions.

(D) Asphalt. Asphalt cement is similar to road-paving material. Asphalt has good strength and durability and is relatively impermeable when properly sealed. This coating should not be used to store hydrocarbon volatiles, such as gasoline, however, because the hydrocarbons cause asphalt to destabilize rapidly.

(2) *Synthetic (Polymeric) Membrane Liners.* Synthetic membrane liners provide acceptable secondary containment for petroleum products on a temporary basis. For other liquids, the synthetic liner must be nonpermeable to the substances that are contained and be resistant to chemical attack from the substances. Synthetic liners can be fabricated from a wide variety of polymers, including polyvinyl chloride (PVC), polyethylene, chlorosulphanated polyethylene, butyl rubber, epichlorohydrin, and

neoprene. The appropriate material is selected on the basis of compatibility of the liner with the stored substances, permeability, durability, and the liner's ability to resist damage during installation.

Liner installation presents a complex task and should only be performed by a construction contractor who is experienced and properly equipped. Proper installation involves, among other things:

- A well-compacted excavation base to prevent settling under a liner after a tank is installed;
- A stable slope for the excavation walls to prevent collapse after a liner is installed;
- Removal of rocks, rubble, and debris at the base and walls that could puncture a liner; and
- Special care and attention during construction to ensure that the seams and joints of a liner are properly sealed.

(3) *Vaults*. The last type of secondary containment discussed is a concrete vault (see Figure 2-15). A vault consists of a concrete floor upon which a tank is supported, and four concrete walls and a roof. If the interior of a vault is to remain open (free of backfill), several things must be considered. First, if the stored substances are flammable, a flammable or explosive mixture could form within the air space of the vault if a leak occurs. Second, the tanks installed in a vault must be designed for aboveground applications. As discussed earlier, tanks constructed for underground use often depend heavily upon backfill for support. Third, liquids may leak through a concrete vault if improperly constructed. Although the concrete vault may delay the release of leaked material to the environment, it should not be assumed that it will prevent leakage. The concrete vault may, however, be lined with a synthetic material to prevent leakage. Concrete is also subject to cracking as a result of settling, frost heave, etc. When the concrete cracks, the liner may also crack.

(4) *Secondary Containment of Piping*. In manners similar to those used for tanks, piping may also be placed in secondary containment. Double-walled piping may be installed, the piping trench may be lined, or piping may be installed in a vault. Piping and piping trenches should be installed so they slope toward a tank; thus, any remainder in the piping and any spills will drain to the tank. Each of these secondary containment methods will contain leaks or spills temporarily, preventing them from contaminating the surrounding environment.

3. THE PROTECTION OF UNDERGROUND TANKS FROM STRUCTURAL FAILURE

The proper design and installation of an underground tank is necessary to ensure that normal operational loads will not cause the tank to deform and rupture. The Interim Prohibition requires that every underground tank installed after May 7, 1985 be designed to prevent releases from structural failure for the operational life of the tank. Used tanks, i.e., tanks removed from the ground and reinstalled, are covered by the requirements of the Interim Prohibition.

This chapter provides a brief description of structural failure and its causes. The necessity to adhere to proper installation procedures is emphasized. Prevention of structural failure by selecting an appropriate tank design is also addressed.

3.1 Causes of Underground Tank Structural Failure

Most standard tanks in current use, regardless of the construction materials, have been professionally designed and tested to withstand normal operating conditions and loads with a comfortable

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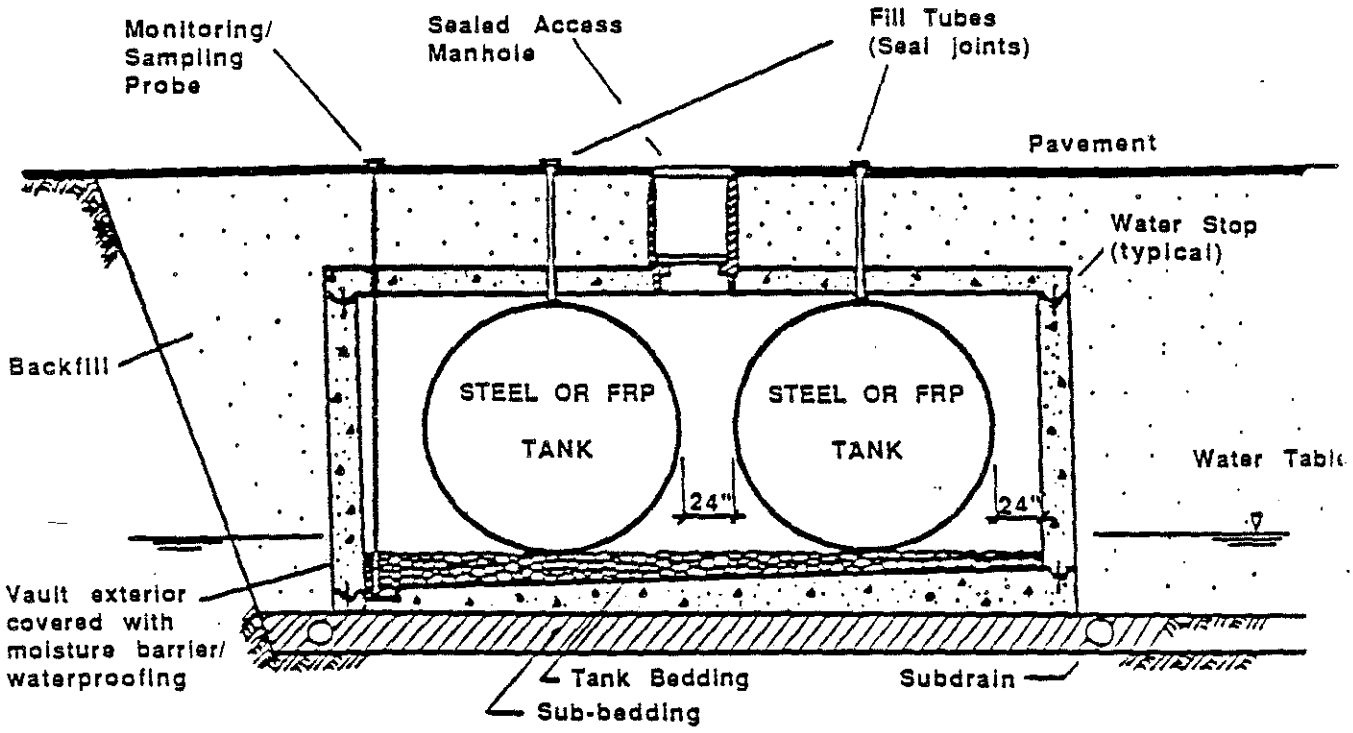

Note: Tanks must be designed to withstand internal forces without backfill support.

FIGURE 2-15 SECONDARY CONTAINMENT VAULT

margin of safety. The most common cause of structural failure is improper installation. Improper installation is a term that encompasses a multitude of potential problems. Some of the most common installation mistakes that can lead to structural failure are the following:

- Inadequate pit and trench design;
- Improper handling of a tank at a site;
- Improper tank bedding and placement;
- Poor or unsuitable backfill material and/or compaction procedures;
- Improper tank depth;
- Inadequate, or nonexistent, anchoring in high ground water table conditions; and
- Improper installation of attachments, particularly piping.

Proper installation practices, described in Section 3.2, should minimize the likelihood of these mistakes occurring and causing structural failure.

Installing a tank that is physically inadequate to meet the stresses at a site can also result in structural failure. Section 3.3 discusses design considerations to assist tank owners in selecting tanks that are structurally secure.

3.2 Installation Considerations

The environment surrounding an underground tank must be adequately characterized before a tank is installed. Environmental factors that can affect siting and installation decisions include:

- Bedding and backfill characteristics;
- High water level, requiring a tank to be anchored;
- Location and magnitude of soil loads over a tank; and
- Likelihood of earthquakes.

Information on proper tank installation procedures is given in local consensus codes; such guidance is, however, often inadequate because details are frequently vague in these codes. The most commonly available codes and recommended practices (RPs) that cover underground tank installation are NFPA 30, *Flammable and Combustible Liquids Code* (1984) and API Publication 1615, *Installation of Underground Petroleum Storage Systems* (1979). These documents were developed for petroleum storage, but installation procedures for tanks used in other liquid storage situations are very similar. The primary difference may be in the selection of storage system components. In addition, tank manufacturers have developed very detailed, explicit installation recommendations. If these recommendations are followed carefully, many installation problems that may lead to eventual tank failures can be avoided.

The following subsections highlight some of the most important steps in proper installation of underground storage tanks. They are not intended to be detailed explanations of tank installation procedures. For more detailed guidance, a tank owner should refer to the codes and RPs and the instructions provided by the tank manufacturer.

3.2.1 Excavation

The size of the pit excavated to hold a tank is important. The pit should be deep enough to allow for a tank's diameter, with sufficient space at the top and bottom for tank bedding, and space for surface cover sufficient to protect the tank from the weight of vehicular traffic. A pit should be wide enough to permit sufficient space between tanks (if there is more than one tank) and between pit walls and tanks so that sufficient backfill can be added to support the tanks evenly (see Figure 3-1). Deep pits in unstable soil conditions may require extra support (shoring) to prevent cave-ins.

If the ground water table is high, the pit may fill with water during excavation. A tank can, nevertheless, be installed properly in a wet pit if the procedure is performed by a competent contractor who has had previous experience with such installations. A tank in this environment must be properly secured, as discussed in subsection 3.2.3 below.

3.2.2 Tank Bedding

As part of proper installation, a tank should not be placed directly on native soil. A granular bedding material should be placed on the pit bottom to provide an even bearing surface upon which the tank will rest. Pea gravel, clean sand, or crushed stone should be used to form a uniformly supporting cradle around the tank. Care must be taken not to leave any voids around the base (see Figure 3-2). Voids can magnify the effects of structural loading and, if severe, can cause a tank to bend or crack. Sand requires mechanical compacting to provide adequate support and to reduce the possibility of voids developing.

Proper handling of a tank before and during installation is necessary to avoid damaging the tank or its coating. This includes the use of lifting equipment of sufficient size and power to handle the tank, using lifting lugs attached to the tank, or special lifting slings. A tank should never be dropped or rolled into position. Improper tank handling can immediately lead to leaks following installation or can later shorten the life of a tank.

The entire tank system should be tested for leaks before backfilling. Leak testing for new systems involves pressurizing a tank aboveground and, coating it with a soapy water solution. Any bubbles indicate a leak that should be repaired. After repairs, a system should be retested before burial. A tank must not be pressurized beyond design standards during testing. Piping should be isolated from the tank and tested with air pressure and soapy water solution. Air pressure testing should *never* be done on tank systems once they have been buried. This type of testing is suitable *only* for new equipment.

Once a tank base has been firmly seated and backfilled and the tank's appurtenances installed, the balance of backfill can be placed in the excavation. Pea gravel, and crushed stone are relatively self-compacting, provide firm support to a tank, and are easy to place. Clean sand is also an excellent backfill material, but should be mechanically compacted to provide proper support. The soil previously taken from an excavation should not be used as backfill, unless such use is approved by the engineer or technical representative of a tank supplier. If native soil is used as backfill, it should be replaced in layers and each layer compacted to the level specified by local standards, or as recommended by an engineer.

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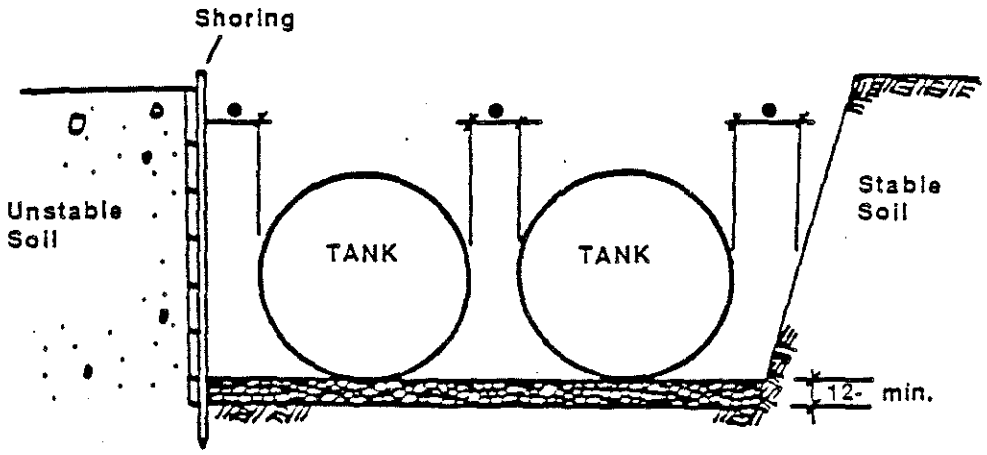

Note: ● Space in accordance with manufacturer's installation instructions.

FIGURE 3-1 EXCAVATION

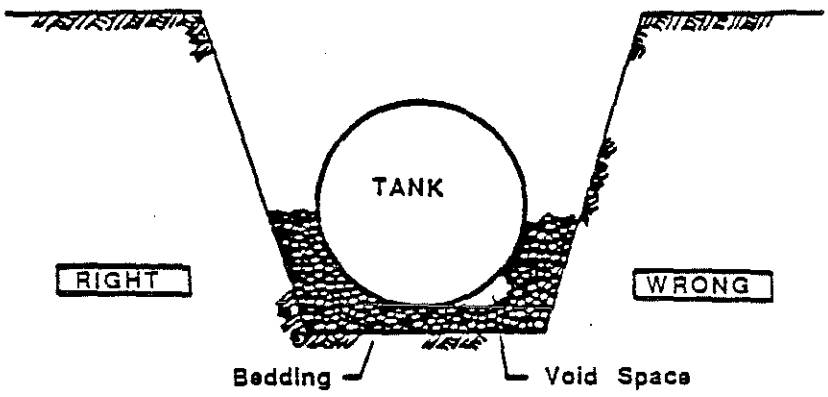

FIGURE 3-2 BEDDING

3.2.3 Tank Anchoring

Failure to secure a tank properly under high ground water conditions may result in the tank being forced up out of the ground by the buoyant forces exerted upon it. Tanks may be secured in a number of ways. Some rely on the weight of soil and a concrete driveway slab to hold the tank down from above. Others rely on anchor straps around the tank, fastened to concrete. Tank anchors should be supplied with a tank and installed by knowledgeable contractors. If a tank is to be anchored to a concrete slab, it should not be set directly on the slab, but separated from the slab by at least 12 inches of bedding, as specified in API 1615 (see Figure 3-3). Anchor straps should be placed on a tank in a manner that avoids damaging the tank or its coating, and the anchors should be electrically insulated from the tank.

3.2.4 Piping

API 1615 outlines installation procedures for tank piping (see Figure 3-4). In general, piping should be installed in adequately sized trenches and buried in sand or gravel, as is the tank. In addition, piping should be sloped toward a tank to allow product to drain back to the tank. Finally, as advocated in API 1615, swing joints or some other type of flexible coupling should be used where piping connects to a tank, to allow for postinstallation shifting and settling. Swing joints may not be necessary for FRP piping if a sufficiently straight run of piping is provided between a tank connection and the next pipe bend. Installers should refer to API 1615 and the manufacturer's specifications for more detailed guidance on installing a tank system.

3.2.5 Other Attachments

Access manholes should not rest directly on top of a tank. Adequate clearance should be left so that the loads on a tank are transferred to the backfill (see Figure 3-5). Paving over tanks in traffic areas should extend at least one foot beyond the perimeter of the tanks. Otherwise, a heavy vehicular load on the top of a tank may lead to structural failure. The same consideration applies to vent placement and the locations of other tank accessories.

3.3 Tank Design Considerations

In addition to proper installation practices, a tank and its attachments must be designed to withstand the forces acting on the system. Such forces are illustrated in Figure 3-6. Underwriters' Laboratories, Inc. (UL) Standards 1316 *Glass-Fiber-Reinforced Plastic Underground Storage Tanks for Petroleum Products* and 58 *Steel Underground Tanks for Flammable and Combustible Liquids* can assist in designing and testing tank systems for structural integrity. Tank structural integrity warranties are based on these standards.

UL listing of a tank provides some assurance that a tank's design meets certain minimum standards. There may be other designs, however, that provide adequate structural integrity without meeting UL standards.

4. THE COMPATIBILITY OF UNDERGROUND TANKS WITH SUBSTANCES STORED

The substance stored in an underground tank can adversely impact a tank's structural soundness if the materials are chemically incompatible with the tank's liner or construction material. The Interim Prohibition requires that an underground tank cannot be installed after May 7, 1985 unless

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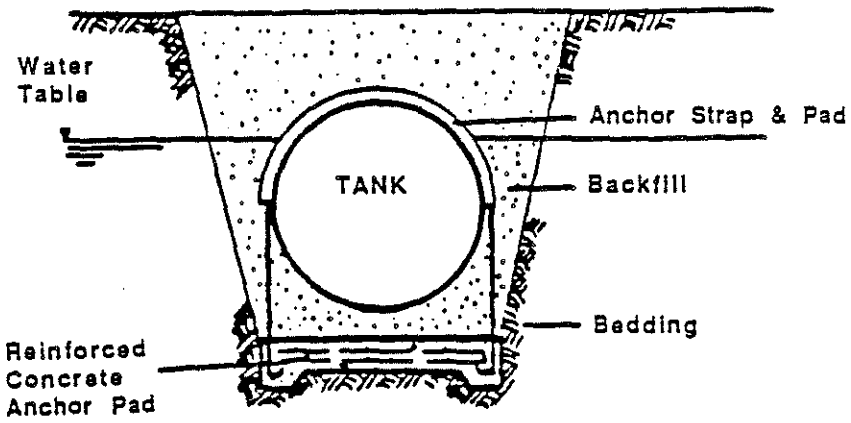

FIGURE 3-3 TANK ANCHORING CONCEPT

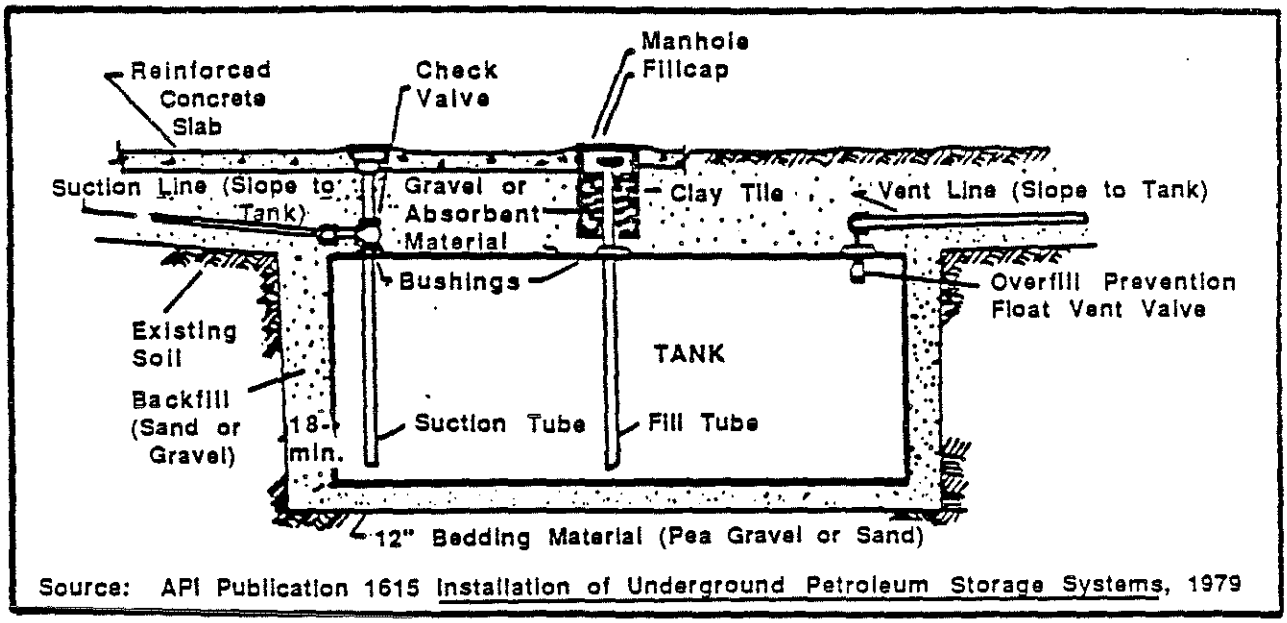

FIGURE 3-4 TANK PIPING DETAILS - SUCTION SYSTEM

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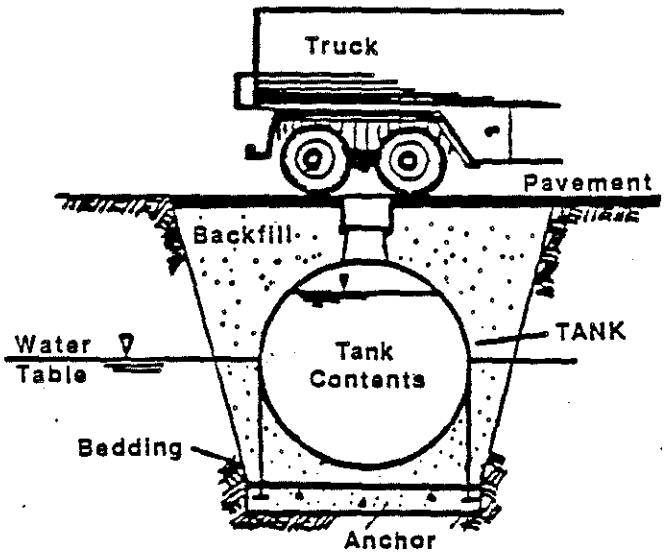

FIGURE 3-5 NORMAL TANK LOADS

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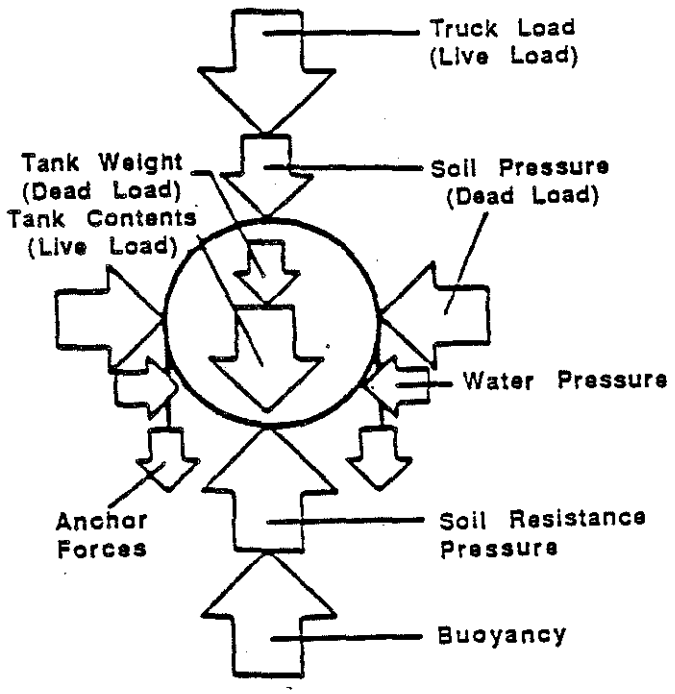

FIGURE 3-6 TANK LOAD SCHEMATIC

the lining and construction materials of the tank are compatible with the substance stored. Chemical incompatibility can result in accelerated corrosion, cracking, and/or increased permeability (seepage through) a tank's structure, thus causing leaks.

This chapter provides some general guidance on compatibility and how to attain it. The chapter includes descriptions of some tank liner and construction material characteristics that can be used to predict compatibility with stored substances.

4.1 Compatibility Considerations

Compatibility is an important concern when selecting a new tank. Some examples of chemicals that are incompatible with specific types of tank liner and construction materials are listed in Table 4.1. (This list is not intended to be all-inclusive.) Under the Interim Prohibition, compatibility must be maintained throughout a tank's operating lifetime. Further details on tank liners are contained in Section 4.4 of this document.

The tank owner should consult with tank and resin suppliers regarding special storage requirements. Tank suppliers are equipped to make tests to establish compatibility of a substance with its container, if compatibility information is not otherwise available. Corrosion, swelling, loss of strength, etc. can be detected in laboratory experiments. Selection of a tank's construction material and design thickness may be dependent on laboratory compatibility test results. Most reputable tank and resin suppliers will assist in making the compatibility determination. Future uses of a tank must be considered when content compatibility is the goal.

4.2 FRP Alcohol Compatibility

Concerns have been raised that storage of alcohol or of gasoline/alcohol mixtures adversely affects the structural integrity of FRP tanks and may lead to their structural failure. However, research into these concerns has failed to discover any documented instances of an FRP tank failure attributable directly or indirectly to storage of such substances.

Certain types of FRP tanks are currently available to store 100 percent methanol and ethanol blends. These tanks are lined with a type of vinyl ester resin. Most of the FRP tanks now in service are the standard polyester tanks used to store motor fuels and gasoline/alcohol blends consisting usually of mixtures containing up to 10 percent ethanol or 5 percent methanol. Current testing methodology established by Underwriters' Laboratory (UL) requires that FRP material flexural strength and hardness retain at least 50 percent of their original values after 270 days exposure. While these criteria bear no direct correlation to useful tank service life or to the rate of change of tank properties under field conditions, they do give a general indication of content compatibility.

Resin manufacturers, tank manufacturers and chemical companies are performing research regarding the effects of several types of alcohol (ethanol, methanol, etc.) and blends of gasolines of different grades mixed with these alcohols on FRP tank construction materials. Many of these research testing programs are on-going.

Available UL testing data indicate that the relatively new terephalate resins used for some types of FRP tanks meet UL criteria when exposed to 100 percent methanol and ethanol blends. This is supported by industry data.

Table 4-1 Compatibility Chart: Structural Materials vs. Chemical

Construction Material	Generally Incompatible with:
Steel	Mineral acids; nitric, hydrochloric, dilute sulfuric acids
Aluminum	Alkalies; potassium hydroxide, sodium hydroxide, mineral acids
Magnesium	Mineral acids
Lead	Acetic acid, nitric acid
Copper	Nitric acid, ammonia
Zinc	Hydrochloric acid, nitric acid
Tin	Organic acids, alkalies
Titanium	Sulfuric acid, hydrochloric acid
Fiberglass Reinforced Plastics	Sulfuric acid 95%, nitric acid 50%, hydrofluoric acid 40%, aromatic solvents, ketone solvents, chlorinated solvents

Lining Material	Generally Incompatible with:
Alkyds	Strong mineral acids, strong alkalies, alcohol, ketones, esters, aromatic hydrocarbons
Vinyls (polyvinylchloride-PVC)	Ketones, esters, aromatic hydrocarbons
Chlorinated Rubbers	Organic solvents
Epoxy (aminecured, polyamide cured, or esters)	Oxidizing acids (nitric acid), ketones
Coal Tar Epoxy	Strong organic solvents
Polyesters	Oxidizing acids, strong alkalies, mineral acids, ketones, aromatic hydrocarbons
Silicones	Strong mineral acids, strong alkalies, alcohols, ketones, aromatic hydrocarbons

Available industry test data also show that standard fiberglass tanks exposed to 5 percent methanol-gasoline blends and 10 percent ethanol-gasoline blends meet UL criteria. No corresponding UL data are available.

It must be recognized that the useful service life of an underground tank installed at the present time could be greater than 30 years. In the future, there is a possibility that higher percentages of alcohol or other additives may be blended with gasoline stored in standard FRP tanks. If the reader is planning to install an FRP tank that may be used in this manner during its service life, he should discuss this situation with the tank manufacturer and/or supplier.

4.3 Characteristics of Tank Liner and Construction Materials

A tank liner or construction material's resistance to the following factors can be used to predict compatibility with a substance that is stored:

- pH extremes;
- Chlorides and fluorides;
- Oxidation; and
- Solvent action.

If any stored substances display these characteristics, the substances can have adverse effects on tank liner and construction materials. These effects will increase with elevated temperatures. Each of the above characteristics is discussed below.

4.3.1 pH Extremes

Acids with a pH of 0 to 2 are highly corrosive acids, and alkalines with a pH of 12.5 to 14 are highly corrosive bases. Such liquids can, depending on temperature, tank agitation, and tank construction material, uniformly dissolve a significant percentage of the thickness of metal walls. Local corrosion can be even greater under these pH conditions. The closer the contents of a tank are to the neutral value of 7, the less likely that they will corrode a tank wall. Mixing nonreactive substances to arrive at a neutral pH is a useful method to help ensure content compatibility. Corrosive substances rapidly attack carbon steel tanks, but most plastics have excellent resistance to acids and bases.

4.3.2 Chlorides and Fluorides

When a chloride or, to a lesser extent, a fluoride solution is stored in a metal tank, the compound will generally remove metal atoms from the tank to form soluble salts. This form of tank wall deterioration may not be uniform over tank walls. Instead, the attack may be concentrated in areas of stress (i.e., joints, welds, corners, bends) and result in leaks in these places long before the overall strength of a tank is noticeably reduced. For example, carbon steel, stainless steel, and aluminum deteriorate rapidly in the presence of chlorides and fluorides. Titanium tanks have exceptional resistance to attack from hot chloride solutions. Plastics are generally unaffected by chloride solutions.

4.3.3 Oxidation

Strongly oxidizing (electron-removing) solutions such as hypochlorides, peroxides, and permanganates can corrode some types of metal and nonmetallic tanks.

4.3.4 Solvent Action

Some types of nonmetallic tank and liner materials may be susceptible to "softening," dissolution, or decomposition by solvents. The relatively large spaces between the particles that form light, soft plastics (as compared to the small spaces in metals) can allow gases and some liquids to pass into tank walls. As the plastic absorbs solvents, the walls swell and soften. Plastic molecules can then leave the material, resulting in contamination of tank contents and wall shrinkage and cracking. In effect, a tank wall acts somewhat like a sponge, drawing liquid into its structure until it becomes saturated. Continued pressure by tank contents causes the absorbed liquids to travel through the plastic walls and enter the surrounding soil or, in the case of a plastic liner, contact the supporting tank shell. Overall tank resistance to puncture is also diminished by softening. Periodic hardness testing of a tank in use (Durometer, Rockwell, or Barcol hardness tests) can show if softening is occurring and indicate if permeation (seepage) is a potential problem.

FRP depends on good bonding between the fibers and the plastic to give the composite material the necessary mechanical strength. Solvents that cause swelling of FRP can permanently damage the bonds to the fibers, resulting in a great loss of tank strength and subsequent tank failure. Thus, particular resins must be used in FRP tanks that are compatible with the material stored. If no permanent damage is done by solvent absorption, however, a tank can usually be "dried out" to restore its strength.

Heavy materials such as metals and hard plastics have small pore spaces that are generally impermeable to liquids and most gases. Pore size can be estimated from a tank material's density. Metals, however, can be susceptible to cracking where a small surface irregularity can propagate into a large crack in the presence of particular stored materials. Certain chemicals such as chromic acid, aluminum chloride, nickel nitrate, potassium hydroxide, and sodium hydroxide can cause such cracking in a carbon steel tank, producing early tank failure. Aluminum and its alloys, copper, brass and bronze, are generally resistant to solvents.

4.4 Lining Tanks

The use of a tank liner material can provide added assurance of material compatibility. For example, a liner which is resistant to all chemical substances that are used singularly or in combination in an industrial operation can be bonded inside a metal tank. By so doing, the strength of the metal is combined with the chemical resistance of the liner to produce a tank that is both structurally sound and compatible with its stored contents. In a similar manner, FRP tanks can be lined with special resins designed to resist specific chemical substances.

Underground tanks may be relined *in situ* or after removal from the ground. Adequate surface preparation is necessary prior to relining. Sandblasting of metal tanks and thorough tank cleaning are the minimum surface preparations generally required prior to relining. Tanks in poor structural condition should not be relined.

New tanks may be purchased equipped with liners installed by their manufacturers. Liners must be applied to the proper thickness and must be adequately tested and inspected. As discussed in Section 4.3, selection of a tank liner depends on resistance to the presence of the four chemical characteristics that may weaken the liner: pH extremes, chlorides and fluorides, oxidation, and solvent action.

APPENDIX A

TITLE VI—UNDERGROUND STORAGE TANKS

UNDERGROUND STORAGE TANK REGULATION

SEC. 601. (a) The Solid Waste Disposal Act is amended by adding the following new subtitle after subtitle H:

"Subtitle I—Regulation of Underground Storage Tanks

"DEFINITIONS AND EXEMPTIONS

42 USC 6991.

"SEC. 9001. For the purposes of this subtitle—

"(1) The term 'underground storage tank' means any one or combination of tanks (including underground pipes connected thereto) which is used to contain an accumulation of regulated substances, and the volume of which (including the volume of the underground pipes connected thereto) is 10 per centum or more beneath the surface of the ground. Such term does not include any—

"(A) farm or residential tank of 1,100 gallons or less capacity used for storing motor fuel for noncommercial purposes,

Petroleum and petroleum products.

"(B) tank used for storing heating oil for consumptive use on the premises where stored,

"(C) septic tank,

"(D) pipeline facility (including gathering lines) regulated under—

"(i) the Natural Gas Pipeline Safety Act of 1968 (49 U.S.C. App. 1671, et seq.),

"(ii) the Hazardous Liquid Pipeline Safety Act of 1979 (49 U.S.C. App. 2001, et seq.), or

"(iii) which is an intrastate pipeline facility regulated under State laws comparable to the provisions of law referred to in clause (i) or (ii) of this subparagraph,

"(E) surface impoundment, pit, pond, or lagoon,

"(F) storm water or waste water collection system,

"(G) flow-through process tank,

"(H) liquid trap or associated gathering lines directly related to oil or gas production and gathering operations, or

"(I) storage tank situated in an underground area (such as a basement, cellar, mineworking, drift, shaft, or tunnel) if the storage tank is situated upon or above the surface of the floor.

The term 'underground storage tank' shall not include any pipes connected to any tank which is described in subparagraphs (A) through (I).

"(2) The term 'regulated substance' means—

"(A) any substance defined in section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (but not including any substance regulated as a hazardous waste under subtitle C), and

42 USC 9601.
42 USC 6921.

"(B) petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute).

"(3) The term 'owner' means—

"(A) in the case of an underground storage tank in use on the date of enactment of the Hazardous and Solid Waste Amendments of 1984, or brought into use after that date, any person who owns an underground storage tank used for the storage, use, or dispensing of regulated sustances, and

"(B) in the case of any underground storage tank in use before the date of enactment of the Hazardous and Solid Waste Amendments of 1984, but no longer in use on the date of enactment of such Amendments, any person who owned such tank immediately before the discontinuation of its use.

"(4) The term 'operator' means any person in control of, or having responsibility for, the daily operation of the underground storage tank.

"(5) The term 'release' means any spilling, leaking, emitting, discharging, escaping, leaching, or disposing from an underground storage tank into ground water, surface water or subsurface soils.

"(6) The term 'person' has the same meaning as provided in section 1004(15), except that such term includes a consortium, a joint venture, and a commercial entity, and the United States Government.

"(7) The term 'nonoperational storage tank' means any underground storage tank in which regulated substances will not be deposited or from which regulated substances will not be dispensed after the date of the enactment of the Hazardous and Solid Waste Amendments of 1984.

"NOTIFICATION

42 USC 6991a.

"SEC. 9002. (a) UNDERGROUND STORAGE TANKS.—(1) Within 18 months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984, each owner of an underground storage tank shall notify the State or local agency or department designated pursuant to subsection (b)(1) of the existence of such tank, specifying the age, size, type, location, and uses of such tank.

"(2)(A) For each underground storage tank taken out of operation after January 1, 1974, the owner of such tank shall, within eighteen months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984, notify the State or local agency, or department designated pursuant to subsection (b)(1) of the existence of such tanks (unless the owner knows the tank subsequently was removed from the ground). The owner of a tank taken out of operation on or before January 1, 1974, shall not be required to notify the State or local agency under this subsection.

"(B) Notice under subparagraph (A) shall specify, to the extent known to the owner—

"(i) the date the tank was taken out of operation,

"(ii) the age of the tank on the date taken out of operation,

"(iii) the size, type and location of the tank, and

"(iv) the type and quantity of substances left stored in such tank on the date taken out of operation.

"(3) Any owner which brings into use an underground storage tank after the initial notification period specified under paragraph (1), shall notify the designated State or local agency or department within thirty days of the existence of such tank, specifying the age, size, type, location and uses of such tank.

"(4) Paragraphs (1) through (3) of this subsection shall not apply to tanks for which notice was given pursuant to section 103(c) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980. 42 USC 9603.

"(5) Beginning thirty days after the Administrator prescribes the form of notice pursuant to subsection (b)(2) and for eighteen months thereafter, any person who deposits regulated substances in an underground storage tank shall reasonably notify the owner or operator of such tank of the owner's notification requirements pursuant to this subsection.

"(6) Beginning thirty days after the Administrator issues new tank performance standards pursuant to section 9003(e) of this subtitle, any person who sells a tank intended to be used as an underground storage tank shall notify the purchaser of such tank of the owner's notification requirements pursuant to this subsection. *Infra.*

"(b) AGENCY DESIGNATION.—(1) Within one hundred and eighty days after the enactment of the Hazardous and Solid Waste Amendments of 1984, the Governors of each State shall designate the appropriate State agency or department or local agencies or departments to receive the notifications under subsection (a) (1), (2), or (3). State and local governments.

"(2) Within twelve months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984, the Administrator, in consultation with State and local officials designated pursuant to subsection (b)(1), and after notice and opportunity for public comment, shall prescribe the form of the notice and the information to be included in the notifications under subsection (a) (1), (2), or (3). In prescribing the form of such notice, the Administrator shall take into account the effect on small businesses and other owners and operators. Public information.

"RELEASE DETECTION, PREVENTION, AND CORRECTION REGULATIONS

"SEC. 9003. (a) REGULATIONS.—The Administrator, after notice and opportunity for public comment, and at least three months before the effective dates specified in subsection (f), shall promulgate release detection, prevention, and correction regulations applicable to all owners and operators of underground storage tanks, as may be necessary to protect human health and the environment. 42 USC 6991b.

"(b) DISTINCTIONS IN REGULATIONS.—In promulgating regulations under this section, the Administrator may distinguish between types, classes, and ages of underground storage tanks. In making such distinctions, the Administrator may take into consideration factors, including, but not limited to: location of the tanks, soil and climate conditions, uses of the tanks, history of maintenance, age of the tanks, current industry recommended practices, national consensus codes, hydrogeology, water table, size of the tanks, quantity of regulated substances periodically deposited in or dispensed from

the tank, the technical capability of the owners and operators, and the compatibility of the regulated substance and the materials of which the tank is fabricated.

"(c) REQUIREMENTS.—The regulations promulgated pursuant to this section shall include, but need not be limited to, the following requirements respecting all underground storage tanks—

"(1) requirements for maintaining a leak detection system, an inventory control system together with tank testing, or a comparable system or method designed to identify releases in a manner consistent with the protection of human health and the environment;

"(2) requirements for maintaining records of any monitoring or leak detection system or inventory control system or tank testing or comparable system;

"(3) requirements for reporting of releases and corrective action taken in response to a release from an underground storage tank;

"(4) requirements for taking corrective action in response to a release from an underground storage tank; and

"(5) requirements for the closure of tanks to prevent future releases of regulated substances into the environment.

"(d) FINANCIAL RESPONSIBILITY.—(1) As he deems necessary or desirable, the Administrator shall promulgate regulations containing requirements for maintaining evidence of financial responsibility as he deems necessary and desirable for taking corrective action and compensating third parties for bodily injury and property damage caused by sudden and nonsudden accidental releases arising from operating an underground storage tank.

"(2) Financial responsibility required by this subsection may be established in accordance with regulations promulgated by the Administrator by any one, or any combination, of the following: insurance, guarantee, surety bond, letter of credit, or qualification as a self-insurer. In promulgating requirements under this subsection, the Administrator is authorized to specify policy or other contractual terms, conditions, or defenses which are necessary or are unacceptable in establishing such evidence of financial responsibility in order to effectuate the purposes of this subtitle.

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"(3) In any case where the owner or operator is in bankruptcy, reorganization, or arrangement pursuant to the Federal Bankruptcy Code or where with reasonable diligence jurisdiction in any State court of the Federal Courts cannot be obtained over an owner or operator likely to be solvent at the time of judgment, any claim arising from conduct for which evidence of financial responsibility must be provided under this subsection may be asserted directly against the guarantor providing such evidence of financial responsibility. In the case of any action pursuant to this paragraph such guarantor shall be entitled to invoke all rights and defenses which would have been available to the owner or operator if any action had been brought against the owner or operator by the claimant and which would have been available to the guarantor if an action had been brought against the guarantor by the owner or operator.

"(4) The total liability of any guarantor shall be limited to the aggregate amount which the guarantor has provided as evidence of financial responsibility to the owner or operator under this section. Nothing in this subsection shall be construed to limit any other State or Federal statutory, contractual or common law liability of a guarantor to its owner or operator including, but not limited to, the

liability of such guarantor for bad faith either in negotiating or in failing to negotiate the settlement of any claim. Nothing in this subsection shall be construed to diminish the liability of any person under section 107 or 111 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 or other applicable law. 42 USC 9607, 9611.

"(5) For the purpose of this subsection, the term 'guarantor' means any person, other than the owner or operator, who provides evidence of financial responsibility for an owner or operator under this subsection.

"(e) NEW TANK PERFORMANCE STANDARDS.—The Administrator shall, not later than three months prior to the effective date specified in subsection (f), issue performance standards for underground storage tanks brought into use on or after the effective date of such standards. The performance standards for new underground storage tanks shall include, but need not be limited to, design, construction, installation, release detection, and compatibility standards.

"(f) EFFECTIVE DATES.—(1) Regulations issued pursuant to subsection (c) and (d) of this section, and standards issued pursuant to subsection (e) of this section, for underground storage tanks containing regulated substances defined in section 9001(2)(B) (petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure) shall be effective not later than thirty months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984.

"(2) Standards issued pursuant to subsection (e) of this section (entitled 'New Tank Performance Standards') for underground storage tanks containing regulated substances defined in section 9001(2)(A) shall be effective not later than thirty-six months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984.

"(3) Regulations issued pursuant to subsection (c) of this section (entitled 'Requirements') and standards issued pursuant to subsection (d) of this section (entitled 'Financial Responsibility') for underground storage tanks containing regulated substances defined in section 9001(2)(A) shall be effective not later than forty-eight months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984.

"(g) INTERIM PROHIBITION.—(1) Until the effective date of the standards promulgated by the Administrator under subsection (e) and after one hundred and eighty days after the date of the enactment of the Hazardous and Solid Waste Amendments of 1984, no person may install an underground storage tank for the purpose of storing regulated substances unless such tank (whether of single or double wall construction)—

"(A) will prevent releases due to corrosion or structural failure for the operational life of the tank;

"(B) is cathodically protected against corrosion, constructed of noncorrosive material, steel clad with a noncorrosive material, or designed in a manner to prevent the release or threatened release of any stored substance; and

"(C) the material used in the construction or lining of the tank is compatible with the substance to be stored.

"(2) Notwithstanding paragraph (1), if soil tests conducted in accordance with ASTM Standard G57-78, or another standard approved by the Administrator, show that soil resistivity in an installation location is 12,000 ohm/cm or more (unless a more stringent

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standard is prescribed by the Administrator by rule), a storage tank without corrosion protection may be installed in that location during the period referred to in paragraph (1).

"APPROVAL OF STATE PROGRAMS

42 USC 6991c.

"SEC. 9004. (a) ELEMENTS OF STATE PROGRAM.—Beginning 30 months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984, any State may, submit an underground storage tank release detection, prevention, and correction program for review and approval by the Administrator. The program may cover tanks used to store regulated substances referred to in 9001(2) (A) or (B) or both. A State program may be approved by the Administrator under this section only if the State demonstrates that the State program includes the following requirements and standards and provides for adequate enforcement of compliance with such requirements and standards—

"(1) requirements for maintaining a leak detection system, an inventory control system together with tank testing, or a comparable system or method designed to identify releases in a manner consistent with the protection of human health and the environment;

"(2) requirements for maintaining records of any monitoring or leak detection system or inventory control system or tank testing system;

"(3) requirements for reporting of any releases and corrective action taken in response to a release from an underground storage tank;

"(4) requirements for taking corrective action in response to a release from an underground storage tank;

"(5) requirements for the closure of tanks to prevent future releases of regulated substances into the environment;

"(6) requirements for maintaining evidence of financial responsibility for taking corrective action and compensating third parties for bodily injury and property damage caused by sudden and nonsudden accidental releases arising from operating an underground storage tank;

"(7) standards of performance for new underground storage tanks; and

"(8) requirements—

"(A) for notifying the appropriate State agency or department (or local agency or department) designated according to section 9002(b)(1) of the existence of any operational or non-operational underground storage tank; and

"(B) for providing the information required on the form issued pursuant to section 9002(b)(2).

"(b) FEDERAL STANDARDS.—(1) A State program submitted under this section may be approved only if the requirements under paragraphs (1) through (7) of subsection (a) are no less stringent than the corresponding requirements standards promulgated by the Administrator pursuant to section 9003(a).

"(2)(A) A State program may be approved without regard to whether or not the requirements referred to in paragraphs (1), (2), (3), and (5) of subsection (a) are less stringent than the corresponding standards under section 9003(a) during the one-year period commencing on the date of promulgation of regulations under section

9003(a) if State regulatory action but no State legislative action is required in order to adopt a State program.

"(B) If such State legislative action is required, the State program may be approved without regard to whether or not the requirements referred to in paragraphs (1), (2), (3), and (5) of subsection (a) are less stringent than the corresponding standards under section 9003(a) during the two-year period commencing on the date of promulgation of regulations under section 9003(a) (and during an additional one-year period after such legislative action if regulations are required to be promulgated by the State pursuant to such legislative action).

"(c) FINANCIAL RESPONSIBILITY.—(1) Corrective action and compensation programs financed by fees on tank owners and operators and administered by State or local agencies or departments may be submitted for approval under subsection (a)(6) as evidence of financial responsibility. State and local governments.

"(2) Financial responsibility required by this subsection may be established in accordance with regulations promulgated by the Administrator by any one, or any combination, of the following: insurance, guarantee, surety bond, letter of credit, or qualification as a self-insurer. In promulgating requirements under this subsection, the Administrator is authorized to specify policy or other contractual terms, conditions, or defenses which are necessary or are unacceptable in establishing such evidence of financial responsibility in order to effectuate the purposes of this subtitle.

"(3) In any case where the owner or operator is in bankruptcy, reorganization, or arrangement pursuant to the Federal Bankruptcy Code or where with reasonable diligence jurisdiction in any State court of the Federal courts cannot be obtained over an owner or operator likely to be solvent at the time of judgment, any claim arising from conduct for which evidence of financial responsibility must be provided under this subsection may be asserted directly against the guarantor providing such evidence of financial responsibility. In the case of any action pursuant to this paragraph such guarantor shall be entitled to invoke all rights and defenses which would have been available to the owner or operator if any action had been brought against the owner or operator by the claimant and which would have been available to the guarantor if an action had been brought against the guarantor by the owner or operator. Claims.

"(4) The total liability of any guarantor shall be limited to the aggregate amount which the guarantor has provided as evidence of financial responsibility to the owner or operator under this section. Nothing in this subsection shall be construed to limit any other State or Federal statutory, contractual or common law liability of a guarantor to its owner or operator including, but not limited to, the liability of such guarantor for bad faith either in negotiating or in failing to negotiate the settlement of any claim. Nothing in this subsection shall be construed to diminish the liability of any person under section 107 or 111 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 or other applicable law. 42 USC 9607, 9611.

"(5) For the purpose of this subsection, the term 'guarantor' means any person, other than the owner or operator, who provides evidence of financial responsibility for an owner or operator under this subsection.

"(d) EPA DETERMINATION.—(1) Within one hundred and eighty days of the date of receipt of a proposed State program, the Administrator shall, after notice and opportunity for public comment, make Public information.

a determination whether the State's program complies with the provisions of this section and provides for adequate enforcement of compliance with the requirements and standards adopted pursuant to this section.

State and local governments.

"(2) If the Administrator determines that a State program complies with the provisions of this section and provides for adequate enforcement of compliance with the requirements and standards adopted pursuant to this section, he shall approve the State program in lieu of the Federal program and the State shall have primary enforcement responsibility with respect to requirements of its program.

"(e) WITHDRAWAL OF AUTHORIZATION.—Whenever the Administrator determines after public hearing that a State is not administering and enforcing a program authorized under this subtitle in accordance with the provisions of this section, he shall so notify the State. If appropriate action is not taken within a reasonable time, not to exceed one hundred and twenty days after such notification, the Administrator shall withdraw approval of such program and reestablish the Federal program pursuant to this subtitle.

"INSPECTIONS, MONITORING, AND TESTING

42 USC 6991d.

"Sec. 9005. (a) FURNISHING INFORMATION.—For the purposes of developing or assisting in the development of any regulation, conducting any study, or enforcing the provisions of this subtitle, any owner or operator of an underground storage tank (or any tank subject to study under section 9009 that is used for storing regulated substances) shall, upon request of any officer, employee or representative of the Environmental Protection Agency, duly designated by the Administrator, or upon request of any duly designated officer, employee, or representative of a State with an approved program, furnish information relating to such tanks, their associated equipment, their contents, conduct monitoring or testing, and permit such officer at all reasonable times to have access to, and to copy all records relating to such tanks. For the purposes of developing or assisting in the development of any regulation, conducting any study, or enforcing the provisions of this subtitle, such officers, employees, or representatives are authorized—

"(1) to enter at reasonable times any establishment or other place where an underground storage tank is located;

"(2) to inspect and obtain samples from any person of any regulated substances contained in such tank; and

"(3) to conduct monitoring or testing of the tanks, associated equipment, contents, or surrounding soils, air, surface water or ground water.

Each such inspection shall be commenced and completed with reasonable promptness.

Records. Reports.

"(b) CONFIDENTIALITY.—(1) Any records, reports, or information obtained from any persons under this section shall be available to the public, except that upon a showing satisfactory to the Administrator (or the State, as the case may be) by any person that records, reports, or information, or a particular part thereof, to which the Administrator (or the State, as the case may be) or any officer, employee, or representative thereof has access under this section if made public, would divulge information entitled to protection under section 1905 of title 18 of the United States Code, such information or particular portion thereof shall be considered confidential in

accordance with the purposes of that section, except that such record, report, document, or information may be disclosed to other officers, employees, or authorized representatives of the United States concerned with carrying out this Act, or when relevent in any proceeding under this Act.

"(2) Any person not subject to the provisions of section 1905 of title 18 of the United States Code who knowingly and willfully divulges or discloses any information entitled to protection under this subsection shall, upon conviction, be subject to a fine of not more than $5,000 or to imprisonment not to exceed one year, or both. Crimes and misdemeanors.

"(3) In submitting data under this subtitle, a person required to provide such data may—

"(A) designate the data which such person believes is entitled to protection under this subsection, and

"(B) submit such designated data separately from other data submitted under this subtitle.

A designation under this paragraph shall be made in writing and in such manner as the Administrator may prescribe.

"(4) Notwithstanding any limitation contained in this section or any other provision of law, all information reported to, or otherwise obtained, by the Administrator (or any representative of the Administrator) under this Act shall be made available, upon written request of any duly authorized committee of the Congress, to such committee (including records, reports, or information obtained by representatives of the Evironmental Protection Agency).

"FEDERAL ENFORCEMENT

"SEC. 9006. (a) COMPLIANCE ORDERS.—(1) Except as provided in paragraph (2), whenever on the basis of any information, the Administrator determines that any person is in violation of any requirement of this subtitle, the Administrator may issue an order requiring compliance within a reasonable specified time period or the Administrator may commence a civil action in the United States district court in which the violation occurred for appropriate relief, including a temporary or permanent injunction. Crimes and misdemeanors. 42 USC 6991e.

"(2) In the case of a violation of any requirement of this subtitle where such violation occurs in a State with a program approved under section 9004, the Administrator shall give notice to the State in which such violation has occurred prior to issuing an order or commencing a civil action under this section.

"(3) If a violator fails to comply with an order under this subsection within the time specified in the order, he shall be liable for a civil penalty of not more than $25,000 for each day of continued noncompliance.

"(b) PROCEDURE.—Any order issued under this section shall become final unless, no later than thirty days after the order is served, the person or persons named therein request a public hearing. Upon such request the Administrator shall promptly conduct a public hearing. In connection with any proceeding under this section the Administrator may issue subpoenas for the attendance and testimony of witnesses and the production of relevant papers, books, and documents, and may promulgate rules for discovery procedures. Hearing.

"(c) CONTENTS OF ORDER.—Any order issued under this section shall state with reasonable specificity the nature of the violation, specify a reasonable time for compliance, and assess a penalty, if

any, which the Administrator determines is reasonable taking into account the seriousness of the violation and any good faith efforts to comply with the applicable requirements.

Crimes and misdemeanors.

"(d) CIVIL PENALTIES.—(1) Any owner who knowingly fails to notify or submits false information pursuant to section 9002(a) shall be subject to a civil penalty not to exceed $10,000 for each tank for which notification is not given or false information is submitted.

"(2) Any owner or operator of an underground storage tank who fails to comply with—

"(A) any requirement or standard promulgated by the Administrator under section 9003;

"(B) any requirement or standard of a State program approved pursuant to section 9004; or

"(C) the provisions of section 9003(g) (entitled 'Interim Prohibition')

shall be subject to a civil penalty not to exceed $10,000 for each tank for each day of violation.

"FEDERAL FACILITIES

42 USC 6991f.

"SEC. 9007. (a) APPLICATION OF SUBTITLE.—Each department, agency, and instrumentality of the executive, legislative, and judicial branches of the Federal Government having jurisdiction over any underground storage tank shall be subject to and comply with all Federal, State, interstate, and local requirements, applicable to such tank, both substantive and procedural, in the same manner, and to the same extent, as any other person is subject to such requirements, including payment of reasonable service charges. Neither the United States, nor any agent, employee, or officer thereof, shall be immune or exempt from any process or sanction of any State or Federal court with respect to the enforcement of any such injunctive relief.

President of U.S.

"(b) PRESIDENTIAL EXEMPTION.—The President may exempt any underground storage tanks of any department, agency, or instrumentality in the executive branch from compliance with such a requirement if he determines it to be in the paramount interest of the United States to do so. No such exemption shall be granted due to lack of appropriation unless the President shall have specifically requested such appropriation as a part of the budgetary process and the Congress shall have failed to make available such requested appropriations. Any exemption shall be for a period not in excess of one year, but additional exemptions may be granted for periods not to exceed one year upon the President's making a new determination. The President shall report each January to the Congress all exemptions from the requirements of this section granted during the preceding calendar year, together with his reason for granting each such exemption.

Report.

"STATE AUTHORITY

42 USC 6991g.

"SEC. 9008. Nothing in this subtitle shall preclude or deny any right of any State or political subdivision thereof to adopt or enforce any regulation, requirement or standard of performance respecting underground storage tanks that is more stringent than a regulation, requirement, or standard of performance in effect under this subtitle.

APPENDIX B

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 280

[FRL 2928-9]

Hazardous Waste: Interpretive Rule on the Interim Prohibition Against Installation of Unprotected Underground Storage Tanks

AGENCY: Environmental Protection Agency.

ACTION: Interpretive rule.

SUMMARY: New Subtitle I of the Resource Conservation and Recovery Act (RCRA), as amended, provides for the regulation of underground storage tanks. Section 9003(g) of Subtitle I establishes interim requirements for underground storage tanks that are installed between May 7, 1985 and the effective date of new tank standards required to be promulgated by EPA under section 9003(e). This notice sets forth EPA's interpretation of Section 9003(g).

FOR FURTHER INFORMATION CONTACT: Pamela Harris, (202) 382-4814, or Steven Way, (202) 475-9328; or the RCRA/Superfund Hotline at (800) 424-9346 (toll free or (202) 382-3000 in Washington, DC.

SUPPLEMENTARY INFORMATION:

I. Introduction: The Hazardous and Solid Waste Amendments of 1984

On November 8, 1984, the President signed into law the Hazardous and Solid Waste Amendments of 1984, Public Law 98-616. These Amendments extend and strengthen the provisions of the Solid Waste Disposal Act of 1970 as amended by RCRA. A major portion of this new legislation, Subtitle I, provides for the development and implementation of a regulatory program for underground storage tanks used to contain regulated substances, which include petroleum and substances defined as hazardous substances under section 101(14) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).[1]

Among the provisions of new Subtitle I, section 9003 requires EPA to promulgate regulations pertaining to the detection, prevention, and correction of releases from underground storage tanks as may be necessary to protect human health and the environment.[2] Section 9003(c) sets forth minimum requirements that must be promulgated for all underground storage tanks and section 9003(e) sets forth additional requirements that must be promulgated for new underground storage tanks. Regulations under both sections 9003 (c) and (e) for tanks containing petroleum products are to be effective by May 8, 1987. With respect to tanks containing hazardous substances, regulations under section 9003(e) for new tanks are to be effective by November 8, 1987 and regulations under section 9003(c) for existing tanks are to be effective by November 8, 1988.

Until new tank standards promulgated under section 9003(e) become effective, section 9003(g)(1) establishes interim requirements for any tank installed on or after May 7, 1985. That section provides as follows:

. . . [N]o person may install an underground storage tank for the purpose of storing regulated substances unless such tank (whether of single or double walled construction)—

(A) will prevent releases due to corrosion or structural failure for the operational life of the tank;

(B) is cathodically protected against corrosion, constructed of noncorrosive material, steel clad with a noncorrosive material, or designed in a manner to prevent the release or threatened release of any stored substance; and

(C) the material used in the construction or lining of the tank is compatible with the substance to be stored.

As a limited exception, section 9003(g)(2) allows the installation of tanks without corrosion protection in soil with a resistivity of 12,000 ohm-cm or more. Under that provision, soil tests must be conducted in accordance with American Society for Testing and Materials (ASTM) Standard G57-78.

II. Purpose of the Interpretive Rule

An interpretive rule is a statement issued by an agency to advise the public of the agency's construction of the statutes and rules that it administers. An interpretive rule simply construes the language of the statute or regulation and does not impose additional obligations. Such rules are exempt from the notice and comment requirements of the Administrative Procedures Act, 5 U.S.C. 553(b)(A) (1982). A substantive rule, such as the new tank standards authorized by section 9003(e), is a rule that is issued by an agency pursuant to statutory authority that implements the statute. EPA intends this notice to be an interpretive rule, not a substantive rule.

Section 9003(g) establishes statutory requirements that took effect on May 7, 1985 without prior action on the part of EPA. Several of the requirements set forth under section 9003(g) are in the form of performance standards. EPA believes that the interpretive rule clarifies obligations of the regulated community in complying with the interim prohibition. The rule also puts the regulated community on notice of the circumstances under which the Agency will proceed with enforcement action for noncompliance.

III. Other Related EPA Activities

On July 15, 1985, EPA codified the statutory language of section 9003(g) in its regulations at 40 CFR 280.2.

EPA is preparing a guidance document that is available in draft form in the Regional Offices. This document discusses methods and technologies for preventing releases from tanks due to corrosion, structural failure, or the storage of materials that are incompatible with the tanks' construction or lining. This guidance will assist tank users in determining effective approaches to meet the performance standards in section 9003(g).

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[1] "Underground storage tank" is defined under RCRA Subtitle I, section 9001(1) as any one or combination of tanks (including underground pipes connected thereto) which is used to contain an accumulation of regulated substances, and the volume of which (including the volume of the underground pipes connected thereto) is 10 percent or more beneath the surface of the ground. Such term does not include any—

(A) Farm or residential tank of 1,100 gallons or less capacity used for storing motor fuel for noncommercial purposes.

(B) Tank used for storing heating oil for consumptive use on the premises where stored.

(C) Septic tank.

(D) Pipeline facility (including gathering lines) regulated under-

(i) The Natural Gas Pipeline Safety Act of 1968, (49 U.S.C. App. 1671 et seq.),

(ii) The Hazardous Liquid Pipeline Safety Act of 1979 (49 U.S.C. App. 2001, et seq.), or

(iii) Which is an intrastate pipeline facility regulated under State laws comparable to the provisions of law referred to in clause (i) or (ii) of this subparagraph;

(E) Surface impoundment, pit, pond or lagoon.

(F) Storm water or waste water collection system.

(G) Flow-through process tank.

(H) Liquid trap or associated gathering lines directly related to oil or gas production and gathering operations, or

(I) Storage tank situated in an underground area (such as a basement, cellar, mineworking, drift, shaft or tunnel) if the storage tank is situated upon or above the surface of the floor.

"Regulated substances" are defined under RCRA Subtitle I, section 9001(2) as:

(A) Any substance defined in section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (but not including any substance regulated as a hazardous waste under Subtitle C), and

(B) Petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute).

[2] "Release" is defined under RCRA Subtitle I, section 9001(5) as any spilling, leaking, emitting, discharging, escaping, leaching, or disposing from an underground storage tank into ground water, surface water or subsurface soils.

IV. Legislative History of Section 9003(g)

Many of the storage tank provisions now contained in Subtitle I, including section 9003(g), had their origins in a bill introduced by Senator Durenberger on February 29, 1984 as an amendment to the Safe Drinking Water Act. 130 Cong. Rec. S2026 (Feb. 29, 1984). Among these provisions was a requirement that EPA promulgate new tank standards within nine months of the date of enactment of the proposed amendments. Such standards were to include a prohibition on bare steel tanks. *Id.* at S2026. The provisions established an exception from the bare steel tank ban "where the Administrator finds there is minimal danger of corrosion." *Id.* In describing that provision, Senator Durenberger stated that "installation of common but less adequate tanks—those made of bare steel—would be prohibited unless the hydrogeology of the area is such that there is a minimal danger of corrosion." *Id.* at S2027.

On July 25, 1984, Senator Durenberger offered a modified version of his storage tank provisions as an amendment to RCRA. 130 Cong. Rec. S9164 (July 25, 1984). This amendment was passed by the Senate. *Id.* at S9201. In this modified version, the deadline for new tank standards was extended and the bare steel ban was converted into an interim requirement that new tanks be installed in accordance with enforced national consensus code." This requirement was to go into effect ninety days after the bill was passed and remain effective until EPA promulgated new tank standards. *Id.* at S9163–64.

On the House of Representatives side, amendments to RCRA were passed but did not contain provisions for the regulation of underground storage tanks. 130 Cong. Rec. H9184 (November 3, 1983). On August 10, 1984, however, the House passed an underground storage tank bill as an amendment to CERCLA. 130 Cong. Rec. H8938, H9027 (August 10, 1984). The House bill contained an interim prohibition that provided as follows:

> Until the effective date of the regulations promulgated by the Administrator under subsection (a) and after 180 days after the date of the enactment of this title, no person may install or begin using an underground storage tank for the purpose of storing hazardous substances unless such tank, of either single or double wall construction, is cathodically protected against corrosion, constructed of noncorrosive material, steel clad with a noncorrosive material which would prevent corrosion for the operational life of the tank, or contained in a manner designed to prevent the release or threatened release of any stored hazardous substance and unless in all cases the material used in the construction or lining of the tank is compatible with the substance to be stored. *Id.* at H8939.

Subsequently, a Conference Committee was formed to consider the RCRA amendments passed by the Senate and the House. Although the House CERCLA bill was not officially under consideration by the RCRA Conference Committee, the conferees adopted the language of that bill's interim prohibition with several significant modifications. 130 Cong. Rec. H11121 (Oct. 3, 1984). These modifications included the requirement that every new tank prevent releases due to "Structural failure" for its "operational life" (section 9003(g)(A)) and the exception from corrosion protection requirements for tanks located in soil with a resistivity of 12,000 ohm/cm or more. The Conference Report described the reported provision as follows:

> Following enactment, the installation of bare steel tanks, i.e. those which provide little or no protection against corrosion, will be prohibited until the Administrator promulgates regulations establishing the conditions for installation. Bare steel tanks may be installed (pending promulgation of EPA regulations) only where properly conducted soil tests show resistivity at 12,000 ohms/cm or more. This provision replaces the provision in the Senate amendment which prohibits installation of bare steel tanks except in states that enforce a national consensus code.

130 Cong. Rec. 11139 (Oct. 3, 1984).

The bill, as reported by the Conference Committee, ultimately passed both houses and was signed by the President on November 8, 1984.

The legislative history of section 9003(g) reveals that, as originally introduced in the Senate, the section was aimed at preventing the installation of steel tank systems without corrosion protection. Ultimately, however, section 9003(g) was expanded not only to prohibit installation of bare steel tanks, but also to include requirements pertaining to the structural integrity of all newly installed tanks and the compatibility of the substances stored with the materials used in the construction and lining of such tanks.

V. EPA's Interpretation of Section 9003(g)

EPA reviewed the statutory language of section 9003(g) and its legislative history. Based upon this review, EPA's conclusions are set forth below.

Section 9003(g) (codified as 40 CFR 280.2) establishes three requirements that must be satisfied by all underground storage tanks (including underground pipes connected to the tanks) installed between May 7, 1985 and the effective date of new tank standards promulgated under RCRA section 9003(e), with the exception of tanks qualifying for the exemption from corrosion protection requirements under section 9003(g)(2). These requirements are: (1) That the tank and underground piping be designed, constructed, and installed to prevent releases due to corrosion for the operational life of the tank and the piping; (2) that the tank and underground piping be designed, constructed, and installed to prevent releases due to structural failure for the operational life of the tank and the piping; and (3) that the materials used in the construction or lining of the tank and its underground piping be compatible with the substance to be stored in the tank.

The first two of the above requirements are established by section 9003(g)(1)(A), which provides that tanks must "prevent releases due to corrosion or structural failure for the operational life of the tank." The third requirement is established by section 9003(g)(1)(C). In addition, section 9003(g)(1)(B) sets forth minimum requirements for tank design and construction. Under section 9003(g)(1)(B), tanks must be either cathodically protected against corrosion, constructed of noncorrosive material, steel clad with a noncorrosive material or designed in a manner to prevent the release or threatened release of any stored substance.

In addition to cathodically protected tanks and tanks constructed or clad with non-corrosive materials, section 9003(g)(1)(B) would permit the use of other types of tanks and protective measures if they are "designed in a manner to prevent the release or threatened release of any stored substance." Interested parties may consult with EPA on a case-by-case basis concerning the effectiveness of particular technologies for preventing releases.

There are several examples of tanks that do not satisfy the requirement of section 9003(g)(1)(A), that they prevent releases due to corrosion for the operational life of the tank. A steel tank whose only corrosion protection is a coating of noncorrosive materials that is applied in such a way that it will not prevent releases due to corrosion for the operational life of the tank is not adequate. Similarly, a cathodically protected tank whose cathodic protection is not designed to prevent releases for the operational life of the

tank will not be deemed to have satisfied this requirement.

Paint and asphalt coatings are not adequate for cathodic protection. Asphalt paints are soluble in a number of regulated substances that are normally stored in tanks, including solvents and hydrocarbons, such as gasoline. Applications of both asphalt paints and lead paints are thin, easily damaged during installation and easily worn away during use. They do not provide a complete seal for the tank; such paint or asphalt coatings do not provide corrosion resistance for the operational life of the tank and, therefore, do not comply with the interim prohibition.

Tanks that satisfy the requirement of section 9003(g)(1)(A) to prevent releases due to corrosion must still satisfy the requirements that they prevent releases due to "structural failure" and that the materials used in the construction of the tank be compatible with the substances to be stored. For example, a tank constructed of noncorrosive material that is subject to structural failure because of its design or installation would not satisfy the requirements of section 9003(g)(1). Similarly, a tank whose construction materials are not compatible with the product to be stored would not satisfy the requirements of section 9003(g)(1) because, although it satisfies the corrosion protection requirement of section 9003(g)(1)(A), it does not satisfy the compatibility requirement of section 9003(g)(1)(C).

Section 9003(g)(1) provides that "no person may install an underground storage tank" unless such tank satisfies the requirements of sections 9003(g)(1)(A), (B), and (C). EPA interprets the term "no person may install an underground storage tank" to encompass any persons responsible for having a tank installed, including among others owners, operators and installers. EPA also interprets section 9003(g) as applying to all new installations, including installation of previously used tanks and to any new installation of underground piping associated with underground tanks subject to the prohibition. When the new installation is only piping, only the new piping would be subject to the standards in section 9003(g).

With respect to the exemption from corrosion protection requirements provided by section 9003(g)(2), EPA interprets this provision as permitting the installation of a tank without corrosion protection if a person, prior to installation, demonstrates by means of soil testing conducted in accordance with ASTM Standard G57–58 that the soil at the location where the tank is to be installed does not have a resistivity of less than 12,000 ohm-cm.

A tank exempted from corrosion protection requirements under this section, however, must still satisfy the requirement that the tank be designed, constructed, and installed to prevent releases due to the structural failure of the tank and that the materials used in the construction or lining of the tank be compatible with the substances to be stored in the tank. Thus, for example, a steel tank without any type of corrosion protection may be installed at a location where the soil continues to have a resistivity of 12,000 ohm-cm during the operational life of the tank. However, if the tank is constructed or installed so that it suffers structural failure or is not compatible with the stored product and releases its contents, the tank would not be in compliance with section 9003(g).

VI. Summary of Supporting Analyses

1. Executive Order 12291

Executive Order 12291 [46 FR 13193, February 9, 1981] requires that a regulatory agency determine whether a new regulation will be "major" regulation and, if so, that a Regulatory Impact Analysis be conducted. A major rule is defined as regulation which is likely to result in:

(1) An annual effect on the economy of $100 million or more;

(2) A major increase in costs or prices for consumers, individual industries, Federal, State, and local government agencies, or geographic regions;

(3) Significant adverse effects on competition, employment, investment, productivity, innovation, or on the ability of United States-based enterprises to compete with foreign-based enterprises in domestic or export markets.

This rule does not have any of the impacts listed above. The Agency did conduct an economic impact analysis of the interim prohibition as part of the Hazardous Waste Management System: Final Codification Rule published in the Federal Register July 15, 1985. The Regulatory Impact Analysis concludes that upper bound cost estimates for the Interim Prohibition are under $10 million per year.

The interpretive rule has been submitted to the Office of Management and Budget (OMB) for review as required by Executive Order 12291.

2. Regulatory Flexibility Act

Pursuant to the Regulatory Flexibility Act, 5 U.S.C. 601 *et seq.*, whenever an agency publishes a general notice of rulemaking for any proposed or final rule, it must prepare and make available for public comment a regulatory flexibility analysis that describes the impact of the rule on small entities (i.e., small businesses, small organizations, 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.

The Regulatory Impact Analysis for the Final Codification Rule also addresses the impact of the Interim Prohibition on small entities and concludes that the Interim Prohibition will not have a significant economic impact on a substantial number of small entities. This interpretive rule does not, therefore, require a regulatory flexibility analysis.

Dated: May 21, 1986.

Lee M. Thomas,

Administrator.

[FR Doc. 86–12002 Filed 6–3–86; 8:45 am]

BILLING CODE 6560–50–M

APPENDIX C

APPENDIX C

STATE UNDERGROUND STORAGE CONTACTS

Alabama (EPA Form)

Alabama Department of Environmental Management
Groundwater Section/Water Division
1751 Federal Drive
Montgomery, Alabama 36130

(205) 671-7700

Alaska (EPA Form)

Department of Environmental Conservation
Pouch O
Juneau, Alaska 99811

(907) 465-2653

American Samoa (EPA Form)

Executive Secretary
Environmental Quality Commission
Office of the Governor
American Samoan Government
Pago Pago, American Samoa 96799
Attn: UST Notification

Arizona (EPA Form)

Attn: UST Coordinator
Arizona Department of Health Services
Environmental Health Services
2005 North Central
Phoenix, Arizona 85004

(602) 257-2300

Arkansas (EPA Form)

Arkansas Department of Pollution Control and Ecology
POB 9583
Little Rock, Arkansas 72219

(501) 562-7444

California (State Form)

Ed Anton
California Water Resources Control Board
POB 100
Sacramento, California 95801

(916) 445-9552

Colorado (EPA Form)

Kenneth Mesch, Section Chief
Colorado Department of Health
Waste Management Division
Underground Tank Program
4210 East 11th Avenue
Denver, Colorado 80220

(303) 320-8333, Ext. 4364

Connecticut (State Form)

Hazardous Materials Management Unit
Department of Environmental Protection
State Office Building
165 Capitol Avenue
Hartford, Connecticut 06106

(203) 566-3437

Delaware (State Form)

Division of Air and Waste Management
Department of Natural Resources and Environmental Control
POB 1401
89 Kings Highway
Dover, Delaware 19903

(302) 736-5409

District of Columbia (EPA Form)

Department of Consumer and Regulatory Affairs
Pesticides and Hazardous Waste Management Branch
Room 114
5010 Overlook Avenue, S.W.
Washington, D.C. 20032
Attn: UST Notification Form

(202) 767-7370

Florida (State Form)

Florida Department of Environmental Regulation
Solid Waste Section
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32301

(904) 487-4398

Georgia (EPA Form)

Georgia Department of Natural Resources
Environmental Protection Division
Underground Storage Tank Program
3420 Norman Berry Drive
Hapeville, Georgia 30354

(404) 656-3500

Guam (State Form)

James B. Branch, Administrator
Guam Environmental Protection Agency
POB 2999
Agana, Guam 96910

Overseas Operator
(Commercial Call 646-8863)

Hawaii (EPA Form)

Chief, Noise and Radiation Branch
Hawaii Department of Health
591 Ala Moana Boulevard
Honolulu, Hawaii 96801

(808) 548-4129

Idaho (EPA Form)

Underground Storage Tank Coordinator
Water Quality Bureau
Idaho Department of Health & Welfare
Division of Environment
450 West State Street
Boise, Idaho 83720

(208) 334-4251

Illinois (EPA Form)

Underground Storage Tank Coordinator
Division of Fire Prevention
Office of State Fire Marshal
3150 Executive Park Drive
Springfield, Illinois 62703-4599

(217) 782-6760

Indiana (EPA Form)

Division of Land Pollution Control, UST Program
Indiana State Board of Health
POB 7015
Indianapolis, Indiana 46207

(317) 243-5060

Iowa (State Form)

Iowa Department of Water, Air and Waste Management
900 East Grand
Des Moines, Iowa 50319

(515) 281-8692

Kansas (EPA Form)

Office of Environmental Geology
Kansas Department of Health and Environment
Forbes Field, Building 740
Topeka, Kansas 66620

(913) 862-9360 Ext. 221

Kentucky (State Form)

Natural Resources Cabinet
Division of Waste Management, Attn: Vicki Pettus
18 Reilly Road
Frankfort, Kentucky 40601

(502) 564-6716

Louisiana (State Form)

Patricia L. Norton, Secretary
Louisiana Department of Environmental Quality
POB 44066
Baton Rouge, Louisiana 70804

(504) 342-1265

Maine (State Form)

Attn: Underground Tanks Program
Bureau of Oil & Hazardous Material Control
Department of Environmental Protection
State House -- Station 17
Augusta, Maine 04333

(207) 289-2651

Maryland (EPA Form)

Science and Health Advisory Group
Office of Environmental Programs
201 West Preston Street
Baltimore, Maryland 21201

(301) 383-7328

Massachusetts (EPA Form)

UST Registry, Department of Public Safety
1010 Commonwealth Avenue
Boston, Massachusetts 02215

(617) 566-4500

Michigan (EPA Form)

Ground Water Quality Division
Department of Natural Resources
Box 30157
Lansing, Michigan 48909

(517) 373-1220

Minnesota (State Form)

Underground Storage Tank Program
Division of Solid and Hazardous Wastes
Minnesota Pollution Control Agency
1935 West County Road, B-2
Roseville, Minnesota 55113

(612) 296-7301

Mississippi (EPA Form)

Department of Natural Resources
Bureau of Pollution Control
POB 10385
Jackson, Mississippi 39209

(601) 961-5171

Missouri (EPA Form)

Gordon Ackley, UST Coordinator
Missouri Department of Natural Resources
POB 176
Jefferson City, Missouri 65102

(314) 751-3241

Montana (EPA Form)

Solid and Hazardous Waste Bureau
Department of Health and Environmental Science
Cogswell Building, Room B201
Helena, Montana 59620

(406) 444-3948

Nebraska (EPA Form)

Nebraska State Fire Marshal
POB 94677
Lincoln, Nebraska 68509-4677

(402) 471-2186

Nevada (EPA Form)

Attn: Underground Storage Tanks
Division of Environmental Protection
Department of Conservation and Natural Resources
Capitol Complex
201 South Fall Street
Carson City, Nevada 89710

(800) 992-0900, Ext. 4670

New Hampshire (EPA Form)

Water Supply and Pollution Control Commission
Hazen Drive
POB 95
Concord, New Hampshire 03301
Attn: UST Registration

(603) 271-3503

New Jersey (State Form)

Underground Storage Tank Coordinator
Department of Environmental Protection
Division of Water Resources (CN-029)
Trenton, New Jersey 08625

(609) 292-0424

New Mexico (EPA Form)

New Mexico Environmental Improvement Division
Ground Water/Hazardous Waste Bureau
POB 968
Santa Fe, New Mexico 87504

(505) 827-2933, 2918

New York (EPA Form)

Bulk Storage Section
Division of Water
Department of Environmental Conservation
50 Wolf Road, Room 326
Albany, New York 12233-0001

(518) 457-4351

North Carolina (EPA Form)

Division of Environmental Management/Ground Water Section
Department of Natural Resources & Community Development
POB 27687
Raleigh, North Carolina 27611

(919) 733-5083

North Dakota (State Form)

Division of Hazardous Waste Management & Special Studies
North Dakota Department of Health
Box 5520
Bismarck, North Dakota 58502-5520

(701) 224-2371

Northern Mariana Islands (EPA Form)

Chief
Division of Environmental Quality
POB 1304
Commonwealth of Northern Mariana Islands
Saipan, CM 96950

Overseas Operator: 6984
Cable address: GOV. NMI Saipan

Ohio (State Form)

State Fire Marshal's Office, UTN
Department of Commerce
8895 East Main Street
Reynoldsburg, Ohio 43068

State Hotline: (800) 282-1927

Oklahoma (EPA Form)

Underground Storage Tank Program
Oklahoma Corporation Commission
Jim Thorpe Building
Oklahoma City, Oklahoma 73105

(405) 521-2351

Oregon *

Underground Storage Tank Program
Hazardous and Solid Waste Division
Department of Environmental Quality
POB 1760
Portland, Oregon 97207

(503) 229-5788

Pennsylvania (EPA Form)

Pennsylvania Department of Environmental Resources
Bureau of Water Quality Management/Ground Water Unit
9th Floor, Fulton Building
POB 2063
Harrisburg, Pennsylvania 17120

(717) 787-2814

Puerto Rico (EPA Form)

Director, Water Quality Control Area
Environmental Quality Board
Commonwealth of Puerto Rico
POB 11488
Santurce, Puerto Rico 00910-1488

(809) 725-0717

Rhode Island (EPA Form)

UST Registration
Department of Environmental Management
204 Cannon Building
75 Davis Street
Providence, Rhode Island 02908

(401) 277-2234

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* May be using a State form. Owners should consult EPA to determine whether such form is in compliance with Section 9002.

South Carolina (State Form)

Attn: Susana Workman
Groundwater Protection Division
South Carolina Department of Health & Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

(803) 758-5213

South Dakota (EPA Form)

Office of Water Quality
Department of Water & Natural Resources
Joe Foss Building
Pierre, South Dakota 57501

(605) 773-4064

Tennessee (EPA Form)

Terry K. Cothron, Director
Division of Ground Water Protection
Tennessee Department of Health and Environment
150 Ninth Avenue, North
Nashville, Tennessee 37219-5404

(615) 741-7206

Texas (EPA Form)

Underground Storage Tank Program
Texas Water Commission
POB 13087
Austin, Texas 78711

(512) 458-7485

Utah (EPA Form)

Kenneth L. Alkema
Division of Environmental Health
POB 45500
Salt Lake City, Utah 84145-0500

(801) 533-6121

Vermont (State Form)

Underground Storage Tank Program
Vermont AEC/Waste Management Division
State Office Building
Montpelier, Vermont 05602

(802) 828-3395

Virginia (EPA Form)

Russell P. Ellison, III, P.G.
Virginia Water Control Board
POB 11143
Richmond, Virginia 23230-1143

(804) 257-6685

Virgin Islands (EPA Form)

205(J) Coordinator
Division of Natural Resources Management
14F Building 111, Watergut Homes
Christianstead, St. Croix, Virgin Islands 00820

Washington (State Form)

Earl W. Tower, Supervisor
Department of Ecology, M/S PV-11
Management Division, Solid and Hazardous Waste
Olympia, Washington 98504-8711

(206) 459-6316

West Virginia (EPA Form)

Solid and Hazardous Waste/Ground Water Branch
West Virginia Department of Natural Resources
1201 Greenbriar Street
Charleston, West Virginia 25311
Attn: UST Notification

Wisconsin (State Form)

Bureau of Petroleum Inspection
POB 7969
Madison, Wisconsin 53707

(608) 266-7605

Wyoming (EPA Form)

Water Quality Division
Department of Environmental Quality
Herschler Building, 4th Floor West
122 West 25th Street
Cheyenne, Wyoming 82002

(307) 777-7781

APPENDIX D

APPENDIX D

Recommended Publications

CORROSION REFERENCES

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For further information on specifications for tank materials and construction, contact the organizations listed below:

CARBON STEEL

American Iron and Steel Institute
1000 Sixteenth Street, N.W.
Washington, D.C. 20036

American National Standards Institute
1430 Broadway
New York, NY 10018

Information on standards and specifications of the Canadian Standards Association and the International Organization for Standardization may also be obtained from ANSI.

American Petroleum Institute
1220 L Street, N.W.
Washington, D.C. 20005

American Society of Mechanical Engineers
345 East 47th Street
New York, NY 10017

American Society for Testing and Materials
1916 Race Street
Philadelphia, PA 19103

American Welding Society
2501 N.W. Seventh Street
Miami, FL 33125

National Association of Corrosion Engineers
1440 South Creek
Houston, TX 77084

National Fire Protection Association
Batterymarch Park
Quincy, MA 02269

Steel Tank Institute
666 Dundee Road
Northbrook, IL 60062

Underwriters' Laboratories, Inc.
333 Pfingsten Road
Northbrook, IL 60062

FIBERGLASS-REINFORCED PLASTIC

American Society for Testing and Materials
1916 Race Street
Philadelphia, PA 19103

National Fire Protection Association
Batterymarch Park
Quincy, MA 02269

Underwriters' Laboratories, Inc.
333 Pfingsten Road
Northbrook, IL 60062

TANK RELINING - SURFACE PREPARATION

Steel Structures Painting Council
4400 5th Avenue
Pittsburgh, PA 15213

APPENDIX E

HAZARDOUS SUBSTANCE LIST

FOR REGULATION OF UNDERGROUND STORAGE TANKS UNDER RESOURCE CONSERVATION AND RECOVERY ACT, SUBTITLE I

Hazardous Substance	CASRN*
Acenaphthene	83329
Acenaphthylene	208968
Acetaldehyde	75070
Acetaldehyde, chloro-	107200
Acetaldehyde, trichloro-	75876
Acetamide, N-(aminothioxomethyl)-	591082
Acetamide, N-(4-ethoxyphenyl)-	62442
Acetamide, N-9H-fluoren-2-yl-	53963
Acetamide, 2-fluoro-	640197
Acetic acid	64197
Acetic acid, ethyl ester	141786
Acetic acid, fluoro-, sodium salt	62748
Acetic acid, lead salt	301042
Acetic acid, thallium(I) salt	563688
Acetic anhydride	108247
Acetimidic acid, N-[(methylcarbamoyl) oxy] thio-, methyl ester	16752775
Acetone	67641
Acetone cyanohydrin	75865
Acetonitrile	75058
3-(alpha-Acetonylbenzyl)-4-hydroxycoumarin and salts	81812
Acetophenone	98862
2-Acetylaminofluorene	53963
Acetyl bromide	506967
Acetyl chloride	75365
1-Acetyl-2-thiourea	591082
Acrolein	107028
Acrylamide	79061
Acrylic acid	79107
Acrylonitrile	107131
Adipic acid	124049
Alanine, 3-[p-bis(2-chloroethyl)amino]phenyl-,L-	148823
Aldicarb	116063
Aldrin	309002
Allyl alcohol	107186
Allyl chloride	107051
Aluminum phosphide	20859738
Aluminum sulfate	10043013
5-(Aminomethyl)-3-isoxazolol	2763964
4-Aminopyridine	504245
Amitrole	61825
Ammonia	7664417
Ammonium acetate	631618
Ammonium benzoate	1863634
Ammonium bicarbonate	1066337
Ammonium bichromate	7789095
Ammonium bifluoride	1341497
Ammonium bisulfite	10192300
Ammonium carbamate	1111780
Ammonium carbonate	506876
Ammonium chloride	12125029
Ammonium chromate	7788989
Ammonium citrate, dibasic	3012655

Hazardous Substance	CASRN
Ammonium fluoborate	13826830
Ammonium fluoride	12125018
Ammonium hydroxide	1336216
Ammonium oxalate	6009707 5972736 14258492
Ammonium picrate	131748
Ammonium silicofluoride	16919190
Ammonium sulfamate	7773060
Ammonium sulfide	12135761
Ammonium sulfite	10196040
Ammonium tartrate	14307438 3164292
Ammonium thiocyanate	1762954
Ammonium thiosulfate	7783188
Ammonium vanadate	7803556
Amyl acetate iso- sec- tert-	628637 123922 626380 625161
Aniline	62533
Anthracene	120127
Antimony ††	7440360
ANTIMONY AND COMPOUNDS	
Antimony pentachloride	7647189
Antimony potassium tartrate	28300745
Antimony tribromide	7789619
Antimony trichloride	10025919
Antimony trifluoride	7783564
Antimony trioxide	1309644
Aroclor 1016	12674112
Aroclor 1221	11104282
Aroclor 1232	11141165
Aroclor 1242	53469219
Aroclor 1248	12672296
Aroclor 1254	11097691
Aroclor 1260	11096825
Arsenic ††	7440382
Arsenic acid	1327522 7778394
ARSENIC AND COMPOUNDS	
Arsenic disulfide	1303328
Arsenic (III) oxide	1327533
Arsenic(V) oxide	1303282
Arsenic pentoxide	1303282
Arsenic trichloride	7784341
Arsenic trioxide	1327533
Arsenic trisulfide	1303339
Arsine, diethyl-	692422
Asbestos †††	1332214
Auramine	492808
Azaserine	115026
Aziridine	151564
Aziridinol[2',3':3,4]pyrrolo[1,2-a]indole-4,7-dione, 6-amino-8-[[(aminocarbonyl)oxy]methyl]-1,1a,2,8,8a,8b-hexahydro-8a-methoxy-5-methyl-	50077

Hazardous Substance	CASRN
Barium cyanide	542621
Benz(j)aceanthrylene, 1,2-dihydro-3-methyl-	56495
Benz(c)acridine	225514
3,4-Benzacridine	225514
Benzal chloride	98873
Benz(a)anthracene	56553
1,2-Benzanthracene	56553
1,2-Benzanthracene, 7,12-dimethyl-	57976
Benzenamine	62533
Benzenamine, 4,4'-carbonimidoylbis[N,N-dimethyl-	492808
Benzenamine, 4-chloro-	106478
Benzenamine, 4-chloro-2-methyl-, hydrochloride	3165933
Benzenamine, N,N-dimethyl-4-phenylazo-	60117
Benzenamine, 4,4'-methylenebis(2-chloro-	101144
Benzenamine, 2-methyl-, hydrochloride	636[illegible]
Benzenamine, 2-methyl-5-nitro-	99558
Benzenamine, 4-nitro-	100016
Benzene	7[illegible]
Benzene, 1-bromo-4-phenoxy-	101553
Benzene chloro-	108907
Benzene, chloromethyl-	100447
Benzene, 1,2-dichloro-	95501
Benzene, 1,3-dichloro-	541731
Benzene, 1,4-dichloro-	106467
Benzene, dichloromethyl-	98873
Benzene, 2,4-diisocyanatomethyl	584849 91087 26471625
Benzene, dimethyl m- o- p-	1330207 108383 95476 106423
Benzene, hexachloro-	118741
Benzene, hexahydro-	110827
Benzene, hydroxy-	108952
Benzene, methyl-	108883
Benzene, 1-methyl-2,4-dinitro-	121142
Benzene, 1-methyl-2,6-dinitro-	606202
Benzene, 1,2-methylenedioxy-4-allyl-	94597
Benzene, 1,2-methylenedioxy-4-propenyl-	120581
Benzene, 1,2-methylenedioxy-4-propyl-	94586
Benzene, 1-methylethyl-	98828
Benzene, nitro-	98953
Benzene, pentachloro-	608935
Benzene, pentachloronitro-	82688
Benzene, 1,2,4,5-tetrachloro-	95943
Benzene, trichloromethyl-	98077
Benzene, 1,3,5-trinitro-	99354
Benzeneacetic acid, 4-chloro-alpha-(4-chlorophenyl)-alpha-hydroxy-, ethyl ester	510156
1,2-Benzenedicarboxylic acid anhydride	85449
1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	117817
1,2-Benzenedicarboxylic acid, dibutyl ester	84742
1,2-Benzenedicarboxylic acid, diethyl ester	84662

*Chemical Abstracts Service Registry Number

Hazardous Substance	CASRN
1,2-Benzenedicarboxylic acid, dimethyl ester	131113
1,2-Benzenedicarboxylic acid, di-n-octyl ester	117840
1,3-Benzenediol	108463
1,2-Benzenediol,4-[1-hydroxy-2-(methylamino)ethyl]	51434
Benzenesulfonic acid chloride	98099
Benzenesulfonyl chloride	98099
Benzenethiol	108985
Benzidine	92875
1,2-Benzisothiazolin-3-one,1,1-dioxide, and salts	81072
Benzo(a)anthracene	56553
Benzo(b)fluoranthene	205992
Benzo(k)fluoranthene	207089
Benzo(g,h,i) fluorene	206440
Benzoic acid	65850
Benzonitrile	100470
Benzo(g,h,i)perylene	191242
Benzo(a)pyrene	50328
3,4-Benzopyrene	50328
p-Benzoquinone	106514
Benzotrichloride	98077
Benzoyl chloride	98884
1,2-Benzophenanthrene	218019
Benzyl chloride	100447
Beryllium ††	7440417
BERYLLIUM AND COMPOUNDS	
Beryllium chloride	7787475
Beryllium dust	7440417
Beryllium fluoride	7787497
Beryllium nitrate	13597994
	7787555
alpha - BHC	319846
beta - BHC	319857
gamma - BHC	58899
delta - BHC	319868
2,2'-Bioxirane	1464535
(1,1'-Biphenyl)-4,4'-diamine	92875
(1,1'-Biphenyl)-4,4'-diamine,3,3'-dichloro-	91941
(1,1'-Biphenyl)-4,4'-diamine,3,3'-dimethoxy-	119904
(1,1'-Biphenyl)-4,4'-diamine,3,3'-dimethyl-	119937
Bis(2-chloroethoxy) methane	111911
Bis (2-chloroethyl) ether	111444
Bis(2-chloroisopropyl) ether	108601
Bis(chloromethyl) ether	542881
Bis(dimethylthiocarbamoyl) disulfide	137268
Bis(2-ethylhexyl)phthalate	117817
Bromine cyanide	506683
Bromoacetone	598312
Bromoform	75252
4-Bromophenyl phenyl ether	101553
Brucine	357573
1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	87683
1-Butanamine N-butyl-N-nitroso	924163
Butanoic acid, 4-[bis(2-chloroethyl)amino]benzene	305033
1-Butanol	71363

Hazardous Substance	CASRN
2-Butanone	78933
2-Butanone peroxide	1338234
2-Butenal	123739
	4170303
2-Butene, 1,4-dichloro-	764410
Butyl acetate	123864
iso-	110190
sec-	105464
tert-	540885
n-Butyl alcohol	71363
Butylamine	109739
iso-	78819
sec-	513495
sec-	13952846
tert-	75649
Butyl benzyl phthalate	85687
n-Butyl phthalate	84742
Butyric acid	107926
iso-	79312
Cacodylic acid	75605
Cadmium ††	7440439
Cadmium acetate	543908
CADMIUM AND COMPOUNDS	
Cadmium bromide	7789426
Cadmium chloride	10108642
Calcium arsenate	7778441
Calcium arsenite	52740166
Calcium carbide	75207
Calcium chromate	13765190
Calcium cyanide	592018
Calcium dodecylbenzene sulfonate	26264062
Calcium hypochlorite	7778543
Camphene, octachloro-	8001352
Captan	133062
Carbamic acid, ethyl ester	51796
Carbamic acid, methylnitroso-,ethyl ester	615532
Carbamide, N-ethyl-N-nitroso-	759739
Carbamide, N-methyl-N-nitroso-	684935
Carbamide, thio-	62566
Carbamimidoselenoic acid	630104
Carbamoyl chloride, dimethyl-	79447
Carbaryl	63252
Carbofuran	1563662
Carbon bisulfide	75150
Carbon disulfide	75150
Carbonic acid, dithallium (I) salt	6533739
Carbonochloridic acid, methyl ester	79221
Carbon oxyfluoride	353504
Carbon tetrachloride	56235
Carbonyl chloride	75445
Carbonyl fluoride	353504
Chloral	75876
Chlorambucil	305033
CHLORDANE (TECHNICAL MIXTURE AND METABOLITES).	
Chlordane	57749

Hazardous Substance	CASRN
Chlordane, technical	57749
CHLORINATED BENZENES	
CHLORINATED ETHANES	
CHLORINATED NAPHTHALENE	
CHLORINATED PHENOLS	
Chlorine	7782505
Chlorine cyanide	506774
Chlormaphazine	494[illegible]
Chloroacetaldehyde	107[illegible]
CHLOROALKYL ETHERS	
p-Chloroaniline	106[illegible]
Chlorobenzene	108[illegible]
4-Chloro-m-cresol	5050[illegible]
p-Chloro-m-cresol	59507
Chlorobromomethane	124481
1-Chloro-2,3-epoxypropane	106898
Chloroethane	7500[illegible]
2-Chloroethyl vinyl ether	1107[illegible]
Chloroform	676[illegible]
Chloromethyl methyl ether	1079[illegible]
beta-Chloronaphthalene	915[illegible]
2-Chloronaphthalene	915[illegible]
2-Chlorophenol	95[illegible]
o-Chlorophenol	95[illegible]
4-Chlorophenyl phenyl ether	7005723
1-(o-Chlorophenyl)thiourea	5344[illegible]
3-Chloropropionitrile	5427[illegible]
Chlorosulfonic acid	7790[illegible]
4-Chloro-o-toluidine, hydrochloride	3165[illegible]
Chlorpyrifos	292[illegible]
Chromic acetate	1066[illegible]
Chromic acid	11115745
	7738945
Chromic acid, calcium salt	13765[illegible]
Chromic sulfate	1010[illegible]
Chromium ††	7440[illegible]
CHROMIUM AND COMPOUNDS	
Chromous chloride	1004[illegible]
Chrysene	218[illegible]
Cobaltous bromide	7789[illegible]
Cobaltous formate	544183
Cobaltous sulfamate	14017415
Coke Oven Emissions	N.A
Copper ††	7440508
COPPER AND COMPOUNDS	
Copper cyanide	544923
Coumaphos	56724
Creosote	8001589
Cresol(s)	1319773
m-	108394
o-	95487
p-	106445
Cresylic acid	1319773
m-	108394
o-	95487
p-	106445
Crotonaldehyde	123739
	4170303
Cumene	98828

Hazardous Substance	CASRN
Cupric acetate	142712
Cupric acetoarsenite	12002038
Cupric chloride	7447394
Cupric nitrate	3251238
Cupric oxalate	5893663
Cupric sulfate	7758987
Cupric sulfate ammoniated	10380297
Cupric tartrate	815827
CYANIDES	
Cyanides (soluble cyanide salts), not elsewhere specified	57125
Cyanogen	460195
Cyanogen bromide	506683
Cyanogen chloride	506774
2,5-Cyclohexadienedione	106514
Cyclohexane	110827
Cyclohexanone	108941
1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-	77474
Cyclophosphamide	50180
2,4-D acid	94757
2,4-D Esters	94111 94791 94804 1320189 1928387 1928616 1929733 2971382 25168267 53467111
2,4-D, salts and esters	94757
Daunomycin	20830813
DDD	72548
4,4' DDD	72548
DDE	72559
4,4' DDE	72559
DDT	50293
4,4' DDT	50293
DDT AND METABOLITES	
Decachlorooctahydro-1,3,4-metheno-2H-cyclobuta[c,d]pentalen-2-one	143500
Diallate	2303164
Diamine	302012
Diaminotoluene	95807 25376458
Diazinon	496720 333415 5333415
Dibenz[a,h]anthracene	53703
1,2:5,6-Dibenzanthracene	53703
Dibenzo[a,h]anthracene	53703
1,2:7,8-Dibenzopyrene	189559
Dibenz[a,i]pyrene	189559
1,2-Dibromo-3-chloropropane	96128
Dibutyl phthalate	84742
Di-n-butyl phthalate	84742
Dicamba	1918009
Dichlobenil	1194656
Dichione	117806
S-(2,3-Dichloroallyl) diisopropylthiocarbamate	2303164
3,5-Dichloro-N-(1,1-dimethyl-2-propynyl)benzamide	23950585

Hazardous Substance	CASRN
Dichlorobenzene (mixed)	25321226
1,2-Dichlorobenzene	95501
1,3-Dichlorobenzene	541731
1,4-Dichlorobenzene	106467
m-Dichlorobenzene	541731
o-Dichlorobenzene	95501
p-Dichlorobenzene	106467
DICHLOROBENZIDINE	
3,3'-Dichlorobenzidine	91941
Dichlorobromomethane	75274
1,4-Dichloro-2-butene	764410
Dichlorodifluoromethane	75718
Dichlorodiphenyl dichloroethane	72548
Dichlorodiphenyl trichloroethane	50293
1,1-Dichloroethane	75343
1,2-Dichloroethane	107062
1,1-Dichloroethylene	75354
1,2-trans-Dichloroethylene	156605
Dichloroethyl ether	111444
2,4-Dichlorophenol	120832
2,6-Dichlorophenol	87650
2,4-Dichlorophenoxyacetic acid, salts and esters	94757
Dichlorophenylarsine	696286
Dichloropropane	26638197
1,1-Dichloropropane	78999
1,3-Dichloropropane	142289
1,2-Dichloropropane	78875
Dichloropropane - Dichloropropene (mixture)	8003198
Dichloropropene	26952238
2,3-Dichloropropene	78886
1,3-Dichloropropene	542756
2,2-Dichloropropionic acid	75990
Dichlorvos	62737
Dieldrin	60571
1,2:3,4-Diepoxybutane	1464535
Diethylamine	109897
Diethylarsine	692422
1,4-Diethylene dioxide	123911
N,N'-Diethylhydrazine	1615801
O,O-Diethyl S-[2-(ethylthio)ethyl]phosphorodithioate	298044
O,O-Diethyl S-methyl dithiophosphate	3288582
Diethyl-p-nitrophenyl phosphate	311455
Diethyl phthalate	84662
O,O-Diethyl O-pyrazinyl phosphorothioate	297972
Diethylstilbestrol	56531
1,2-Dihydro-3,6-pyridazinedione	123331
Dihydrosafrole	94586
Diisopropyl fluorophosphonate	55914
Dimethoate	60515
3,3'-Dimethoxybenzidine	119904
Dimethylamine	124403
Dimethylaminoazobenzene	60117
7,12-Dimethylbenz[a]anthracene	57976
3,3'-Dimethylbenzidine	119937
alpha,alpha-Dimethylbenzylhydroperoxide	80159
3,3-Dimethyl-1-(methylthio)-2-butanone,O-[(methylamino)carbonyl] oxime	39196184
Dimethylcarbamoyl chloride	79447

Hazardous Substance	CASRN
1,1-Dimethylhydrazine	57147
1,2-Dimethylhydrazine	540738
O,O-Dimethyl O-p-nitrophenyl phosphorothioate	298000
Dimethylnitrosamine	62759
alpha, alpha-Dimethylphenethylamine	122098
2,4-Dimethylphenol	105679
Dimethyl phthalate	131113
Dimethyl sulfate	77781
Dinitrobenzene (mixed)	25154545
m-	99650
o-	528290
p-	100254
4,6-Dinitro-o-cresol and salts	534521
4,6-Dinitro-o-cyclohexylphenol	131895
Dinitrophenol	25550587
2,5-	329715
2,6-	573560
2,4-Dinitrophenol	5128
Dinitrotoluene	25321146
3,4-Dinitrotoluene	610399
2,4-Dinitrotoluene	121142
Dinoseb	88857
Di-n-octyl phthalate	117840
1,4-Dioxane	123911
DIPHENYLHYDRAZINE	
1,2-Diphenylhydrazine	122667
Diphosphoramide, octamethyl-	152169
Dipropylamine	142847
Di-n-propylnitrosamine	621647
Diquat	85007 2764729
Disulfoton	298044
2,4-Dithiobiuret	541537
Dithiopyrophosphonic acid, tetraethyl ester	3689245
Diuron	330541
Dodecylbenzenesulfonic acid	27176870
Endosulfan	115297
alpha-Endosulfan	959988
beta-Endosulfan	33213659
ENDOSULFAN AND METABOLITES	
Endosulfan sulfate	1031078
Endothall	145733
Endrin	72208
Endrin aldehyde	7421934
ENDRIN AND METABOLITES	
Epichlorohydrin	106898
Epinephrine	51434
Ethanal	75070
Ethanamine, 1,1-dimethyl-2-phenyl-	122098
Ethanamine, N-ethyl-N-nitroso-	55185
Ethane, 1,2-dibromo-	106934
Ethane, 1,1-dichloro-	75343
Ethane, 1,2-dichloro-	107062
Ethane, 1,1,1,2,2,2-hexachloro-	67721
Ethane, 1,1'-[methylenebis(oxy)]bis[2-chloro-	111911
Ethane, 1,1'-oxybis-	60297
Ethane, 1,1'-oxybis[2-chloro-	111444
Ethane, pentachloro-	76017

Hazardous Substance	CASRN
Ethane, 1,1,1,2-tetrachloro-	630206
Ethane, 1,1,2,2-tetrachloro-	79345
Ethane, 1,1,2-trichloro-	79005
Ethane, 1,1,1-trichloro-2,2-bis(p-methoxyphenyl)-	72435
1,2-Ethanediylbiscarbamodithioic acid	111546
Ethanenitrile	75058
Ethanethioamide	62555
Ethanol, 2,2'-(nitrosoimino)bis-	1116547
Ethanone, 1-phenyl-	98862
Ethanoyl chloride	75365
Ethanamine, N-methyl-N-nitroso	4549400
Ethene, chloro-	75014
Ethene, 2-chloroethoxy	110758
Ethene, 1,1-dichloro-	75354
Ethene, 1,1,2,2-tetrachloro-	127184
Ethene, trans- 1,2-dichloro-	156605
Ethion	563122
Ethyl acetate	141786
Ethyl acrylate	140885
Ethylbenzene	100414
Ethyl carbamate (Urethan)	51796
Ethyl cyanide	107120
Ethyl 4,4-dichlorobenzilate	510156
Ethylene dibromide	106934
Ethylene dichloride	107062
Ethylene oxide	75218
Ethylenebis(dithiocarbamic acid)	111546
Ethylenediamine	107153
Ethylenediamine tetraacetic acid (EDTA)	60004
Ethylenethiourea	96457
Ethylenimine	151564
Ethyl ether	60297
Ethylidene dichloride	75343
Ethyl methacrylate	97632
Ethyl methanesulfonate	62500
Famphur	52857
Ferric ammonium citrate	1185575
Ferric ammonium oxalate	2944674 55488874
Ferric chloride	7705080
Ferric dextran	9004664
Ferric fluoride	7783508
Ferric nitrate	10421484
Ferric sulfate	10028225
Ferrous ammonium sulfate	10045893
Ferrous chloride	7758943
Ferrous sulfate	7720787 7782630
Fluoroacetic acid, sodium salt	62748
Fluoranthene	206440
Fluorene	86737
Fluorine	7782414
Fluoroacetamide	640197
Formaldehyde	50000
Formic acid	64186
Fulminic acid, mercury(II) salt	628864
Fumaric acid	110178
Furan	110009
Furan, tetrahydro-	109999
2-Furancarboxaldehyde	98011
2,5-Furandione	108316
Furfural	98011
Furfuran	110009
D-Glucopyranose, 2-deoxy-2-(3-methyl-3-nitrosoureido)-	18883664
Glycolaldehyde	765344
Guanidine, N-nitroso-N-methyl-N'-nitro	70257
Guthion	86500
HALOETHERS	
HALOMETHANES	
Heptachlor	76448
HEPTACHLOR AND METABOLITES	
Heptachlor epoxide	1024573
Hexachlorobenzene	118741
Hexachlorobutadiene	87683
HEXACHLOROCYCLOHEXANE (all isomers)	608731
Hexachlorocyclohexane (gamma isomer)	58899
Hexachlorocyclopentadiene	77474
1,2,3,4,10,10-Hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-endo,endo-1,4:5,8-dimethanonaphthalene	72208
1,2,3,4,10,10-Hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-endo,exo-1,4:5,8-dimethanonaphthalene.	60571
Hexachloroethane	67721
Hexachlorohexahydro-endo,endo-dimethanonaphthalene	465736
1,2,3,4,10,10-Hexachloro-1,4,4a,5,8,8a-hexahydro-1,4,5,8-endo,endo-dimethanonaphthalene.	465736
1,2,3,4,10-10-Hexachloro-1,4,4a,5,8,8a,-hexahydro-1,4-5,8- endo, exo-dimethanonaphthalene.	309002
Hexachloropropene	70304
Hexachlorocyclopropene	1888717
Hexaethyl tetraphosphate	757584
Hydrazine	302012
Hydrazine 1,2-diethyl-	1615801
Hydrazine, 1,1-dimethyl-	57147
Hydrazine, 1,2-dimethyl-	540738
Hydrazine, 1,2-diphenyl-	122667
Hydrazine, methyl-	60344
Hydrazinecarboximidamide	79196
Hydrochloric acid	7647010
Hydrocyanic acid	74908
Hydrofluoric acid	7664393
Hydrogen cyanide	74908
Hydrogen fluoride	7664393
Hydrogen phosphide	7803512
Hydrogen sulfide	7783064
Hydroperoxide, 1-methyl-1-phenylethyl-	80159
Hydrosulfuric acid	7783064
Hydroxydimethylarsine oxide	75605
2-Imidazolidinethione	96457
Indeno(1,2,3-cd)pyrene	193395
Iron dextran	9004664
Isobutyl alcohol	78831
Isocyanic acid, methyl ester	624839
Isophorone	78591
Isoprene	78795
Isopropanolamine dodecylbenzenesulfonate	42504461
Isosafrole	120581
3(2H)-Isoxazolone, 5-(aminomethyl)-	2763964
Kelthane	115322
Kepone	143500
Lasiocarpine	303344
Lead TT	7439921
Lead acetate	301042
LEAD AND COMPOUNDS	
Lead arsenate	7784409 7645252 10102484
Lead chloride	7758954
Lead fluoborate	13814965
Lead fluoride	7783462
Lead iodide	10101630
Lead nitrate	10099748
Lead phosphate	7446277
Lead stearate	7428480 1072351 56189094 52652592
Lead subacetate	1335326
Lead sulfate	15739807 7446142
Lead sulfide	1314870
Lead thiocyanate	592870
Lindane	58899
Lithium chromate	14307358
Malathion	121755
Maleic acid	110167
Maleic anhydride	108316
Maleic hydrazide	123331
Malononitrile	109773
Melphalan	148823
Mercaptodimethur	2032657
Mercuric cyanide	592041
Mercuric nitrate	10045940
Mercuric sulfate	7783359
Mercuric thiocyanate	592858
Mercurous nitrate	10415755 7782867
Mercury	7439976
MERCURY AND COMPOUNDS	
Mercury, (acetato-O)phenyl-	62384
Mercury fulminate	628864
Methacrylonitrile	126987
Methanamine, N-methyl-	124403
Methane, bromo-	74839
Methane, chloro-	74873
Methane, chloromethoxy-	107302
Methane, dibromo-	74953
Methane, dichloro-	75092
Methane, dichlorodifluoro-	75718
Methane, iodo-	74884
Methane, oxybis[chloro-	542881

Hazardous Substance	CASRN
Methane, tetrachloro-	5u235
Methane, tetranitro-	509148
Methane, tribromo-	75252
Methane, trichloro-	67663
Methane, trichlorofluoro-	75694
Methanesulfonic acid, ethyl ester	62500
Methanethiol	74931
Methanesulfenyl chloride, trichloro-	594423
4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-	76448
Methanoic acid	64186
4,7-Methanoindan, 1,2,4,5,6,7,8,8-octachloro-3a,4,7,7a-tetrahydro-	57749
Methanol	67561
Methapyrilene	91805
Methomyl	16752775
Methoxychlor	72435
Methyl alcohol	67561
2-Methylaziridine	75558
Methyl bromide	74839
1-Methylbutadiene	504609
Methyl chloride	74873
Methyl chlorocarbonate	79221
Methyl chloroform	71556
4,4-Methylenebis(2-chloroaniline)	101144
2,2'-Methylenebis(3,4,6-trichlorophenol)	70304
3-Methylcholanthrene	56495
Methylene bromide	74953
Methylene chloride	75092
Methylene oxide	50000
Methyl ethyl ketone	78933
Methyl ethyl ketone peroxide	1338234
Methyl hydrazine	60344
Methyl iodide	74884
Methyl isobutyl ketone	108101
Methyl isocyanate	624839
2-Methyllactonitrile	75865
Methylmercaptan	74931
Methyl methacrylate	80626
N-Methyl-N'-nitro-N-nitrosoguanidine	70257
Methyl parathion	298000
4-Methyl-2-pentanone	108101
Methylthiouracil	56042
Mevinphos	7786347
Mexacarbate	315184
Mitomycin C	50077
Monoethylamine	75047
Monomethylamine	74895
Naled	300765
5,12-Naphthacenedione, 8S-cis)-8-acetyl-10-[(3-amino-2,3,6-trideoxy-alpha-L-lyxo-hexopyranosyl)oxy]-7,8,9,10-tetrahydro-6,8,11-trihydroxy-1-methoxy-	20830813
Naphthalene, 2-chloro-	91203
Naphthalene, 2-chloro-	91587
1,4-Naphthalenedione	130154
2,7-Naphthalenedisulfonic acid,3,3'-[(3,3'-dimethyl-(1,1'-biphenyl)-4,4'-diyl)-bis(azo)]bis(5-amino-4-hydroxy)-tetrasodium salt	72571
Naphthenic acid	1338245
1,4-Naphthoquinone	130154
1-Naphthylamine	134327
2-Naphthylamine	91598
alpha-Naphthylamine	134327
beta-Naphthylamine	91598
2-Naphthylamine, N,N-bis(2-chloroethyl)-	494031
1-(o-tolyl)-2-Naphthylthiourea	86884
Nickel ††	7440020
NICKEL AND COMPOUNDS	
Nickel ammonium sulfate	15699180
Nickel carbonyl	13463393
Nickel chloride	7718549 37211055
Nickel cyanide	557197
Nickelous cyanide	557197
Nickel hydroxide	12054487
Nickel nitrate	14216752
Nickel sulfate	7786814
Nickel tetracarbonyl	13463393
Nicotine and salts	54115
Nitric acid	7697372
Nitric oxide	10102439
p-Nitroaniline	100016
Nitrobenzene	98953
Nitrogen dioxide	10102440 10544726
Nitrogen(II) oxide	10102439
Nitrogen(IV) oxide	10102440 10544726
Nitroglycerine	55630
Nitrophenol (mixed)	25154556
m-	554847
o-	88755
p-	100027
p-Nitrophenol	100027
2-Nitrophenol	88755
4-Nitrophenol	100027
NITROPHENOLS	
2-Nitropropane	79469
NITROSAMINES	
N-Nitrosodi-n-butylamine	924163
N-Nitrosodiethanolamine	1116547
N-Nitrosodiethylamine	55185
N-Nitrosodimethylamine	62759
N-Nitrosodiphenylamine	86306
N-Nitrosodi-n-propylamine	621647
N-Nitroso-N-ethylurea	759739
N-Nitroso-N-methylurea	684935
N-Nitroso-N-methylurethane	615532
N-Nitrosomethylvinylamine	4549400
N-Nitrosopiperidine	100754
N-Nitrosopyrrolidine	930552
Nitrotoluene	1321126
m-	99081
o-	88722
p-	99990
5-Nitro-o-toluidine	99558
5-Norbornene-2,3-dimethanol,1,4,5,6,7,7-hexachloro-, cyclic sulfite	115297
Octamethylpyrophosphoramide	152169
Osmium oxide	20816120
Osmium tetroxide	20816120
7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid	145733
1,2-Oxathiolane,2,2-dioxide	1120714
2H-1,3,2-Oxazaphosphorine,2-[bis(2-chloroethyl) amino]tetrahydro-2-oxide.	50180
Oxirane	75218
Oxirane, 2-(chloromethyl)-	106898
Paraformaldehyde	30525894
Paraldehyde	123637
Parathion	56382
Pentachlorobenzene	608935
Pentachloroethane	76017
Pentachloronitrobenzene	82688
Pentachlorophenol	87865
1,3-Pentadiene	504609
Phenacetin	62442
Phenanthrene	85018
Phenol	108952
Phenol, 2-chloro-	95578
Phenol, 4-chloro-3-methyl-	59507
Phenol, 2-cyclohexyl-4,6-dinitro-	131895
Phenol, 2,4-dichloro-	120832
Phenol, 2,6-dichloro-	87650
Phenol, 2,4-dimethyl-	105679
Phenol, 2,4-dinitro-	51285
Phenol, 2,4-dinitro-6-(1-methylheptyl)-	88857
Phenol, 2,4-dinitro-6-methyl- and salts	534521
Phenol, 4-nitro-	100027
Phenol, pentachloro-	87865
Phenol, 2,3,4,6-tetrachloro-	58902
Phenol, 2,4,5-trichloro-	95954
Phenol, 2,4,6-trichloro-	88062
Phenol, 2,4,6-trinitro-, ammonium salt	131748
Phenyl dichloroarsine	696286
1,10-(1,2-Phenylene)pyrene	193395
Phenylmercuric acetate	62384
N-Phenylthiourea	103855
Phorate	298022
Phosgene	75445
Phosphine	7803512
Phosphonic acid	7664382
Phosphonic acid,diethyl p-nitrophenyl ester	311455
Phosphonic acid, lead salt	7446277
Phosphorodithioic acid, O,O-diethyl S-methylester	3288582
Phosphorodithioic acid, O,O-diethyl S-(ethylthio), methyl ester.	298022
Phosphorodithioic acid, O,O-dimethyl S-[2(methylamino)-2-oxoethyl] ester	60515
Phosphorofluoridic acid,bis(1-methylethyl)ester	55914
Phosphorothioic acid,O,O-diethyl O-(p-nitrophenyl) ester	56382
Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester	297972
Phosphorothioic acid, O,O-dimethyl O-[p-[(dimethylamino)-sulfonyl]phenyl] ester	52857

Hazardous Substance	CASRN
Phosphorus	7723140
Phosphorus oxychloride	10025873
Phosphorus pentasulfide	1314803
Phosphorus sulfide	1314803
Phosphorus trichloride	7719122
PHTHALATE ESTERS	
Phthalic anhydride	85449
2-Picoline	109068
Plumbane, tetraethyl-	78002
POLYCHLORINATED BIPHENYLS (PCBs)	1336363 12674112 11104282 11141165 53469219 12672296 11097691 11096825
POLYNUCLEAR AROMATIC-HYDROCARBONS	
Potassium arsenate	7784410
Potassium arsenite	10124502
Potassium bichromate	7778509
Potassium chromate	7789006
Potassium cyanide	151508
Potassium hydroxide	1310583
Potassium permanganate	7722647
Potassium silver cyanide	506616
Pronamide	23950585
1-Propanal, 2,3-epoxy-	765344
Propanal, 2-methyl-2-(methylthio)-,O-[(methylamino)carbonyl]oxime.	116063
1-Propanamine	107108
1-Propanamine, N-propyl-	142847
Propane, 1,2-dibromo-3-chloro-	96128
Propane, 2-nitro-	79469
Propane 2 2-oxybis(2-chloro-	108601
1,3-Propane sultone	1120714
Propanedinitrile	109773
Propanenitrile	107120
Propanenitrile, 3-chloro-	542767
Propanenitrile, 2-hydroxy-2-methyl-	75865
1,2,3-Propanetriol, trinitrate-	55630
1-Propanol, 2,3-dibromo-, phosphate (3:1)	126727
1-Propanol, 2-methyl-	78831
2-Propanone	67641
2-Propanone, 1-bromo	598312
Propargite	2312358
Propargyl alcohol	107197
2-Propenal	107028
2-Propenamide	79061
Propene, 1,3-dichloro-	542756
1-Propene, 1,1,2,3,3,3-hexachloro-	1888717
2-Propenenitrile	107131
2-Propenenitrile, 2-methyl-	126987
2-Propenoic acid	79107
2-Propenoic acid, ethyl ester	140885
2-Propenoic acid, 2-methyl-, ethyl ester	97632
2-Propenoic acid, 2-methyl-, methyl ester	80626
2-Propen-1-ol	107186
Propionic acid	79094

Hazardous Substance	CASRN
Propionic acid, 2-(2,4,5-trichlorophenoxy)-	93721
Propionic anhydride	123626
n-Propylamine	107108
Propylene dichloride	78875
Propylene oxide	75569
1,2-Propylenimine	75558
2-Propyn-1-ol	107197
Pyrene	129000
Pyrethrins	121299 121211 8003347
4-Pyridinamine	504245
Pyridine	110861
Pyridine,2-[(2-(dimethylamino)ethyl)-2-thenylamino)	91805
Pyridine, hexahydro-N-nitroso-	100754
Pyridine,2-methyl-	109068
Pyridine, (S)-3-(1-methyl-2-pyrrolidinyl)- and salts	54115
4(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-	56042
Pyrophosphoric acid, tetraethyl ester	107493
Pyrrole, tetrahydro-N-nitroso-	930552
Quinoline	91225
RADIONUCLIDES	
Reserpine	50555
Resorcinol	108463
Saccharin and salts	81072
Safrole	94597
Selenious acid	7783008
Selenium ††	7782492
SELENIUM AND COMPOUNDS	
Selenium dioxide	7446084
Selenium disulfide	7488564
Selenium oxide	7446084
Selenourea	630104
L-Serine, diazoacetate (ester)	115026
Silver ††	7440224
SILVER AND COMPOUNDS	
Silver cyanide	506649
Silver nitrate	7761888
Silvex	93721
Sodium	7440235
Sodium arsenate	7631892
Sodium arsenite	7784465
Sodium azide	26628228
Sodium bichromate	10588019
Sodium bifluoride	1333831
Sodium bisulfite	7631905
Sodium chromate	7775113
Sodium cyanide	143339
Sodium dodecylbenzene sulfonate	25155300
Sodium fluoride	7681494
Sodium hydrosulfide	16721805
Sodium hydroxide	1310732
Sodium hypochlorite	7681529 10022705
Sodium methylate	124414
Sodium nitrite	7632000

Hazardous Substance	CASRN
Sodium phosphate, dibasic	7558794 10039324 1[illegible]40655
Sodium phosphate, tribasic	7601549 [illegible]5844 10[illegible]830 10[illegible]894 77[illegible]94 10[illegible]68
Sodium selenite	10[illegible]28 77[illegible]23
4,4'-Stilbenediol, alpha,alpha'-diethyl-	56531
Streptozotocin	18883664
Strontium chromate	7789062
Strontium sulfide	1[illegible]961
Strychnidin-10-one, and salts	[illegible]249
Strychnidin-10-one, 2,3-dimethoxy-	[illegible]73
Strychnine and salts	[illegible]49
Styrene	[illegible]25
Sulfur hydride	[illegible]64
Sulfur monochloride	[illegible]03
Sulfur phosphide	[illegible]03
Sulfur selenide	7[illegible]864
Sulfuric acid	76[illegible]939 80[illegible]957
Sulfuric acid, dimethyl ester	[illegible]781
Sulfuric acid, thallium(I) salt	7446186 [illegible]591
2,4,5-T	[illegible]765
2,4,5-T acid	[illegible]3765
2,4,5-T amines	2008460 6369966 6369977 1319728 [illegible]013147
2,4,5-T esters	93798 [illegible]545597 61792072 [illegible]79478 25[illegible]8154
2,4,5-T salts	[illegible]91
TDE	[illegible]48
1,2,4,5-Tetrachlorobenzene	[illegible]943
2,3,7,8-Tetrachlorodibenzo-p-dioxin(TCDD)	[illegible]016
1,1,1,2-Tetrachloroethane	[illegible]206
1,1,2,2-Tetrachloroethane	9345
Tetrachloroethylene	127184
2,3,4,6-Tetrachlorophenol	58902
Tetraethyldithiopyrophosphate	3689245
Tetraethyl lead	78002
Tetraethyl pyrophosphate	107493
Tetrahydrofuran	109999
Tetranitromethane	509148
Tetraphosphoric acid, hexaethyl ester	757584
Thallic oxide	1314325
Thallium ††	[illegible]40280
THALLIUM AND COMPOUNDS	
Thallium(I) acetate	[illegible]3688
Thallium(I) carbonate	65[illegible]39
Thallium(I) chloride	7791120
Thallium(I) nitrate	10102451

Hazardous Substance	CASRN
Thallium(III) oxide	1314325
Thallium(I) selenide	12039520
Thallium(I) sulfate	7446186
	10031591
Thioacetamide	62555
Thiofanox	39196184
Thiomeoicarbonic diamide	541537
Thiomethanol	74931
Thiophenol	108985
Thiosemicarbazide	79196
Thiourea	62566
Thiourea, (2-chlorophenyl)-	5344821
Thiourea, 1-naphthalenyl-	86884
Thiourea, phenyl-	103855
Thiram	137268
Toluene	108883
Toluenediamine	95807
	25376458
	496720
	823405
Toluene diisocyanate	584849
	91087
	26471625
o-Toluidine hydrochloride	636215
Toxaphene	8001352
2,4,5-TP acid	93721
2,4,5-TP acid esters	32534955
1H-1,2,4-Triazol-3-amine	61825
Trichlorfon	52686
1,2,4-Trichlorobenzene	120821
1,1,1-Trichloroethane	71556
1,1,2-Trichloroethane	79005
Trichloroethene	79016
Trichloroethylene	79016
Trichloromethanesulfenyl chloride	594423
Trichloromonofluoromethane	75694
Trichlorophenol	25167822
2,3,4-Trichlorophenol	15950660
2,3,5-Trichlorophenol	933788
2,3,6-Trichlorophenol	933755
2,4,5-Trichlorophenol	95954
2,4,6-Trichlorophenol	88062
3,4,5-Trichlorophenol	609198
2,4,5-Trichlorophenol	95954
2,4,6-Trichlorophenol	88062
2,4,5-Trichlorophenoxyacetic acid	93765
Triethanolamine dodecylbenzenesulfonate	27323417
Triethylamine	121448
Trimethylamine	75503
sym-Trinitrobenzene	99354
1,3,5-Trioxane, 2,4,6-trimethyl-	123637
Tris(2,3-dibromopropyl) phosphate	126727
Trypan blue	72571
Unlisted Hazardous Wastes	
Characteristic of Ignitability	
Characteristic of Corrosivity	
Characteristic of Reactivity	
Characteristic of EP Toxicity	
Arsenic	
Barium	
Cadmium	
Chromium	
Lead	
Mercury	
Selenium	
Silver	
Endrin	
Lindane	
Methoxychlor	
Toxaphene	
2,4-D	
2,4,5-TP	
Uracil, 5-[bis(2-chloroethyl)amino]-	66751
Uracil mustard	66751
Uranyl acetate	541093
Uranyl nitrate	10102064
	36478789
Vanadic acid, ammonium salt	7803556
Vanadium(V) oxide	1314621
Vanadium pentoxide	1314621
Vanadyl sulfate	27774136
Vinyl acetate	108054
Vinyl chloride	75014
Vinylidene chloride	75354
Warfarin	81812
Xylene (mixed)	1330207
m-	108383
o-	95476
p-	106423
Xylenol	1300716
Yohimban-16-carboxylic acid,11,17-dimethoxy-18-[(3,4,5-trimethoxybenzoyl)oxy]-, methylester.	50555
Zinc††	7440666
ZINC AND COMPOUNDS	
Zinc acetate	557346
Zinc ammonium chloride	52628258
	14639975
	14639986
Zinc borate	1332076
Zinc bromide	7699458
Zinc carbonate	3486359
Zinc chloride	7646857
Zinc cyanide	557211
Zinc fluoride	7783495
Zinc formate	557415
Zinc hydrosulfite	7779864
Zinc nitrate	7779886
Zinc phenolsulfonate	127822
Zinc phosphide	1314847
Zinc silicofluoride	16871719
Zinc sulfate	7733020
Zirconium nitrate	13746899
Zirconium potassium fluoride	16923958
Zirconium sulfate	14644612
Zirconium tetrachloride	10026116

†† no reporting of releases of this hazardous substance is required if diameter of the pieces of the solid metal released is equal to or exceeds 100 micrometers (0.004 inches)
††† the reportable quantity for asbestos is limited to friable forms only

APPENDIX F

Designation: G 57 – 78 (Reapproved 1984)[ε1]

Standard Method for FIELD MEASUREMENT OF SOIL RESISTIVITY USING THE WENNER FOUR-ELECTRODE METHOD[1]

This standard is issued under the fixed designation G 57; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

[ε1] NOTE—Editorial changes were made throughout in September 1984.

1. Scope

1.1 This method covers the equipment and procedures for the field measurement of soil resistivity, both *in situ* and for samples removed from the ground, for use in the control of corrosion of buried structures.

1.2 *This standard may involve hazardous materials, operations, and equipment. This standard does not purport to address all of the safety problems associated with its use. It is the responsibility of whoever uses this standard to consult and establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

2. Definition

2.1 *resistivity*—the electrical resistance of a unit volume of a material; the reciprocal of conductivity. Resistivity is used in preference to conductivity as an expression of the electrical character of soils (and waters) since it is expressed in whole numbers.

2.1.1 Resistivity measurements indicate the relative ability of a medium to carry electrical currents. When a metallic structure is immersed in a conductive medium, the ability of the medium to carry current will influence the magnitude of galvanic currents and cathodic protection currents. The degree of electrode polarization will also affect the size of such currents.

3. Summary of Method

3.1 The Wenner four-electrode method requires that four metal electrodes be placed with equal separation in a straight line in the surface of the soil to a depth not exceeding 5 % of the minimum separation of the electrodes. The electrode separation should be selected with consideration of the soil strata of interest. The resulting resistivity measurement represents the average resistivity of a hemisphere of soil of a radius equal to the electrode separation.

3.2 A voltage is impressed between the outer electrodes, causing current to flow, and the voltage drop between the inner electrodes is measured using a sensitive voltmeter. Alternatively, the resistance can be measured directly. The resistivity, ρ, is then:

$$\rho, \Omega\cdot\text{cm} = 2\pi aR (a \text{ in cm})$$
$$= 191.5\, aR (a \text{ in ft})$$

where:

a = electrode separation, and
R = resistance, Ω.

Using dimensional analysis, the correct unit for resistivity is ohm-centimetre.

4. Apparatus

4.1 *At-Grade Measurements in situ:*

4.1.1 The equipment required for field resistivity measurements to be taken at grade consists of a current source, a suitable voltmeter, ammeter, or galvanometer, four metal electrodes, and the necessary wiring to make the connections shown in Fig. 1.

4.1.2 *Current Source*—An a-c current source is preferred since the use of a d-c current will cause polarization of most metal electrodes, resulting in error. The current can be provided by either a cranked a-c generator or a vibrator-equipped d-c source. An unal-

[1] This method is under the jurisdiction of ASTM Committee G-1 on Corrosion of Metals, and is the direct responsibility of Subcommittee G01.10 on Corrosion in Soils.

Current edition approved March 31, 1978. Published May 1978.

tered d-c source can be used if the electrodes are abraded to bright metal before immersion, polarity is regularly reversed during measurement, and measurements are averaged for each polarity.

4.1.3 *Voltmeter*—The voltmeter shall not draw appreciable current from the circuit to avoid polarization effects. A galvanometer type of movement is preferred but a moving coil type of instrument will yield satisfactory results if the meter resistance is in the order of 100 000 Ω/V.

4.1.4 *Electrodes* fabricated from mild steel or martensitic stainless steel 0.475 to 0.635 cm (3/16 to 1/4 in.) in diameter and 30 to 60 cm (1 to 2 ft) in length are satisfactory for most field measurements. Both materials may require heat treatment so that they are sufficiently rigid to be inserted in dry or gravel soils. The electrodes should be formed with a handle and a terminal for wire attachment.

4.1.5 *Wiring*, 18 to 22-gage insulated stranded copper wire. Terminals should be of good quality to ensure that low-resistance contact is made at the electrodes and at the meter. Where regular surveys are to be made at fixed electrode spacing, a shielded multiconductor cable can be fabricated with terminals permanently located at the required intervals.

4.2 *Soil Sample Measurement:*

4.2.1 The equipment required for the measurement of the resistivity of soil samples, either in the field or in the laboratory, is identical to that needed for at-grade measurements except that the electrodes are replaced with an inert container containing four permanently mounted electrodes (see Fig. 2).

4.2.2 If the current-carrying (outside) electrodes are not spaced at the same interval as the potential-measuring (inside) electrodes, the resistivity, ρ, is:

$$\rho, \Omega \cdot \text{cm} = 95.76\, bR \Big/ \left(1 - \frac{b}{b + a}\right)$$

where:

b = outer electrode spacing, ft.
a = inner electrode spacing, ft, and
R = resistance, Ω.

or:

$$\rho, \Omega \cdot \text{cm} = \pi bR \Big/ \left(1 - \frac{b}{b + a}\right)$$

where:

b = outer electrode spacing, cm
a = inner electrode spacing, cm, and
R = resistance, Ω.

4.2.3 The dimensions of the box can be established so that resistivity is read directly from the voltmeter without further calculation. The box should be readily cleanable to avoid contamination by previous samples.

5. Field Procedures

5.1 *At-Grade Measurements:*

5.1.1 Select the alignment of the measurement to include uniform topography over the limits of the electrode span. Do not include large nonconductive bodies such as frozen soil, boulders, concrete foundations, etc., which are not representative of the soil of interest, in the electrode span. Conductive structures such as pipes and cables should not be within 1/2 a of the electrode span unless they are at right angles to the span.

5.1.2 Select electrode spacings with regard to the structure of interest. Since most pipelines are installed at depths of from 1.5 to 4.5 m (5 to 15 ft), electrode spacings of 1.5, 3.0, and 4.5 m (5, 10, and 15 ft) are commonly used. The a spacing should equal the maximum depth of interest. To facilitate field calculation of resistivities, spacings of 1.58, 3.16, and 4.75 m (5.2, 10.4, and 15.6 ft), which result in multiplication factors of 1000, 2000, and 3000, can be used when a d-c vibrator-galvanometer instrument is used.

5.1.3 Impress a voltage across the outer electrodes, causing the current to flow. Measure the voltage drop across the inner electrodes and record both the current and voltage drop if a separate ammeter and voltmeter are used. Where a resistivity meter is used, read the resistance directly and record.

5.1.4 Make a record of electrode spacing, resistance or amperes and volts, date, time, air temperature, topography, drainage, and indications of contamination to facilitate subsequent interpretation.

5.2 *Soil Sample Measurement:*

5.2.1 Soil samples should be representative of the area of interest where the stratum of interest contains a variety of soil types. It is desirable to sample each type separately. It will also be necessary to prepare a mixed sample. The sample should be reasonably large and thoroughly mixed so that it will be representative. The soil should be well-compacted in layers in the soil box, with air spaces

eliminated as far as practicable. Fill the box flush to the top and take measurements as previously detailed (5.1.3). The meter used may limit the upper range of resistivity, which can be measured. In such cases, the resistivity should be recorded as <10 000 Ω·cm, etc.

5.2.2 The measured resistivity will be dependent on the degree of compaction, moisture content, constituent solubility, and temperature. The effect of variations in compaction and moisture content can be reduced by fully saturating the sample before placing it in the box. This can be done by preparing a stiff slurry of the sample, adding only sufficient water to produce a slight amount of surface water, which should be allowed to evaporate before the slurry is remixed and placed in the box. Where available, use ground water from the sample excavation for saturation. Otherwise, use distilled water. If the soil resistivity is expected to be below 10 000 Ω·cm, local tap water can be used without introducing serious error. Some soils absorb moisture slowly and contain constituents that dissolve slowly, and the resistivity may not stabilize for as much as 24 h after saturation. The saturated measurement will provide a "worst-case" resistivity, and can be usefully compared with "as-received" resistivity measurements. Surplus water should not be poured off as this will remove soluble constituents.

5.2.3 Temperature correction will not be required if measurement is made in-the-ditch or immediately after the sample is taken. If samples are retained for subsequent measurement, correct the resistivity if the measurement temperature is substantially different from the ground temperature. Correction to 15.5°C (60°F) is recommended if the sample temperature exceeds 21°C (70°F).

$$R_{15.5} = R_T \left(\frac{24.5 + T}{40} \right)$$

where:

T = soil temperature, °C, and

R_T = resistivity at T °C.

A nomograph for this correction is shown in Fig. 3.[2]

6. Planning and Interpretation

6.1 *Planning:*

6.1.1 Surveys may be conducted at regular or random intervals. The former method is suited to graphical presentation and plotting resistivity versus distance, and will identify gradients and abrupt changes in soil condition. The latter method permits precise mathematical treatment, such as cumulative probability analysis. This method permits the determination of the probability of the presence of a soil with a resistivity equal to or greater than a particular value.[3] Where random resistivities are measured over a plant site, these can best be displayed on a plot plan or similar layout. In either case, use pedological surveys in the planning and interpretation of any extensive survey. Measurements could be made in each soil classification under a variety of drainage conditions to simplify survey planning.

6.1.2 If resistivity information is required to assess the requirement for corrosion control measures, it is recommended that the tests be made on a true random basis. Since the number of soil sections that could be inspected is essentially unlimited, infinite population characteristics can be used to simplify statistical treatment. Risk and error must be arbitrarily selected to allow determination of the number of measurements. A risk of 5 % of an error greater than 100 Ω·cm should be suitable for most situations. The error limit should be about 10 % of the anticipated mean resistivity. Where mean or median values cannot be estimated with reasonable accuracy, sequential sampling techniques can be employed..

6.2 *Interpretation*—Interpretation of the results of resistivity surveys will largely depend on the experience of the persons concerned. The mean and median resistivity values will indicate the general corrosivity of the soil. Sharp changes in resistivity with distance and appreciable variations in moisture content and drainage are indicative of local severe conditions. Cumulative probability plots will indicate the homogeneity of the soil over the area or route and will indicate the probability of severe, moderate, and minimal corrosion of the various construction materials. Available pedological data should be used to facilitate interpretation.

7. Standardization

7.1 Periodically check the accuracy of re-

[2] National Bureau of Standards *Circular No. 579*, p. 157.

[3] Scott, G. N., "Corrosion," *National Association of Corrosion Engineers*, Vol 14, No. 8, August 1958.

sistance meters using a commercial resistance decade box. Meter error should not exceed 5 % over the range of the instrument. If error exceeds this limit, prepare a calibration curve and correct all measurements accordingly. A soil box can be calibrated using solutions of known resistivity. Solutions of sodium chloride and distilled water with resistivities of 1000, 5000, and 10 000 Ω·cm are recommended for this purpose. These solutions should be prepared under laboratory conditions using a commercial conductivity meter, itself calibrated to standard solutions at 20°C (68°F).[4]

8. General

8.1 It should be recognized that subsurface conditions can vary greatly in a short distance, particularly where other buried structures have been installed. Surface contamination tends to concentrate in existing ditches with surface run-off, appreciably lowering the resistivity below the natural level. Since a pipeline ditch cannot be included in the span of at-grade measurements, soil box samples should be obtained where the opportunity exists. To evaluate contamination effects when a new route is being evaluated, soil samples can be obtained at crossings of existing pipelines, cables, etc, or by intentional sampling using soil augers.

8.2 Other field resistivity measurement techniques and equipment are available. These commonly use two electrodes mounted on a prod that is inserted in the soil-at-grade in an excavation or a driven or bored hole. The two-electrode technique is inherently less accurate than the four-electrode method because of polarization effects, but useful information can be obtained concerning the characteristics of particular strata. More precise procedures may be employed in laboratory investigations and these should be defined in reporting the results. Where resistivity information is included in published information, the measurement techniques used should be defined.

9. Precision and Bias

9.1 Field measurement of soil resistivity using the Wenner Four-Electrode Method is not available at this time. It will be included in the next revision of this method.

[4] *Handbook of Chemistry and Physics*, 41st ed., The Chemical Rubber Co., p. 2606.

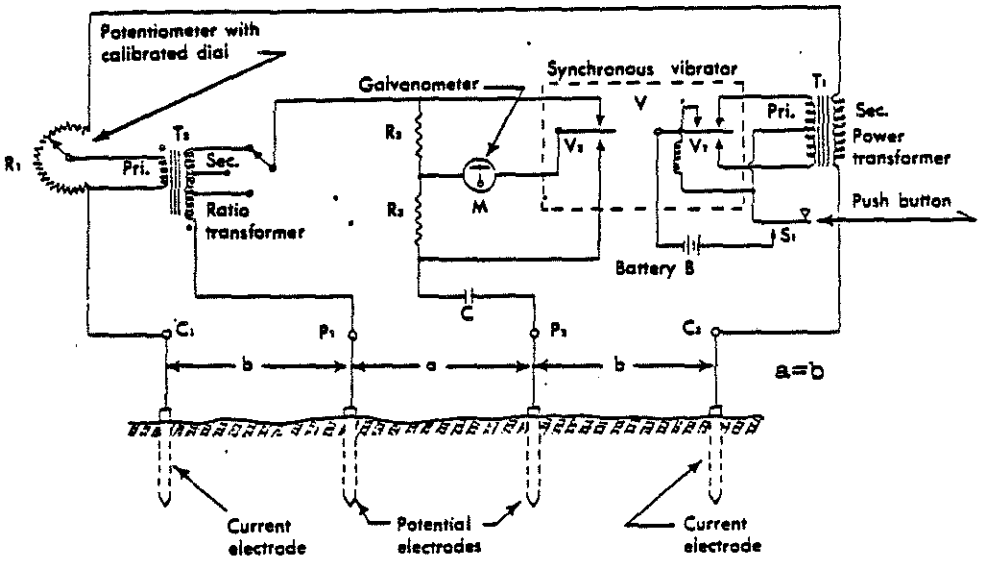

FIG. 1 Wiring Diagram for Typical d-c Vibrator-Current Source

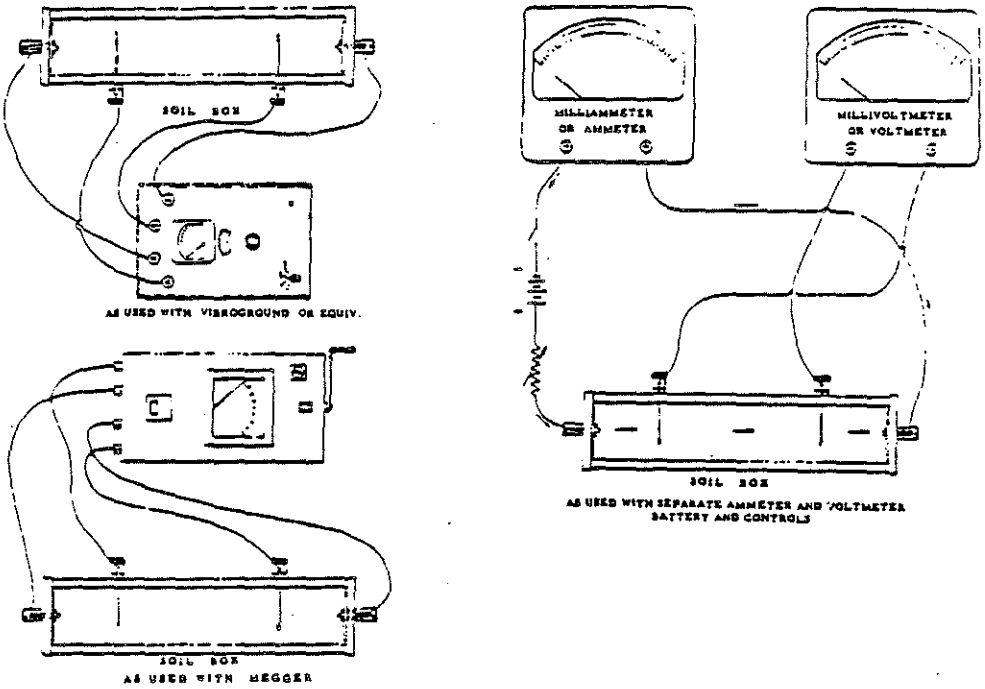

FIG. 2 Typical Connections for Use of Soil Box with Various Types of Instruments

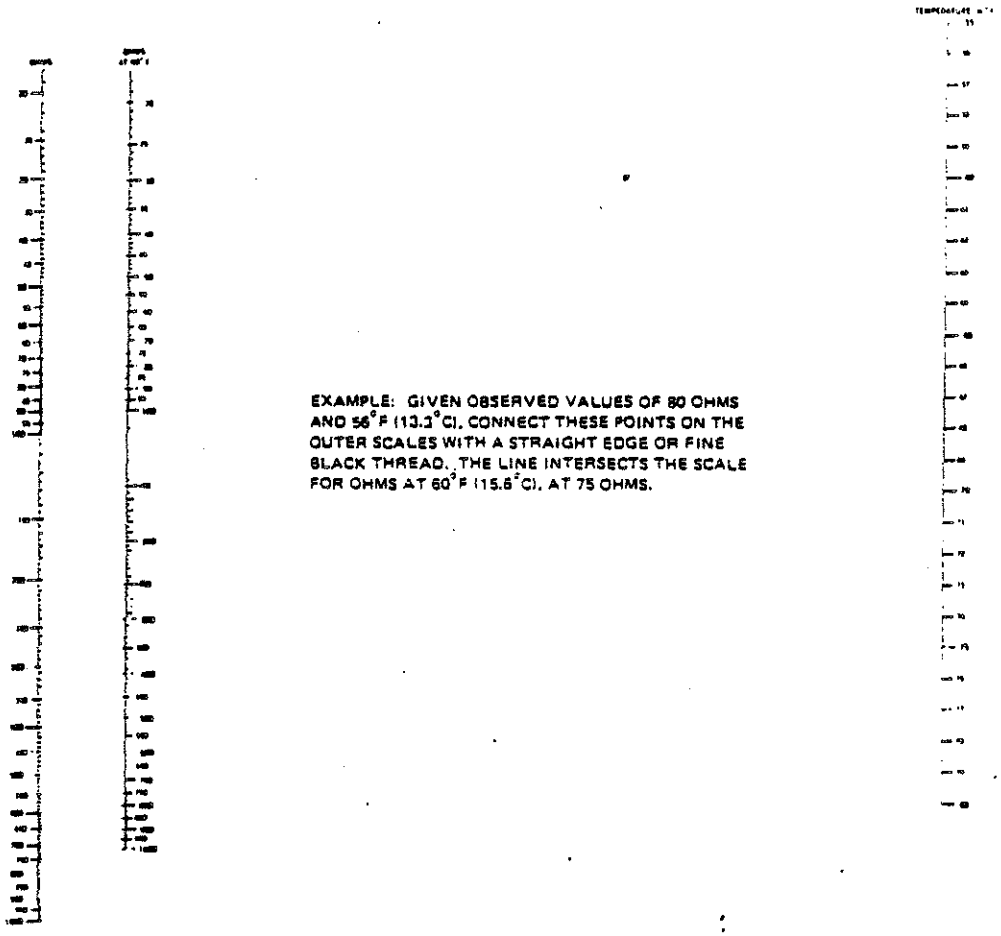

FIG. 3 Nomogram or Conversion Chart for Reducing Soil Paste Resistance in ohms at a Particular Temperature as Measured in the Bureau of Soils Cup, to Resistance at 15.6°C (60°F)

Recommended Practice for Abandonment or Removal of Used Underground Service Station Tanks

API BULLETIN 1604
FIRST EDITION, MARCH 1981

American Petroleum Institute
1220 L Street, Northwest
Washington, D.C. 20005

Recommended Practice for Abandonment or Removal of Used Underground Service Station Tanks

Marketing Department

API BULLETIN 1604
FIRST EDITION, MARCH 1981

American
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FOREWORD

This recommended practice provides a guide in the form of operating procedures which may be used for the abandonment, removal, storage, placed temporarily out of service, and sale of used underground tanks which have contained gasoline or other flammable liquids. Whereas this guide refers to service station features, the principles outlined may be applied to tanks used in other functions. Listed below are other available references which will provide additional guidance.

NFPA No. 30: Flammable and Combustible Liquids Code

NFPA No. 327: Standard Procedure for Cleaning or Safeguarding Small Tanks and Containers

NFPA No. 329: Underground Leakage of Flammable and Combustible Liquids

(Published by the National Fire Protection Association, 470 Atlantic Avenue, Boston, MA 02210)

API Publication 2013, Cleaning Mobile Tanks in Flammable or Combustible Liquid Service

API Publication 2015, Cleaning Petroleum Storage Tanks

API Publication 2015A, A Guide for Controlling the Lead Hazard Associated with Tank Entry and Cleaning (Supplement to API RP 2015)

Storage tanks which have stored flammable liquids should be handled with extreme care when abandoned, moved, or stored. This is particularly true of underground tanks at service stations which are most frequently used for the storage of motor fuel and for the storage of other flammable or combustible liquids such as crankcase drainings (which may contain some gasoline).

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Storage of Used Tanks	3
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Recommended Practice for Abandonment or Removal of Used Underground Service Station Tanks

1—TEMPORARILY OUT OF SERVICE

1.1 Underground tanks are considered "temporarily out of service" if they are idle but will be returned to service, are awaiting abandonment in place, or are awaiting removal.

1.2 Tanks temporarily out of service will be considered safe for the "temporary" period if they are treated as provided in 1.2.1 through 1.2.3.

1.2.1 Remove all flammable liquid with the exception of a sufficient quantity (approximately 4 inches) to assure a saturated vapor space.

1.2.2 Cap the fill pipe and gauge pipe and secure the tank against tampering. Cap the product lines at the service station island or elsewhere if the pumps are removed, or leave the pumps connected and locked. Turn off electric power to the pumps.

1.2.3 Leave the vent line open.

NOTE: This procedure is not intended to apply to tanks containing special fuels or to large installations, such as at airports where specific attention to the problems of corrosion, contamination, and preservation of quality is required.

2—ABANDONMENT IN PLACE

2.1 This guide provides a safe method for the abandonment of underground tanks in place to avoid the cost of removal. Abandonment in place is usually less costly than removal; however, it is not necessarily so when the proper procedures for abandoning tanks in place are carefully followed.

2.2 A determination of whether to abandon a tank in place or to remove it will depend upon the location, labor, materials, local regulations, availability of equipment, and the cost of each of these elements. Additional considerations include the length of service the equipment has provided and its reuse or salvage value. The federal Solid Waste Disposal Act places restrictions on disposal of hazardous materials such as tanks containing lead contaminants.

2.3 Tanks may be effectively and safely abandoned underground by following the steps in 2.3.1 through 2.3.8.

2.3.1 Drain and flush the piping into the tank.

2.3.2 Remove all flammable liquid which can be pumped out. It may be necessary to use a hand pump to remove the bottom few inches of product.

2.3.3 Dig down to the top of the tank.

2.3.4 Remove the fill (drop) tube. Disconnect the fill, gauge, and product lines. Cap or plug open ends of lines which are not to be used further. The vent line should remain connected until the tank is filled as outlined below.

2.3.5 Fill the tank to overflowing with water to purge off all product. As the level of the liquid rises, any remaining product will float on top of the water. When the floating product nears the fill opening, suspend filling, remove the floating product, and place it in a suitable container for proper disposal.

In the process of water-filling the tank, flammable vapors will be expelled through both the vent and fill openings, but primarily at the fill opening. Purged product may also flow out of the fill opening as tank overfilling is continued. The entire area of operation should therefore be considered hazardous and all necessary precautions should be taken to prevent ignition.

In some locations water may not be available or its use may be impractical because of low atmospheric temperatures or for other reasons. In such instances the vapors in the tank may be expelled by adding solid carbon dioxide or another inert gas as explained in 3.1.6.

2.3.6 After water has overflowed the tank, cut one or more large holes in the tank top. This can be accomplished with several blows from a back hoe. Pump out the water and dispose of it in accordance with local regulations. Drive several holes in the tank bottom with a ¾ or 1 inch rod.

2.3.7 Proceed to introduce a suitable, solid, inert material through the hole in the top of the tank.

2.3.7.1 Sand Fill. Sand will flow readily and is generally available. Any kind of sand is suitable if it is free of rocks, which might limit leveling-out in the tank. The sand may be introduced dry as long as it flows in freely. When the cone nears the tank top, the sand can be washed into the tank with a nominal amount of water and puddled to cause it to flow to the ends. The use of large amounts of water should be avoided since the tank might be filled with water before it is filled with sand.

2.3.7.2 Sand and Earth Fill. Almost complete filling can be achieved by using a combination of sand and earth as follows: (1) fill the tank with sand to approximately 80 percent of calculated capacity; (2) mix soil and water to make a free-flowing mud; and (3) pour the mixture into the tank opening and puddle until the tank is full and overflows the fill opening.

2.3.8 Disconnect and cap the vent line.

2.4 When underground tanks are abandoned in place, the owner of the tank should keep a permanent record of the tank location, the date of abandonment, and the method of conditioning the tank for abandonment.

2.5 It is a good business practice to inform property owners of the presence of abandoned underground tanks when properties are sold or at the termination of property leases. It may be desirable to obtain an acknowledgement or a release from the property owner.

3—REMOVAL OF UNDERGROUND TANKS

3.1 The safe removal of underground tanks can be accomplished by taking the steps described in 3.1.1 through 3.1.8.

3.1.1 Drain and flush the piping into the tank.

3.1.2 Remove all flammable liquid from the tank which can be pumped out. It may be necessary to use a hand pump to remove the bottom few inches of product.

3.1.3 Dig down to the top of the tank.

3.1.4 Remove the fill (drop) tube. Disconnect the fill, gauge, product, and vent lines. Cap or plug open ends of lines which are not to be used further.

3.1.5 Temporarily plug all tank openings, complete the excavation, and remove the tank, placing it in a secure location. Block the tank to prevent movement. Before undertaking degassing measures, it is normally necessary to remove the tank from the ground since product which may have previously leaked into the ground could reenter the tank. Extreme caution should be used during this procedure.

3.1.6 Remove flammable vapors. The tank should be conditioned by one of the methods described in 3.1.6.1. through 3.1.6.3, or as required by local codes, to ensure that no flammable vapors remain.

3.1.6.1 If water is available and there is a suitable means for disposal, the tank may be filled with water to expel vapors. While the tank is being filled with water, flammable vapors will flow out of the tank and may surround the area. Purged product may flow out of the tank if it overflows. Hence, observe all normal safety and pollution precautions regarding flammable liquids and vapors. When the tank is to be removed from the premises, the contaminated water should be removed and disposed of in accordance with local regulations.

3.1.6.2 If the method described in 3.1.6.1 is not practicable, the vapors in the tank may be made inert by adding solid carbon dioxide (dry ice) in the amount of 1.5 pounds per 100 gallons of tank capacity. The dry ice should be crushed and distributed evenly over the greatest possible area to secure rapid evaporation. Avoid skin contact with dry ice because it may produce burns. As the dry ice vaporizes, flammable vapors will flow out of the tank and may surround the area. Hence, observe all normal safety precautions regarding flammable vapors. Make sure that all of the dry ice has vaporized.

3.1.6.3 An alternate method is to ventilate the tank with air, using a small gas exhauster operated with compressed air (from the service station or from a portable compressor) or by other suitable means. The flow of air in through an opening near one end of the tank and the discharge of the vapor-air mixture out of an opening near the opposite end will quickly remove the vapor. The vapor concentration in the tank can be checked with a combustible gas indicator to determine when the tank is gas-free. While the tank is being ventilated, flammable vapor may flow into the surrounding atmosphere. Ignition sources should be eliminated from the immediate vicinity.

3.1.7 After the tank has been freed of vapors and before the tank is moved from the site, plug or cap all holes. Use screwed (boiler) plugs to plug any corrosion leak holes. One plug should have a ⅛-inch vent hole to prevent the tank from being subjected to an excessive pressure differential caused by extreme temperature changes.

3.1.8 Finally, the tank should be secured on a truck for

transportation to the disposal site. The tank should be secured so that the ⅛-inch vent hole is located at the uppermost point on the tank.

3.2 If a tank remains at the site overnight, or longer, additional vapor may be released from liquid held in the scale or sediment in the tank. Consequently, tanks should be removed from the premises as promptly as possible after these procedures have been completed.

4—STORAGE OF USED TANKS

4.1 Even though used tanks that have contained flammable liquids have been gas-freed at one time, they cannot be guaranteed to remain gas-free. Hydrocarbons are retained in crevices and under scale and are released over time. It is important, therefore, that tanks always be handled with due precautions in recognition of this condition.

4.2 The procedure outlined in 4.2.1 through 4.2.6 is recommended for storing tanks.

4.2.1 Used tanks should be stored in areas where they can be safeguarded, usually on the locked premises of a tank user familiar with the hazards or at another location where the general public will not have access. A fenced yard, apart from other facilities, is desirable.

4.2.2 If facilities are available for gas-freeing by water-flooding, gas inerting, or mechanical ventilation, it is desirable to gas-free tanks before they are stored. Observe all normal safety and pollution precautions regarding flammable liquids and vapors.

Tanks will become gas-free by natural ventilation if they are stored off the ground with all openings down and open for a protracted period. During this period of natural breathing, caused by temperature change, the vapors may be within their flammable limits. To assure safe operations, the condition of the tanks should be indicated by a label or sign, and unauthorized personnel should be prohibited from the area during this period.

4.2.3 During storage or preparation for storage, scale or sludge may be released from tanks which have contained leaded gasoline. Such scale or sludge must be handled with extreme caution and must be disposed of consistent with the requirements of the Solid Waste Disposal Act and local and state requirements.

4.2.4 Gas-free tanks may be safely stored with unplugged openings, but plugging of all openings is recommended to keep tank interiors clean.

4.2.5 In any of the foregoing cases where all tank openings are to be tightly plugged, screwed plugs should be used. In addition, one plug should have a ⅛-inch vent hole to prevent the tank from being subjected to an excessive pressure differential caused by extreme temperature changes.

4.2.6 The former contents and present vapor state of each tank, if known, or the gas-freeing treatment and date should be indicated by an appropriate label on the tank.

5—SALE OR REUSE

5.1 When tanks are sold for reuse, the purchaser should be given a very clear understanding of the former use and present condition of the tanks. It may or may not be necessary to test the tanks for flammable vapors or to gas-free them.

CAUTION: Tanks which previously contained leaded gasoline *must not be used* for the subsequent storage of food or liquids intended for animal or human consumption.

5.2 It is good business practice to use a bill of sale to transfer tank ownership, in which the purchaser will acknowledge and assume all liability related to the tank. Bills of sale should indicate the former use of the tank and carry the following warning regardless of the condition of the tank.

Tank Has Contained Leaded Gasoline
(or Flammable Liquid)*
Not Gas-Free
Not Suitable for Food or Drinking Water

5.3 The tank should be clearly marked with the same warning as the bill of sale in legible letters not less than 1 inch high, regardless of the condition of the tank.

* Use the applicable designation.

6—JUNKING

6.1 Tanks should be disposed of when they are no longer fit for the storage of flammable liquids or are considered junk. Whether sold to a junk or scrap dealer or discarded at an acceptable facility, sufficient holes should be made in tanks to render them unfit for further use.

6.2 When a tank is gas-free, it should be punctured with a pickax, chisel, or other heavy, sharp object, or many large holes may be drilled into it. When a tank is not gas-free, it should be filled with water until overflowing and punctured many times while full of water.

6.3 As an added precaution, regardless of the condition, the tanks should be labeled in legible letters with the following information:

Tank Has Contained Leaded Gasoline
(or Flammable Liquid)*
Not Gas-Free
Not Suitable for Food or Drinking Water

6.4 Prior to junking gasoline tanks, the latest applicable waste disposal regulations should be checked to determine if special attention or preparation is required.

* Use the applicable designation.

further release of hazardous substances to the environment and to allow inspection and repair of the tank system to be performed.

(ii) If the material was released to a secondary containment system, all released materials must be removed within 24 hours or in a timely manner as determined by the implementing agency.

(3) *Containment of visible releases to the environment.* The owner and operator must immediately conduct a visual inspection of any above ground release and, based upon that inspection:

(i) Prevent further migration of the release to soils or surface water;

(ii) Remove, and properly dispose of, any visible contamination of the soil or surface water; and

(iii) Conduct an investigation to determine the possible presence of free product.

(b) In accordance with the reporting requirements of § 280.74, the owners and operators must assemble from investigation of the site and the release, or from other sources (e.g., USGS maps, state and local agencies, SCS soil maps), such information as deemed necessary by the implementing agency for completing the corrective action measures required in paragraph (a) of this section. This information may include, but is not necessarily limited to, the following:

(1) Data on the nature and estimated quantity of the release;

(2) Data from surface and subsurface soil sampling and analyses;

(3) Data from ground-water and/or surface water sampling and analyses; and

(4) Data from available sources and/or site investigations concerning surrounding populations, water quality and use, well locations, subsurface soil conditions, climatological conditions, and land usage.

§ 280.72 Additional site investigation.

(a) Whenever an investigation under § 280.71(b) indicates that there may be additional remaining soil contamination from the release, or a removal in compliance with § 280.71(a)(2) indicates that the released product or contaminated soil may have reached ground water, or as directed by the implementing agency, the owners and operators shall:

(1) Conduct additional investigations of the release, the release site, and the surrounding area possibly affected by the release to determine the full extent and location of soils contaminated by the release; and

(2) Conduct additional investigations of the release, the release site, and the surrrounding area possibly affected by the release to determine the presence of dissolved contamination due to the release in ground water.

(b) The information collected by the owners and operators during the course of the investigations under paragraph (a) of this section must be submitted in accordance with a schedule established by the implementing agency.

(c) The implementing agency may request the submission of a corrective action plan for additional soil and/or ground-water cleanup.

§ 280.73 Soil and ground-water cleanup.

(a) The owners and operators required by the implementing agency under § 280.72(c) to develop and submit a corrective action plan for cleanup of any remaining contaminated soils or ground water shall submit such a plan in accordance with a schedule established by the implementing agency.

(b) Upon approval of the corrective action plan the owners and operators shall implement and monitor, evaluate and report the results of implementation to the implementing agency.

§ 280.74 Reporting.

(a) For purposes of reporting under § 280.71 the owners and operators of an UST containing hazardous substances shall report—

(1) All below ground releases in any quantity; and

(2) All above ground releases to land or surface waters in excess of the reportable quantity established under 40 CFR 302 for the released substance.

(b) Within 30 days of confirmation or discovery of a release to the environment, a report containing the following information must be submitted to the implementing agency:

(1) Likely route of migration of the release to the extent known from available information;

(2) Characteristics of the surrounding soil (soil composition, geology, hydrogeology, climate);

(3) Results of any monitoring or sampling conducted in connection with the release (if available). If sampling or monitoring data relating to the release are not available within 30 days, these data must be submitted to the implementing agency as soon as they become available.

(4) Proximity to downgradient drinking water, surface water, and population areas; and

(5) Description of response actions taken or planned.

(c) The owners and operators shall provide any additional information on corrective action beyond the initial notification required under 280.61 requested by the implementing agency.

§ 280.75 Public participation.

(a) For each corrective action plan submitted under § 280.73 and prior to the approval of such plan, the implementing agency shall provide an opportunity for the public review and comment on the plan. The implementing agency shall provide notice to the public by means designed to reach those members of the public most directly affected by the release and the planned corrective action. Public notice shall provide adequate time for the review of the submitted plan by the affected public. Such notice may include, but is not limited to, public notice in local newspapers, block advertisements, public service announcements, state register, or letters to individual households.

(b) If there is sufficient public interest, or for any other reason, the implementing agency may hold a public meeting to consider comments on the corrective action plan. The implementing agency shall hold a public meeting in any case where implementation of an approved corrective action plan does not achieve the established clean-up levels and termination of that plan is under consideration by the implementing agency. In deciding to approve or modify the corrective action plan, the implementing agency shall consider and respond to the comments from the public.

Subpart H—Out-of-Service UST Systems and Closure

§ 280.60 Temporary removal from use, temporary closure, and permanent closure.

(a) When an UST system is taken out of service for less than 3 months and for regulated substances are left in the tank, the owner or operator must continue operation and maintenance as required in § 280.31, release detection as required in § 280.41, and must comply with Subparts E, F, and G if a release is suspected or confirmed.

(b) When an UST system is taken out of service for 3 months or more but less than 24 months, and regulated substances are left in the tank, the owner and operator must comply with paragraph (a) of this section and meet the following additional requirements:

(1) Leave vent lines open and functioning; and

(2) Cap and secure all other lines, pumps, manways, and ancillary equipment.

(c) When an UST system is taken out of service for longer than 24 months, it must be permanently closed.

(d) At least 30 days prior to permanent closure, the owner or operator must notify the implementing agency and assess the excavation area around the UST system for releases. This requirement is satisfied if one of the external monitoring release detection methods allowed under § 280.41 is in use at the site at the time of closure, or if the owner or operator uses:

(1) Portable gas chromatograph mapping;

(2) Analysis of soil core samples for hydrocarbon and/or chemical contamination in the unsaturated zone;

(3) Analysis of groundwater surrounding the tank for released product; or

(4) Another site assessment method that has been approved by the implementing agency.

This provision applies to all UST system closures that took place before the effective date of these regulations and did not conform with paragraph (f) of this section.

(e) If a release is discovered as a result of the activities under paragraphs (a) through (d) of this section, or by any other manner, the owner or operator must comply with the corrective action requirements of Subparts F and G.

(f) All tanks that are taken out of service permanently must be emptied and either removed from the ground or be filled with an inert solid material.

[Note.—The closure procedures described in API 1604 "Recommended Practice for Abandonment or Removal of Used Underground Service Station Tanks" may be used as guidelines for compliance with paragraph (f).]

(g) All UST system owners and operators must maintain records in accordance with § 280.34 which are capable of demonstrating compliance with closure procedures required under this section. These records must:

(1) Be maintained in accordance with § 280.43 when release detection is conducted in accordance with the temporary closure requirements of § 280.80 (a) and (b); and

(2) Provide the results of the excavation area assessment required in § 280.80(d). Such results must be maintained for at least three years after permanent closure in one of the following ways:

(i) By the owner and operator who took the UST system out of service;

(ii) By the current owner and operator of the UST system; or

(iii) By mailing these records to the implementing agency if they cannot be maintained at the closed facility.

[FR Doc. 87-7630 Filed 4-16-87; 8:45 am]
BILLING CODE 6560-50-M

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40 CFR Part 280

[FRL-3154-7]

Underground Storage Tanks Containing Petroleum; Financial Responsibility Requirements

AGENCY: Environmental Protection Agency.

ACTION: Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) is proposing financial responsibility requirements applicable to owners and operators of underground storage tanks containing petroleum under section 9003 (c) and (d) of the Resource Conservation and Recovery Act (RCRA) as amended by the Hazardous and Solid Waste Amendments of 1984 (HSWA) and the Superfund Amendments and Reauthorization Act of 1986 (SARA). This proposal would establish requirements for demonstrating financial responsibility for taking corrective action and compensating third parties for bodily injury and property damage caused by sudden and nonsudden accidental releases arising from operating an underground storage tank containing petroleum.

DATES: The Agency will consider all comments received by June 6, 1987 before taking final action on the proposed rule. Three public hearings will be held on the following dates: (1) May 28 (and 29, if necessary), 1987—Washington, DC; (2) June 1 (and 2, if necessary), 1987—Dallas, Texas; and (3) June 4 (and 5, if necessary), 1987—San Francisco, California.

ADDRESSES: Comments may be mailed to the Docket Clerk (Docket No. UST-3), Office of Underground Storage Tanks [WH-562A], U.S. Environmental Protection Agency, 401 M Street, SW., Washington, DC 20460. Comments received by EPA, and all references used in this document, may be inspected in the public docket, located in Room LG-100, U.S. Environmental Protection Agency, 401 M Street, SW., Washington, DC 20460, from 9:00 a.m. to 4:00 p.m., Monday through Friday, excluding Federal holidays.

The Agency will hold public hearings on today's proposal at three different locations indicated below:

1. The Westin Hotel, 2401 M Street NW., Washington, DC 20037
2. The Registry Hotel, 15201 Dallas Parkway, Dallas, TX 75248
3. Miyako Hotel, 1625 Post Street, San Francisco, CA 94015.

The hearings will begin at 9:30 a.m., with registration at 9:00 a.m. The hearings will end at 4:30 p.m., unless concluded earlier. Anyone wishing to make a statement at a hearing should notify, in writing, Ms. Gerri Wyer, Hearings Coordinator, Office of Underground Storage Tanks [WH-562A], U.S. Environmental Protection Agency, 401 M Street SW., Washington, DC 20460, (800) 424-9346 (toll free) or (202) 382-3000 in Washington, DC.

Oral and written statements may be submitted at the public hearing. Persons who wish to make oral presentations must restrict them to 15 minutes and are encouraged to have written copies of their complete comments for inclusion in the official record.

FOR FURTHER INFORMATION CONTACT: The RCRA/Superfund Hotline at (800) 424-9346 (toll free) or (202) 382-3000 in Washington, DC.

SUPPLEMENTARY INFORMATION: The contents of today's preamble are listed in the following outline:

I. Authority
II. Background
  A. Legislative and Regulatory Overview
    1. RCRA Subtitle I
    2. CERCLA Reauthorization
    3. Leaking Underground Storage Tank Trust Fund
  B. Key Provisions of Today's Proposal
  C. Rationale for the Agency's Approach
  D. Amount of Required Coverage
  E. Description of the Regulated Community
    1. Background
    2. Owners and Operators in Retail Motor Fuel Marketing
    3. Owners and Operators in Other Sectors
  F. Overview of Proposed Rule
III. Section-by-Section Analysis
  A. Applicability (§ 280.90)
    1. Owner or Operator
    2. New Tanks
    3. Tanks Taken Out of Operation
    4. State and Federal Government Entities
    5. Exemptions
    6. Deferrals
  B. Definition of Terms (§ 280.91)
    1. Accidental Release
    2. Bodily Injury
    3. Controlling Interest
    4. Legal Defense Costs
    5. Occurrence
    6. Property Damage
    7. Provider of Financial Assurance
    8. Substantial Business Relationship
    9. Tangible Net Worth
  C. Amount and Scope of Required Coverage (§ 280.92)
    1. Per-Occurrence Amount
    2. Aggregate Amounts
    3. Apportionment of Costs

Attachment II
Agenda Item
10-9-87, EQC

BEFORE THE ENVIRONMENTAL QUALITY COMMISSION

OF THE STATE OF OREGON

IN THE MATTER OF ADOPTING OAR Chapter 340, Division 150	)))	STATEMENT OF NEED FOR RULES

Statutory Authority

SB 115 (Chapter 539, Oregon Law 1987) authorizes rule adoption for the purpose of regulating underground storage tanks. Specifically, Section 13 authorizes the Commission to adopt rules governing the standards for the installation of underground storage tanks, reporting of releases, permit requirements, procedures for distributors of regulated substances and sellers of underground storage tanks, and decommissioning of underground tanks.

Section 11 requires that installation of underground tanks comply with adopted rules. Sections 15 and 16 require that certain persons complete a permit application and install, operate or decommission a tank only under an authorized permit. Section 16 further limits the distribution of regulated substances to tanks operating under an authorized permit, and imposes certain requirements on distributors of regulated substances and sellers of underground tanks. Section 20 imposes certain responsibilities on the owner of the tank or the permittee. Section 21 authorizes the department to revoke or refuse to issue a permit under certain circumstances. Section 23 allows for a fee not to exceed $25.00 per tank. Sections 38 and 39 subject violators of underground storage tank statutes, rules, or orders to both criminal and civil penalties.

Section 48 requires that the permit application under Section 15 not become operative until 90 days after the Commission has adopted rules. Section 49 requires that the permit issued under Section 16 not become operative until one year after the Commission adopts rules.

Need For the Rules

The proposed rules are needed to carry out the authority given to the Commission to adopt rules for regulation of underground storage tanks, and to begin the rulemaking process for developing a self-supporting program.

Principal Documents Relied Upon

SB 115 passed by the 1987 Oregon Legislature (Chapter 539, Oregon Law 1987).

Subtitle I of the 1984 Hazardous and Solid Waste Amendments to the Resource Conservation and Recovery Act.

The Comprehensive Environmental Response, Compensation and Liability Act of 1980.

Superfund Amendments and Reauthorization Act of 1986.

40CFR Part 280, November 8, 1985

Fiscal and Economic Impact

Fiscal Impact

The Department has developed a program plan to implement a state-wide underground storage tank regulatory program. The department has submitted a Grant Proposal to EPA requesting federal funding in the amount of $189,252. As part of this program, the federal regulations require a state match of 25%. If the grant application is approved by EPA, total program cost for FFY'88 will be $189,252.

In addition, the 1987 Oregon Legislature approved (SB 115) a $25 per tank per year fee and imposed a $1.2 million budget limitation.

Small Business Impact

The department has currently registered 22,409 tanks from the notification program begun in February 1986. The majority of businesses owning and operating underground tanks are classified as small businesses. The overall statewide impact of the permit fee is expected to be $1,120,450 for the biennium.

The average number of tanks located at a facility is approximately 3 tanks. Therefore, each facility location will pay approximately $75 per year for each set of three tanks.

We estimate that an average of 15 minutes will be required to complete the permit application. With an average estimated labor cost of $15.00 per hour, average expenses incurred per application will be $3.75. For a facility with three tanks, an average cost of $11.25 will be incurred. The overall statewide impact will be $252,101.

Any person installing an underground tank is required to comply with the interim prohibition requirements imposed by Congress and regulated by EPA. Therefore, there will not be additional impact on Oregon businesses since the proposed rule does not exceed those standards already required by the EPA.

Attachment III
Agenda Item
10-9-87, EQC Meeting

Before the Environmental Quality Commission of the State of Oregon

In the Matter of Proposed Rules OAR 340-150-10 through 340-150-150 and 340-12-067	)	Land Use Consistency

The proposed rule appears to affect land use and to be consistent with the Statewide Planning Goals.

With regard to Goal 6, the proposed rule is consistent with the goal to maintain and improve the quality of the air, water, and land resources of the state. Permit requirements, interim technical standards regarding the installation of tanks, and decommissioning of tanks are consistent with the goal to maintain and improve air, land, and water resources. Limitations on the distribution of regulated substances to permitted tanks, and requirements to ensure that permit information is distributed by distributors of regulated substances and sellers of tanks are also consistent with Goal 6. The rule does not appear to conflict with other goals.

Public comment on any land use issue involved is welcome and may be submitted in the same fashion 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 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.

Oregon Department of Environmental Quality

A CHANCE TO COMMENT ON...

Proposed Rules for the Underground Storage Tank Program

Hearing Authorized: October 9, 1987
Comments Due: December 4, 1987

WHO IS AFFECTED: Persons who own or are in control of underground tanks used to store petroleum products including waste oil, and hazardous substances listed in the Comprehensive Environmental Response, Compensation, and Liability Act. Persons affected may be owners or operators or owners of land in which the tanks are located. Underground storage tanks are found at gasoline stations, marinas, automobile dealerships, nurseries, commercial fleets, manufacturing firms, dry cleaning establishments, and farming operations. Federal military and non-military facilities, state agencies, school districts, port districts, and local governments also may be included within this regulatory program.

BACKGROUND: Subtitle I, of the Hazardous and Solid Waste Amendments of 1984 to the Resource Conservation and Recovery Act, authorizes the implementation of a federal underground storage tank program. Congress intended that this program be run by state governments with minimum federal involvement. The 1985 Oregon Legislature determined that the Department of Environmental Quality carry out the program in Oregon. The 1987 Oregon Legislature expanded the Department's authority over underground storage tanks to include all the elements of the federal program and certain additional state requirements.

WHAT IS PROPOSED: The purpose of these rules is to implement the first phase of the Oregon Underground Storage Tank Program. This phase includes:

* A permit program for underground tanks;
* Assessment of a $25.00 per tank per year fee to provide for a self-supporting program;
* Limitation on the distribution of regulated substances to only permitted tanks;
* Requirements for distributors of regulated substances and sellers of underground storage tanks to inform their customers of permit requirements;
* Installation standards;
* Requirements for permanent abandonment of underground storage tanks, and
* Penalty provisions.

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.

WHAT ARE THE HIGHLIGHTS:

Definitions for:

Underground Storage Tank
Any tank, including underground piping, which contains regulated substances whose combined volumes (tank + piping) is 10 percent or more beneath the ground, with certain exemptions.

Regulated Substances
Includes hazardous substances (e.g. solvents, resins, pesticides, chemical preservatives, diesel fuel, waste oil, etc.).

Permittee
Means the tank owner or a person designed by the tank owner who is in control of the daily operation or maintenance of the underground tank under a permit issued by the Department.

Permit Requirements
* On or before or after June 1, 1988, owners of tanks in operation and owners of tanks continuing to store regulated substances are required to apply for a permit.
* A $25.00 per tank per year fee is required to accompany the permit application.
* After March 1, 1989, no person may install, operate, abandon or remove an underground tank without a permit.

Removal Requirements
* Abandonment of tanks in place or removal of tanks from the ground requires notification to the Department in writing and corrective action.

HOW TO COMMENT:

A public hearing to receive oral and written comments is scheduled for:

Tuesday, December 1, 1987
10:00 a.m.
DEQ Portland Headquarters
811 S. W. Sixth Avenue
Room 4
Portland, Oregon

Thursday, December 3, 1987
10:00 a.m.
Cedar Lodge Motor Inn
518 North Riverside
Medford, Oregon

Wednesday, December 2, 1987
10:00 a.m.
Lane County Courthouse
B. C. Room
125 E. Eighth Street
Eugene, Oregon

Friday, December 4, 1987
10:00 a.m.
Police Building
720 N. W. Wall
Bend, Oregon

Friday, December 4, 1987
10:00 a.m.
Eastern Oregon State College
Hoke Building
Room 309
Eighth and "K" Streets
LaGrande, Oregon

Written comments should be submitted at the public hearing or sent to DEQ, Underground Storage Tank Program, 811 S. W. Sixth Avenue, Portland, Oregon 97204 by December 4, 1987.

For more information, or to receive a copy of the proposed rules, contact:

Larry Frost at (503) 229-5769 or toll-free at 1-800-452-4011.

WHAT IS THE NEXT STEP

After the public hearing, DEQ will evaluate the comments, prepare response to comments, and make a recommendation to the Environmental Quality Commission at a future meeting. The Commission may adopt as proposed, amend or choose not to take any action.

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Attachment V
Agenda Item
October 9, 1987, EQC Meeting

64th OREGON LEGISLATIVE A

Corre

B-Engrossed
Senate Bill 115

Ordered by the Senate June 17
Including Senate Amendments dated March 18
and June 17

PRINTED PURSUANT TO ORS 171.130* by order of the President of the Senate in conformance with presession filing rules, indicating neither advocacy nor opposition on the part of the President (at the request of Department of Environmental Quality)

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.

Establishes state-wide underground storage tank program. Preempts local government from adopting underground storage tank regulations included in state-wide program. Allows Environmental Quality Commission to contract with state agency or local government unit to administer program. Establishes performance standards for new underground storage tanks. Allows commission to adopt program to regulate underground storage tank installation, removal, retrofit, testing and inspection. Requires permit to own or operate underground storage tank. Imposes duties on owner or operator of underground storage tank. Allows commission to grant variance from program. Imposes annual compliance fee. Imposes strict liability for contamination resulting from operation of underground storage tank. [*Allows imposition of annual corrective action fee.*] Establishes Leaking Underground Storage Tank Cleanup Fund. Requires owners and permittees of underground storage tank to provide proof of financial responsibility. **Provides that rules requiring owner or permittee to demonstrate and maintain financial responsibility must be reviewed by appropriate legislative committee prior to adoption.** Establishes Underground Storage Tank Insurance Fund. Allows department to investigate operation of underground storage tank to determine compliance with state-wide program and standards. Allows department to take emergency action to halt operation of underground storage tank. **Allows district to contract with another district to establish and operate regional emergency response team.** Imposes civil and criminal penalties. Appropriates money.

A BILL FOR AN ACT

Relating to environment; creating new provisions; amending ORS 468.910, 468.911 and 468.913 and section 1, chapter _____, Oregon Laws 1987 (Enrolled Senate Bill 122); repealing ORS 468.901, 468.902, 468.904, 468.905, 468.907, 468.908, 468.914, 468.916 and 468.917; and appropriating money.

Be It Enacted by the People of the State of Oregon:

SECTION 1. ORS 468.901 is repealed and section 2 of this Act is enacted in lieu thereof.

SECTION 2. As used in ORS 468.901 to 468.917:

(1) "Corrective action" means remedial action taken to protect the present or future public health, safety, welfare or the environment from a release of a regulated substance. "Corrective action" includes but is not limited to:

(a) The prevention, elimination, removal, abatement, control, minimization, investigation, assessment, evaluation or monitoring of a hazard or potential hazard or threat, including migration of a regulated substance; or

(b) Transportation, storage, treatment or disposal of a regulated substance or contaminated material from a site.

(2) "Decommission" means to remove from operation an underground storage tank, including

NOTE: Matter in **bold face** in an amended section is new; matter [*italic and bracketed*] is existing law to be omitted.

temporary or permanent removal from operation, abandonment in place or removal from the ground.

(3) "Fee" means a fixed charge or service charge.

(4) "Guarantor" means any person other than the permittee who by guaranty, insurance, letter of credit or other acceptable device, provides financial responsibility for an underground storage tank as required under section 27 of this 1987 Act.

(5) "Investigation" means monitoring, surveying, testing or other information gathering.

(6) "Local unit of government" means a city, county, special service district, metropolitan service district created under ORS chapter 268 or a political subdivision of the state.

(7) "Oil" means gasoline, crude oil, fuel oil, diesel oil, lubricating oil, sludge, oil refuse and any other petroleum related product or fraction thereof that is liquid at a temperature of 60 degrees Fahrenheit and a pressure of 14.7 pounds per square inch absolute.

(8) "Owner" means the owner of an underground storage tank.

(9) "Permittee" means the owner or a person designated by the owner who is in control of or has responsibility for the daily operation or maintenance of an underground storage tank under a permit issued pursuant to section 16 of this 1987 Act.

(10) "Person" means an individual, trust, firm, joint stock company, corporation, partnership, joint venture, consortium, association, state, municipality, commission, political subdivision of a state or any interstate body, any commercial entity and the Federal Government or any agency of the Federal Government.

(11) "Regulated substance" means:

(a) Any substance listed by the United States Environmental Protection Agency in 40 CFR Table 302.4 pursuant to the Comprehensive Environmental Response, Compensation and Liability Act of 1980 as amended (P.L. 96-510 and P.L. 98-80), but not including any substance regulated as a hazardous waste under 40 CFR Part 261 and OAR 340 Division 101;

(b) Oil; or

(c) Any other substance designated by the commission under ORS 466.630.

(12) "Release" means the discharge, deposit, injection, dumping, spilling, emitting, leaking or placing of a regulated substance from an underground storage tank into the air or into or on land or the waters of the state, other than as authorized by a permit issued under state or federal law.

(13) "Underground storage tank" means any one or combination of tanks and underground pipes connected to the tank, used to contain an accumulation of a regulated substance, and the volume of which, including the volume of the underground pipes connected to the tank, is 10 percent or more beneath the surface of the ground.

(14) "Waters of the state" has the meaning given that term in ORS 468.700.

SECTION 3. ORS 468.902 is repealed and section 4 of this Act is enacted in lieu thereof.

SECTION 4. (1) The Legislative Assembly finds that:

(a) Regulated substances hazardous to the public health, safety, welfare and the environment are stored in underground tanks in this state; and

(b) Underground tanks used for the storage of regulated substances are potential sources of contamination of the environment and may pose dangers to the public health, safety, welfare and the environment.

(2) Therefore, the Legislative Assembly declares:

(a) It is the public policy of this state to protect the public health, safety, welfare and the environment from the potential harmful effects of underground tanks used to store regulated sub-

stances.

(b) It is the purpose of ORS 468.901 to 468.917 to enable the Environmental Quality Commission to adopt a state-wide program for the prevention and reporting of releases and for taking corrective action to protect the public and the environment from releases from underground storage tanks.

SECTION 5. Sections 6, 8, 9, 10, 11, 14, 15, 16, 17, 21, 22, 23, 24, 25, 26, 27, 28, 32, 35, 36, 37, 38 and 39 of this Act are added to and made a part of ORS 468.901 to 468.917.

SECTION 6. The Environmental Quality Commission shall adopt a state-wide underground storage tank program. Except as otherwise provided in ORS 468.901 to 468.917, the state-wide program shall establish uniform procedures and standards to protect the public health, safety, welfare and the environment from the consequences of a release from an underground storage tank.

SECTION 7. ORS 468.904 is repealed and section 8 of this Act is enacted in lieu thereof.

SECTION 8. (1) Except as provided in section 9 of this 1987 Act, a local unit of government may not enact or enforce any ordinance, rule or regulation relating to the matters encompassed by the state program established under section 6 of this 1987 Act.

(2) Any ordinance, rule or regulation enacted by a local unit of government of this state that encompasses the same matters as the state program shall be unenforceable, except for an ordinance, rule or regulation:

(a) That requires an owner or permittee to report a release to the local unit of government; or

(b) Adopted by a local unit of government operating an underground storage tank program pursuant to a contract entered into according to the provisions of section 9 of this 1987 Act.

SECTION 9. (1) The commission may authorize the department to enter into a contract or agreement with an agency of this state or a local unit of government to administer all or part of the underground storage tank program.

(2) Any agency of this state or any local unit of government that seeks to administer an underground storage tank program under this section shall submit to the department a description of the program the agency or local unit of government proposes to administer in lieu of all or part of the state program. The program description shall include at least the following:

(a) A description in narrative form of the scope, structure, coverage and procedures of the proposed program.

(b) A description, including organization charts, of the organization and structure of the contracting state agency or local unit of government that will have responsibility for administering the program, including:

(A) The number of employes, occupation and general duties of each employe who will carry out the activities of the contract.

(B) An itemized estimate of the cost of establishing and administering the program, including the cost of personnel listed in subparagraph (A) of this paragraph and administrative and technical support.

(C) An itemization of the source and amount of funding available to the contracting state agency or local unit of government to meet the costs listed in subparagraph (B) of this paragraph, including any restrictions or limitations upon this funding.

(D) A description of applicable procedures, including permit procedures.

(E) Copies of the permit form, application form and reporting form the state agency or local unit of government intends to use in the program.

(F) A complete description of the methods to be used to assure compliance and for enforcement

of the program.

(G) A description of the procedures to be used to coordinate information with the department, including the frequency of reporting and report content.

(H) A description of the procedures the state agency or local unit of government will use to comply with trade secret laws under ORS 192.500 and 468.910.

(3) Any program approved by the department under this section shall at all times be conducted in accordance with the requirements of ORS 468.901 to 468.917.

(4) An agency or local unit of government shall exercise the functions relating to underground storage tanks authorized under a contract or agreement entered into under this section according to the authority vested in the commission and the department under ORS 468.901 to 468.917 insofar as such authority is applicable to the performance under the contract or agreement. The agency or local unit of government shall carry out these functions in the manner provided for the commission and the department to carry out the same functions.

SECTION 10. Nothing in ORS 468.901 to 468.917 is intended to interfere with, limit or abridge the authority of the Building Codes Division or the State Fire Marshal, or any other state agency or local unit of government relating to combustion and explosion hazards, hazard communications or land use. The complementary relationship between the protection of the public safety from combustion and explosion hazards, and protection of the public health, safety, welfare and the environment from releases of regulated substances from underground storage tanks is recognized. Therefore, the department shall work cooperatively with the Building Codes Division, the State Fire Marshal and local units of government in developing the rules and procedures necessary to carry out the provisions of ORS 468.901 to 468.917.

SECTION 11. No person shall install an underground storage tank for the purpose of storing regulated substances unless the tank complies with the standards adopted under section 13 of this 1987 Act and any other rule adopted under ORS 468.901 to 468.917.

SECTION 12. ORS 468.908 is repealed and section 13 of this Act is enacted in lieu thereof.

SECTION 13. (1) The commission may establish by rule:

(a) Performance standards for leak detection systems, inventory control, tank testing or comparable systems or programs designed to detect or identify releases in a manner consistent with the protection of public health, safety, welfare or the environment;

(b) Requirements for maintaining records and submitting information to the department in conjunction with a leak detection or identification system or program used for each underground storage tank;

(c) Performance standards for underground storage tanks including but not limited to design, retrofitting, construction, installation, release detection and material compatibility;

(d) Requirements for the temporary or permanent decommissioning of an underground storage tank;

(e) Requirements for reporting a release from an underground storage tank;

(f) Requirements for a permit issued under section 16 of this 1987 Act;

(g) Procedures that distributors of regulated substances and sellers of underground storage tanks must follow to satisfy the requirements of section 16 of this 1987 Act;

(h) Acceptable methods by which an owner or permittee may demonstrate financial responsibility for responding to the liability imposed under section 27 of this 1987 Act;

(i) Procedures for the disbursement of moneys collected under section 28 of this 1987 Act;

(j) Requirements for reporting corrective action taken in response to a release;

(k) Requirements for taking corrective action in response to a release; and

(L) Any other rule necessary to carry out the provisions of ORS 468.901 to 468.917.

(2) The commission may adopt different requirements for different areas or regions of the state if the commission finds either of the following:

(a) More stringent rules or standards are necessary:

(A) To protect specific waters of the state, a sole source or sensitive aquifer or any other sensitive environmental amenity; or

(B) Because conditions peculiar to that area or region require different standards to protect public health, safety, welfare or the environment.

(b) Less stringent rules or standards are:

(A) Warranted by physical conditions or economic hardship;

(B) Consistent with the protection of the public health, safety, welfare or the environment; and

(C) Not less stringent than minimum federal requirements.

(3) The rules adopted by the commission under subsection (1) of this section may distinguish between types, classes and ages of underground storage tanks. In making such distinctions, the commission may consider the following factors:

(a) Location of the tanks;

(b) Soil and climate conditions;

(c) Uses of the tanks;

(d) History of maintenance;

(e) Age of the tanks;

(f) Current industry recommended practices;

(g) National consensus codes;

(h) Hydrogeology;

(i) Water table;

(j) Size of the tanks;

(k) Quantity of regulated substances periodically deposited in or dispensed from the tank;

(L) The technical ability of the owner or permittee; and

(m) The compatibility of the regulated substance and the materials of which the tank is fabricated.

(4) In adopting rules under subsection (1) of this section, the commission shall consider all relevant federal standards and regulations on underground storage tanks. If the commission adopts any standard or rule that is different than a federal standard or regulation on the same subject, the report submitted to the commission by the department at the time the commission adopts the standard or rule shall indicate clearly the deviation from the federal standard or regulation and the reasons for the deviation.

SECTION 14. (1) In order to safeguard the public health, safety and welfare, to protect the state's natural and biological systems, to protect the public from unlawful underground tank installation and retrofit procedures and to assure the highest degree of leak prevention from underground storage tanks, the commission may adopt a program to regulate persons providing underground storage tank installation and removal, retrofit, testing and inspection services.

(2) The program established under subsection (1) of this section may include a procedure to license persons who demonstrate, to the satisfaction of the department, the ability to service under-

ground storage tanks. This demonstration of ability may consist of written or field examinations. The commission may establish different types of licenses for different types of demonstrations, including but not limited to:

(a) Installation, removal, retrofit and inspection of underground storage tanks;

(b) Tank integrity testing; and

(c) Installation of leak detection systems.

(3) The program adopted under subsection (1) of this section may allow the department after opportunity for hearing under the provisions of ORS 183.310 to 183.550, to revoke a license of any person offering underground tank services who commits fraud or deceit in obtaining a license or who demonstrates negligence or incompetence in performing underground tank services.

(4) The program adopted under subsection (1) of this section shall:

(a) Provide that no person may offer to perform or perform services for which a license is required under the program without such license.

(b) Establish a schedule of fees for licensing under the program. The fees shall be in an amount sufficient to cover the costs of the department in administering the program.

SECTION 15. The following persons shall apply for an underground storage tank permit from the department:

(1) An owner of an underground storage tank currently in operation;

(2) An owner of an underground storage tank taken out of operation between January 1, 1974, and the operative date of this section; and

(3) An owner of an underground storage tank that was taken out of operation before January 1, 1974, but that still contains a regulated substance.

SECTION 16. (1) No person shall install, bring into operation, operate or decommission an underground storage tank without first obtaining a permit from the department.

(2) No person shall deposit a regulated substance into an underground storage tank unless the tank is operating under a permit issued by the department.

(3) Any person who assumes ownership of an underground storage tank from a previous permittee must complete and return to the department an application for a new permit before the person begins operation of the underground storage tank under the new ownership.

(4) Any person who deposits a regulated substance into an underground storage tank or sells an underground storage tank shall notify the owner or operator of the tank of the permit requirements of this section.

(5) The following persons must sign an application for a permit submitted to the department under this section or section 15 of this 1987 Act:

(a) The owner of an underground storage tank storing a regulated substance;

(b) The owner of the real property in which an underground storage tank is located; and

(c) The proposed permittee, if a person other than the owner of the underground storage tank or the owner of the real property.

SECTION 17. If the department is unable to issue a final permit before the operative date of section 16 of this 1987 Act, the department may issue a temporary or conditional permit. A temporary or conditional permit shall expire when the department grants or denies the final permit. A temporary or conditional permit does not authorize any activity, operation or discharge that violates any law or rule of the State of Oregon or the Department of Environmental Quality.

SECTION 18. ORS 468.911 is amended to read:

468.911. ORS 468.901 to 468.917 shall not apply to a:

(1) Farm or residential tank [*or tanks used for storing motor fuel, each of which has a capacity of 10,000 or fewer gallons*] **of 1,100 gallons or less capacity used for storing motor fuel for noncommercial purposes.**

(2) Tank used for storing heating oil for consumptive use on the premises where stored.

(3) Septic tank.

(4) Pipeline facility including gathering lines regulated [*under*]:

(a) **Under** the Natural Gas Pipeline Safety Act of 1968 (49 U.S.C. 1671); [*or*]

(b) **Under** the Hazardous Liquid Pipeline Safety Act of 1979 (49 U.S.C. 2001)**; or** [.]

(c) As an intrastate pipeline facility under state laws comparable to the provisions of law referred to in paragraph (a) or (b) of this subsection.

(5) Surface impoundment, pit, pond or lagoon.

(6) Storm water or waste water collection system.

(7) Flow-through process tank.

(8) Liquid trap or associated gathering lines directly related to oil or gas production and gathering operations.

(9) Storage tank situated in an underground area if the storage tank is situated upon or above the surface of a floor. **As used in this subsection, "underground area" includes but is not limited to a basement, cellar, mine, drift, shaft or tunnel.**

(10) Pipe connected to any tank described in subsections (1) to (8) of this section.

SECTION 19. ORS 468.905 is repealed and section 20 of this Act is enacted in lieu thereof.

SECTION 20. In addition to any other duty imposed by law and pursuant to rules adopted under ORS 468.901 to 468.917, the owner or the permittee of an underground storage tank shall:

(1) Prevent releases;

(2) Install, operate and maintain underground storage tanks and leak detection devices and develop and maintain records in connection therewith in accordance with standards adopted and permits issued under ORS 468.901 to 468.917;

(3) Furnish information to the department relating to underground storage tanks, including information about tank equipment and regulated substances stored in the tanks;

(4) Promptly report releases;

(5) Conduct monitoring and testing as required by rules adopted under section 13 of this 1987 Act and permits issued under section 16 of this 1987 Act;

(6) Permit department employes or a duly authorized and identified representative of the department at all reasonable times to have access to and to copy all records relating to underground storage tanks;

(7) Pay all costs of investigating, preventing, reporting and stopping a release;

(8) Decommission tanks, as required by rules adopted under section 13 of this 1987 Act and permits issued under section 16 of this 1987 Act;

(9) Pay all fees;

(10) Conduct any corrective action required under section 32 of this 1987 Act; and

(11) Perform any other requirement adopted under this 1987 Act.

SECTION 21. (1) The department may refuse to issue, modify, suspend, revoke or refuse to renew a permit if the department finds:

(a) A material misrepresentation or false statement in the application for the permit;

(b) Failure to comply with the conditions of the permit; or

(c) Violation of any applicable provision of ORS 468.901 to 468.917, any applicable rule or standard adopted under ORS 468.901 to 468.917 or an order issued under ORS 468.901 to 468.917.

(2) The department may modify a permit issued under section 16 of this 1987 Act if the department finds, after notice and opportunity for hearing, that modification is necessary to protect the public health, safety, welfare or the environment.

(3) The department shall modify, suspend, revoke or refuse to issue or renew a permit according to the provisions of ORS 183.310 to 183.550 for a contested case proceeding.

SECTION 22. (1) Upon petition by the owner and the permittee of an underground storage tank, the commission may grant a variance from the requirements of any rule or standard adopted under section 13 of this 1987 Act if the commission finds:

(a) The alternative proposed by the petitioner provides protection to the public health, safety, welfare and the environment, equal to or greater than the rule or standard; and

(b) The alternative proposal is at least as stringent as any applicable federal requirements.

(2) The commission may grant a variance under subsection (1) of this section only if the commission finds that strict compliance with the rule or standard is inappropriate because:

(a) Conditions exist that are beyond the control of the petitioner; or

(b) Special physical conditions or other circumstances render strict compliance unreasonable, burdensome or impracticable.

(3) The commission may delegate the authority to grant a variance to the department.

(4) Within 15 days after the department denies a petition for a variance, the petitioner may file with the commission a request for review by the commission. The commission shall review the petition for variance and the reasons for the department's denial of the petition within 150 days after the commission receives a request for review. The commission may approve or deny the variance or allow a variance on terms different than the terms proposed by the petitioner. If the commission fails to act on a denied petition within the 150-day period the variance shall be considered approved by the commission.

SECTION 23. (1) Fees may be required of every permittee of an underground storage tank. Fees shall be in an amount determined by the commission to be adequate to carry on the duties of the department or the duties of a state agency or local unit of government that has contracted with the department under section 9 of this 1987 Act. Such fees shall not exceed $25 per tank per year.

(2) Fees collected by the department under this section shall be deposited in the State Treasury to the credit of an account of the department. All fees paid to the department shall be continuously appropriated to the department to carry out the provisions of ORS 468.901 to 468.917.

SECTION 24. (1) If any owner or permittee of a contaminated site fails without sufficient cause to conduct corrective action under section 20 of this 1987 Act, the department may undertake any investigation or corrective action with respect to the contamination on the site.

(2) The department shall keep a record of all expenses incurred in carrying out any corrective action authorized under subsection (1) of this section, including charges for services performed and the state's equipment and materials utilized.

(3) Any owner or permittee of a contaminated site who fails without sufficient cause to conduct corrective action as required by an order of the department under section 32 of this 1987 Act shall be liable to the department for damages not to exceed three times the amount of all expenses incurred by the department in carrying out the necessary corrective action.

(4) Based on the record compiled by the department under subsection (2) of this section, the commission shall make a finding and enter an order against the person described in subsection (1) or (3) of this section for the amount of damages, not to exceed treble damages, and the expenses incurred by the state in carrying out the actions authorized by this section. The order may be appealed in the manner provided for appeal of a contested case order under ORS 183.310 to 183.550.

(5) If the amount of corrective action costs incurred by the department and damages under this section are not paid by the responsible person to the department within 15 days after receipt of notice that such expenses are due and owing, or, if an appeal is filed within 15 days after the court renders its decision if the decision affirms the order, the Attorney General, at the request of the director, shall bring an action in the name of the State of Oregon in a court of competent jurisdiction to recover the amount specified in the notice of the director.

(6) Subsection (5) of this section shall not apply if the department and the responsible person are negotiating or have entered into a settlement agreement, except that if the responsible person fails to pay the corrective action costs as provided in the negotiated settlement the director may request the Attorney General to take action as set forth in subsection (5) of this section.

(7) All moneys received by the department under this section shall be paid into the fund established in section 26 of this 1987 Act.

(8) As used in this section:

(a) "Contamination" means any abandoning, spilling, releasing, leaking, disposing, discharging, depositing, emitting, pumping, pouring, emptying, injecting, escaping, leaching, placing or dumping of a regulated substance from an underground storage tank into the air or on any lands or waters of the state, so that such regulated substance may enter the environment, be emitted into the air or discharged into any waters. Such contamination authorized by and in compliance with a permit issued under ORS chapter 454, 459, 468, 469, ORS 466.005 to 466.385 or federal law shall not be considered as contamination under this 1987 Act.

(b) "Site" means any area or land.

NOTE: Section 25 was deleted by amendment. Subsequent sections were not renumbered.

SECTION 26. (1) The Leaking Underground Storage Tank Cleanup Fund is established separate and distinct from the General Fund in the State Treasury.

(2) The following moneys, as they pertain to an underground storage tank, shall be deposited into the State Treasury and credited to the Leaking Underground Storage Tank Cleanup Fund:

(a) Moneys recovered or otherwise received from responsible parties for corrective action; and

(b) Any penalty, fine or damages recovered under section 24 of this 1987 Act.

(3) The State Treasurer may invest and reinvest moneys in the Leaking Underground Storage Tank Cleanup Fund in the manner provided by law.

(4) The moneys in the Leaking Underground Storage Tank Cleanup Fund are appropriated continuously to the department to be used as provided in subsection (5) of this section.

(5) Moneys in the Leaking Underground Storage Tank Cleanup Fund may be used by the department for the following purposes:

(a) Payment of corrective action costs incurred by the department in responding to a release from underground storage tanks;

(b) Funding of all actions and activities authorized by section 24 of this 1987 Act; and

(c) Payment of the state cost share for corrective action, as required by section 9003(h)(7)(B) of the federal Solid Waste Disposal Act, P.L. 96-482.

SECTION 27. (1) The commission may by rule require an owner or permittee to demonstrate and maintain financial responsibility for:

(a) Taking corrective action;

(b) Compensating a third party for bodily injury and property damage caused by a release; and

(c) Compensating the department, or any other person, for expenses incurred by the department or any other person in taking corrective action.

(2) The financial responsibility requirements established by subsection (1) of this section may be satisfied by insurance, guarantee by third party, surety bond, letter of credit or qualification as a self-insurer or any combination of these methods. In adopting rules under subsection (1) of this section, the commission may specify policy or other contractual terms, conditions or defenses necessary or unacceptable to establish evidence of financial responsibility.

(3) If an owner or permittee is in bankruptcy, reorganization or arrangement pursuant to the federal bankruptcy law, or if jurisdiction in any state or federal court cannot be obtained over either an owner or a permittee likely to be solvent at the time of judgment, any claim arising from conduct for which evidence of financial responsibility must be provided under this section may be asserted directly against the guarantor. In the case of action under paragraph (b) of subsection (1) of this section, the guarantor is entitled to invoke all rights and defenses that would have been available to the owner or permittee if the action had been brought against the owner or permittee by the claimant and all rights and defenses that would have been available to the guarantor if the action had been brought against the guarantor by the owner or permittee.

(4) The total liability of a guarantor shall be limited to the aggregate amount the guarantor provided as evidence of financial responsibility to the owner or permittee under subsection (2) of this section. This subsection does not limit any other state or federal statutory, contractual or common law liability of the guarantor for bad faith in negotiating or in failing to negotiate the settlement of any claim. This subsection does not diminish the liability of any person under section 107 or 111 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended, or other applicable law.

(5) Corrective action and compensation programs financed by a fee paid by owners and permittees and administered by the department may be used to satisfy all or part of the financial responsibility requirements of this section.

(6) No rule requiring an owner or permittee to demonstrate and maintain financial responsibility shall be adopted by the commission before review by the appropriate legislative committee as determined by the President of the Senate and the Speaker of the House of Representatives.

SECTION 28. (1) The Underground Storage Tank Insurance Fund is established separate and distinct from the General Fund in the State Treasury to be used solely for the purpose of satisfying the financial responsibility requirements of section 27 of this 1987 Act.

(2) Fees received by the department pursuant to subsection (6) of this section, shall be deposited into the State Treasury and credited to the Underground Storage Tank Insurance Fund.

(3) The State Treasurer may invest and reinvest moneys in the Underground Storage Tank Insurance Fund in the manner provided by law.

(4) The moneys in the Underground Storage Tank Insurance Fund are appropriated continuously to the department to be used as provided for in subsection (5) of this section.

(5) Moneys in the Underground Storage Tank Insurance Fund may be used by the department for the following purposes, as they pertain to underground storage tanks:

(a) Compensation to the department or any other person, for taking corrective actions; and

(b) Compensation to a third party for bodily injury and property damage caused by a release.

(6) The commission may establish an annual financial responsibility fee to be collected from an owner or permittee of an underground storage tank. The fee shall be in an amount determined by the commission to be adequate to meet the financial responsibility requirements established under section 27 of this 1987 Act and any applicable federal law.

(7) Before the effective date of any regulations relating to financial responsibility adopted by the United States Environmental Protection Act pursuant to P.L. 98-616 and P.L. 99-499, the department shall formulate a plan of action to be followed if it becomes necessary for the Underground Storage Tank Insurance Fund to become operative in order to satisfy the financial responsibility requirements of section 27 of this 1987 Act. In formulating the plan of action, the department shall consult with the Insurance Commissioner, owners and permittees of underground storage tanks and any other interested party. The plan of action must be reviewed by the Legislative Assembly or the Emergency Board before implementation.

SECTION 29. ORS 468.907 is repealed and section 30 of this Act is enacted in lieu thereof.

SECTION 30. (1) In order to determine compliance with the provisions of ORS 468.901 to 468.917 and rules adopted under ORS 468.901 to 468.917 and to enforce the provisions of ORS 468.901 to 468.917, any employes of or an authorized and identified representative of the department may:

(a) Enter at reasonable times any establishment or site where an underground storage tank is located;

(b) Inspect and obtain samples of a regulated substance contained in an underground storage tank; and

(c) Conduct an investigation of an underground storage tank, associated equipment, contents or the soil, air or waters of the state surrounding an underground storage tank.

(2) If any person refuses to comply with subsection (1) of this section, the department or a duly authorized and identified representative of the department may obtain a warrant or subpena to allow such entry, inspection, sampling or copying.

SECTION 31. ORS 468.910 is amended to read:

468.910. (1) Except as provided in subsection (2) of this section, any **records, reports or** information [*filed or submitted under ORS 468.907*] **obtained from any persons under sections 20 and 30 of this 1987 Act** shall be made available for public inspection and copying during **the** regular office hours of the department at the expense of any person requesting copies.

(2) Unless classified by the director as confidential, any records, reports or information obtained under ORS 468.901 to 468.917 shall be available to the public. Upon a showing satisfactory to the director by any person that records, reports or information, or particular parts thereof, if made public, would divulge methods, processes or information entitled to protection as trade secrets under ORS 192.500, the director shall classify as confidential such record, report or information, or particular part thereof. However, such record, report or information may be disclosed to any other officer, medical or public safety employe or authorized representative of the state concerned with carrying out ORS 468.901 to 468.917 or when relevant in any proceeding under ORS 468.901 to 468.917.

(3) Any record, report or information obtained or used by the department or the commission in administering the state-wide underground storage tank program under ORS 468.901 to 468.917 shall be available to the United States Environmental Protection Agency

upon request. If the record, report or information has been submitted to the state under a claim of confidentiality, the state shall make that claim of confidentiality to the Environmental Protection Agency for the requested record, report or information. The federal agency shall treat the record, report or information subject to the confidentiality claim as confidential in accordance with applicable federal law.

SECTION 32. (1) Whenever the department has reasonable cause to believe that an underground storage tank or the operation of an underground storage tank violates ORS 468.901 to 468.917 or fails to comply with a rule, order or permit issued under ORS 468.901 to 468.917, the department may investigate the underground storage tank.

(2) After the department investigates an underground storage tank under subsection (1) of this section, the department may, without notice or hearing, make such findings and issue such orders as it considers necessary to protect the public health, safety, welfare or the environment.

(3) The findings and orders made by the department under subsection (2) of this section may:

(a) Require changes in the operation, practices or operating procedures found to be in violation of ORS 468.901 to 468.917 or the rules adopted under ORS 468.901 to 468.917;

(b) Require the owner or operator to comply with the provisions of a permit;

(c) Require compliance with a schedule established in the order; and

(d) Require any other actions considered necessary by the department.

(4) After the department issues an order under subsection (2) of this section, the department may decommission the underground storage tank or contract with another person to decommission the underground storage tank.

(5) The department shall serve a certified copy of any order issued by it under subsection (2) of this section to the permittee or the permittee's duly authorized representative at the address furnished to the department in the permit application or other address as the department knows to be used by the permittee. The order shall take effect 20 days after the date of its issuance, unless the permittee requests a hearing on the order before the commission. The request for a hearing shall be submitted in writing within 20 days after the department issues the order.

(6) All hearings before the commission or its hearing officer shall be conducted according to applicable provisions of ORS 183.310 to 183.550 for contested cases.

(7) Whenever it appears to the department that any person is engaged or about to engage in any act or practice that constitutes a violation of ORS 468.901 to 468.917 or the rules and orders adopted under ORS 468.901 to 468.917 or of the terms of any permit issued under ORS 468.901 to 468.917, the department, without prior administrative hearing, may institute actions or proceedings for legal or equitable remedies to enforce compliance therewith or to restrain further violations thereof.

SECTION 33. ORS 468.914 is repealed and section 34 of this Act is enacted in lieu thereof.

SECTION 34. (1) The owner and the permittee of an underground storage tank found to be in violation of any provision of ORS 468.901 to 468.917, shall reimburse the department for all costs reasonably incurred by the department, excluding administrative costs, in the investigation of a leak from an underground storage tank. Department costs may include investigation, design engineering, inspection and legal costs necessary to correct the leak.

(2) Payment of costs to the department under subsection (1) of this section shall be made to the department within 15 days after the end of the appeal period or, if an appeal is filed, within 15 days after the court or the commission renders its decision, if the decision affirms the order.

(3) If such costs are not paid by the owner or the permittee of the underground storage tank to

the department within the time provided in subsection (2) of this section, the Attorney General, upon the request of the director, shall bring action in the name of the State of Oregon in the Circuit Court of Marion County or the circuit court of any other county in which the violation may have taken place to recover the amount specified in the order of the department.

(4) In addition to any other penalty provided by law, if any person is found in violation of any provision of this 1987 Act, the commission or the court may award damages in the amount equal to three times the amount of all expenses incurred by the department in investigating the violation.

(5) Moneys reimbursed shall be deposited to the State Treasury to the credit of an account of the department and are continuously appropriated to the department for the purposes of administering this 1987 Act.

SECTION 35. The owner and permittee of an underground storage tank found to be the source of a release shall be strictly liable to any owner or permittee of a nonleaking underground storage tank in the vicinity, for all costs reasonably incurred by such nonleaking underground storage tank owner or permittee in determining which tank was the source of the release.

SECTION 36. (1) Whenever, in the judgment of the department from the results of monitoring or observation of an identified release, there is reasonable cause to believe that a clear and immediate danger to the public health, welfare, safety or the environment exists from the continued operation of an underground storage tank, the department may, without hearing or prior notice, order the operation of the underground storage tank or site halted by service of an order on the owner or permittee of the underground storage tank or site.

(2) Within 24 hours after the order is served under subsection (1) of this section, the department shall appear in the appropriate circuit court to petition for the equitable relief required to protect the public health, safety, welfare or the environment.

SECTION 37. (1) All compliance and corrective action costs, penalties and damages for which a person is liable to the state under ORS 468.901 to 468.917 shall constitute a lien upon any real and personal property owned by the person.

(2) The department shall file a claim of lien on real property to be charged with a lien under subsection (1) of this section with the recording officer of each county in which the real property is located and shall file a claim of lien on personal property to be charged with a lien under subsection (1) of this section with the Secretary of State. The lien shall attach and become enforceable on the date of the filing. The lien claim shall contain:

(a) A statement of the demand;

(b) The name of the person against whose property the lien attaches;

(c) A description of the property charged with the lien sufficient for identification; and

(d) A statement of the failure of the person to conduct compliance and corrective actions as required.

(3) A lien created by this section may be foreclosed by a suit on real and personal property in the circuit court in the manner provided by law for the foreclosure of liens.

(4) Nothing in this section shall affect the right of the state to bring an action against any person to recover all costs and damages for which a person is liable under the provisions of ORS 468.901 to 468.917.

SECTION 38. Any person who knowingly or intentionally violates any provision of ORS 468.901 to 468.917 or the rules adopted under ORS 468.901 to 468.917 shall be subject to a criminal penalty not to exceed $10,000 or imprisonment for not more than one year or both. Each day of violation

shall be deemed a separate offense.

SECTION 39. (1) Any person who violates any provision of ORS 468.901 to 468.917, a rule adopted under ORS 468.901 to 468.917 or the terms or conditions of any order or permit issued by the department under ORS 468.901 to 468.917 shall be subject to a civil penalty not to exceed $10,000 per violation per day of violation.

(2) Each violation may be a separate and distinct offense and in the case of a continuing violation, each day's continuance thereof may be deemed a separate and distinct offense.

(3) The department may levy a civil penalty up to $100 for each day a fee due and owing under sections 23, 25 and 28 of this 1987 Act is unpaid. A penalty collected under this subsection shall be placed in the State Treasury to the credit of an account of the department.

(4) The civil penalties authorized under this section shall be established, imposed, collected and appealed in the same manner as civil penalties are established, imposed, collected and appealed under ORS 468.090 to 468.125 and 468.135 except that a penalty collected under this section shall be deposited to the fund established in section 26 of this 1987 Act.

SECTION 40. ORS 468.913 is amended to read:

468.913. The commission and the department are authorized to perform or cause to be performed any act necessary to gain interim and final authorization of a state program for the regulation of underground storage tanks under the provisions of Section 9004 of the Federal Resource Conservation and Recovery Act, P.L. 94-580 as amended and P. L. 98-616, **Section 205 of the federal Solid Waste Disposal Act, P.L. 96-482 as amended** and federal regulations and interpretive and guidance documents issued pursuant to P.L. 94-580 as amended, [*and*] P.L. 98-616 **and P.L. 96-482.** The commission may adopt, amend or repeal any rule necessary to implement ORS 468.901 to 468.917.

SECTION 41. Section 42 of this Act is added to and made a part of ORS 466.605 to 466.690.

SECTION 42. Consistent with the oil and hazardous material emergency response master plan adopted under ORS 466.620, the department may make grants to rural fire protection districts, cities or counties for up to 90 percent of the actual costs to purchase equipment and supplies to respond to oil and hazardous material spills or releases.

SECTION 43. Section 44 of this Act is added to and made a part of ORS 478.210 to 478.310.

SECTION 44. (1) Any district may contract with another rural fire protection district, city or county to establish, operate and maintain a regional oil and hazardous material emergency response team. The contracting parties may provide for a joint board of control, composed of representatives of the contracting parties, to control the operation of the regional emergency response team.

(2) A rural fire protection district may receive a grant under section 42 of this 1987 Act.

(3) Any district whose boundary coincides with the boundary of this state may contract with a public agency or person in an adjoining state for the purpose of responding to spills or releases of oil and hazardous material.

(4) As used in this section, "hazardous material," "oil," "person" and "spill or release" have the meaning established in ORS 466.605.

SECTION 45. ORS 468.916 and 468.917 are repealed.

SECTION 46. Section 8 of this Act does not become operative until nine months after the Environmental Quality Commission adopts a state-wide underground storage tank program under section 6 of this Act and has filed a copy of such rules with the Secretary of State as prescribed in ORS 183.310 to 183.550.

SECTION 47. Section 11 of this Act does not become operative until the Environmental Quality Commission has adopted rules under section 13 of this Act and has filed a copy of such rules with the Secretary of State, as prescribed in ORS 183.310 to 183.550.

SECTION 48. Section 15 of this Act does not become operative until 90 days after the Environmental Quality Commission has adopted rules under section 13 of this Act and has filed a copy of such rules with the Secretary of State, as prescribed in ORS 183.310 to 183.550.

SECTION 49. Section 16 of this Act does not become operative until one year after the Environmental Quality Commission has adopted rules under section 13 of this Act and has filed a copy of such rules with the Secretary of State, as prescribed in ORS 183.310 to 183.550.

SECTION 50. Section 23 of this Act is amended to read:

Sec. 23. (1) Fees may be required of every permittee of an underground storage tank. Fees shall be in an amount determined by the commission to be adequate to carry on the duties of the department or the duties of a state agency or local unit of government that has contracted with the department under section 9 of this 1987 Act. Such fees shall not exceed [*$25*] **$20** per tank per year.

(2) Fees collected by the department under this section shall be deposited in the State Treasury to the credit of an account of the department. All fees paid to the department shall be continuously appropriated to the department to carry out the provisions of ORS 468.901 to 468.917.

SECTION 51. Section 50 of this Act becomes operative on July 1, 1989.

SECTION 52. If Senate Bill 122 becomes law, section 1 of Senate Bill 122, chapter _____, Oregon Laws 1987 (Enrolled Senate Bill 122), is amended to read:

Sec. 1. As used in sections 1 to 24, **chapter _____, Oregon Laws 1987 (Enrolled Senate Bill 122)** [*of this Act*]:

(1) "Claim" means a demand in writing for a sum certain.

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

(3) "Department" means the Department of Environmental Quality.

(4) "Director" means the Director of the Department of Environmental Quality.

(5) "Environment" includes the waters of the state, any drinking water supply, any land surface and subsurface strata and ambient air.

(6) "Facility" means any building, structure, installation, equipment, pipe or pipeline including any pipe into a sewer or publicly owned treatment works, well, pit, pond, lagoon, impoundment, ditch, landfill, storage container, above ground tank, underground storage tank, motor vehicle, rolling stock, aircraft, or any site or area where a hazardous substance has been deposited, stored, disposed of, or placed, or otherwise come to be located and where a release has occurred or where there is a threat of a release, but does not include any consumer product in consumer use or any vessel.

(7) "Fund" means the Hazardous Substance Remedial Action Fund established by section 19, **chapter _____, Oregon Laws 1987 (Enrolled Senate Bill 122)** [*of this Act*].

(8) "Guarantor" means any person, other than the owner or operator, who provides evidence of financial responsibility for an owner or operator under sections 1 to 24, **chapter _____, Oregon Laws 1987 (Enrolled Senate Bill 122)** [*of this 1987 Act*].

(9) "Hazardous substance" means:

(a) Hazardous waste as defined in ORS 466.005.

(b) Any substance defined as a hazardous substance pursuant to section 101(14) of the federal Comprehensive Environmental Response, Compensation and Liability Act, P.L. 96-510, as amended,

P.L. 96-510 and P.L. 99-499.

(c) Oil.

(d) Any substance designated by the commission under section 4, **chapter_____, Oregon Laws 1987 (Enrolled Senate Bill 122)** [*of this Act*].

(10) "Natural resources" includes but is not limited to land, fish, wildlife, biota, air, surface water, groundwater, drinking water supplies and any other resource owned, managed, held in trust or otherwise controlled by the State of Oregon or a political subdivision of the state.

(11) "Oil" includes gasoline, crude oil, fuel oil, diesel oil, lubricating oil, oil sludge or refuse and any other petroleum-related product, or waste or fraction thereof that is liquid at a temperature of 60 degrees Fahrenheit and pressure of 14.7 pounds per square inch absolute.

(12) "Owner or operator" means any person who owned, leased, operated, controlled or exercised significant control over the operation of a facility. "Owner or operator" does not include a person, who, without participating in the management of a facility, holds indicia of ownership primarily to protect a security interest in the facility.

(13) "Person" means an individual, trust, firm, joint stock company, joint venture, consortium, commercial entity, partnership, association, corporation, commission, state and any agency thereof, political subdivision of the state, interstate body or the Federal Government including any agency thereof.

[*(14) "Regulated substance" means:*]

[*(a) Any substance defined as a hazardous substance pursuant to section 101(14) of the federal Comprehensive Environmental Response, Compensation and Liability Act, as amended, P.L. 96-510 and P.L. 99-499, but not including any substance regulated as a hazardous waste under 40 CFR part 261 and OAR 340, Division 101.*]

[*(b) Oil.*]

[*(c) Any substance designated by the commission under ORS 466.630.*]

[*(15)*] **(14)** "Release" means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping or disposing into the environment including the abandonment or discarding of barrels, containers and other closed receptacles containing any hazardous substance, or threat thereof, but excludes:

(a) Any release which results in exposure to a person solely within a workplace, with respect to a claim that the person may assert against the person's employer under ORS chapter 656;

(b) Emissions from the engine exhaust of a motor vehicle, rolling stock, aircraft, vessel or pipeline pumping station engine;

(c) Any release of source, by-product or special nuclear material from a nuclear incident, as those terms are defined in the Atomic Energy Act of 1954, as amended, if such release is subject to requirements with respect to financial protection established by the Nuclear Regulatory Commission under section 170 of the Atomic Energy Act of 1954, as amended, or, for the purposes of section 11 of this Act or any other removal or remedial action, any release of source by-product or special nuclear material from any processing site designated under section 102(a)(1) or 302(a) of the Uranium Mill Tailings Radiation Control Act of 1978; and

(d) The normal application of fertilizer.

[*(16)*] **(15)** "Remedial action" means those actions consistent with a permanent remedial action taken instead of or in addition to removal actions in the event of a release or threatened release of a hazardous substance into the environment, to prevent or minimize the release of a hazardous

substance so that they do not migrate to cause substantial danger to present or future public health, safety, welfare or the environment. "Remedial action" includes, but is not limited to:

(a) Such actions at the location of the release as storage, confinement, perimeter protection using dikes, trenches or ditches, clay cover, neutralization, cleanup of released hazardous substances and associated contaminated materials, recycling or reuse, diversion, destruction, segregation of reactive wastes, dredging or excavations, repair or replacement of leaking containers, collection of leachate and runoff, onsite treatment or incineration, provision of alternative drinking and household water supplies, and any monitoring reasonably required to assure that such actions protect the public health, safety, welfare and the environment.

(b) Offsite transport and offsite storage, treatment, destruction or secure disposition of hazardous substances and associated, contaminated materials.

(c) Such actions as may be necessary to monitor, assess, evaluate or investigate a release or threat of release.

[*(17)*] **(16)** "Remedial action costs" means reasonable costs which are attributable to or associated with a removal or remedial action at a facility, including but not limited to the costs of administration, investigation, legal or enforcement activities, contracts and health studies.

[*(18)*] **(17)** "Removal" means the cleanup or removal of a released hazardous substance from the environment, such actions as may be necessary taken in the event of the threat of release of a hazardous substance into the environment, such actions as may be necessary to monitor, assess and evaluate the release or threat of release of a hazardous substance, the disposal of removed material, or the taking of such other actions as may be necessary to prevent, minimize or mitigate damage to the public health, safety, welfare or to the environment, which may otherwise result from a release or threat of release. "Removal" also includes but is not limited to security fencing or other measures to limit access, provision of alternative drinking and household water supplies, temporary evacuation and housing of threatened individuals and action taken under section 11, **chapter _____, Oregon Laws 1987 (Enrolled Senate Bill 122)** [*of this 1987 Act*].

[*(19)*] **(18)** "Transport" means the movement of a hazardous substance by any mode, including pipeline and in the case of a hazardous substance which has been accepted for transportation by a common or contract carrier, the term "transport" shall include any stoppage in transit which is temporary, incidental to the transportation movement, and at the ordinary operating convenience of a common or contract carrier, and any such stoppage shall be considered as a continuity of movement and not as the storage of a hazardous substance.

[*(20)*] **(19)** "Underground storage tank" [*means any one or combination of tanks and underground pipes connected to the tank, used to contain an accumulation of a regulated substance, and the volume of which, including the volume of the underground pipes connected to the tank, is 10 percent or more beneath the surface of the ground*] **has the meaning given that term in section 2 of this 1987 Act.**

[*(21)*] **(20)** "Waters of the state" has the meaning given that term in ORS 468.700.

Attachment VI
Agenda Item
October 9, 1987 EQC Meeting

UST ADVISORY COMMITTEE

The following individuals have been selected to serve on the underground storage tank advisory committee:

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NEIL GOLDSCHMIDT
GOVERNOR

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 , October 9, 1987, EQC Meeting

Request for a variance from OAR 340-60-040(1)(a) and (2) for the Gilliam, Jefferson, Morrow, Sherman, Wasco and Wheeler Wastesheds.

Background and Problem Statement

As a part of providing the opportunity to recycle, each wasteshed is required to have a public education and promotion program that gives notice to each person of the opportunity to recycle and that encourages the source separation of recyclable materials. The requirements for these programs are outlined in OAR 340-60-040 (Attachment I). OAR 340-60-040(1)(a) requires the affected persons in a wasteshed to design, produce and distribute a written or more effective notice to each person who generates recyclable materials in the wasteshed. The rule specifies the information that must be included in the notice. The Department has interpreted the rule to require that notice be delivered to garbage service customers and given to persons who self-haul garbage by handouts or signs at the landfill or transfer station. OAR 340-60-040(2) requires the affected persons in each wasteshed to identify a procedure for citizen involvement in the development and implementation of the wasteshed's education and promotion program.

The Environmental Quality Commission has authority under ORS 459.185(8) to grant a variance from specific requirements of the opportunity to recycle rules, OAR 340-60-005 to 085 (Attachment II). A variance may be granted to accommodate special conditions in a wasteshed.

The Gilliam, Jefferson, Morrow, Sherman, Wasco and Wheeler Wastesheds are each requesting a variance from OAR 340-60-040(1)(a) and (2). Each request is based on special conditions in all or part of the wasteshed. Information on the conditions in each wasteshed is included in the attached requests for variance (Attachments III - VIII).

Of the six wastesheds requesting variances, Gilliam, Morrow, Sherman and Wheeler have populations of less than 8,000 persons and very limited or no recycling within the wasteshed. Persons who wish to recycle residential

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Of the six wastesheds requesting variances, Gilliam, Morrow, Sherman and Wheeler have populations of less than 8,000 persons and very limited or no recycling within the wasteshed. Persons who wish to recycle residential

materials will be referred to recycling centers in Hermiston, Pendleton and The Dalles. These centers are outside the referring wastesheds. Participation in garbage collection service is relatively low in these rural wastesheds.

The Wasco Wasteshed is requesting a variance only for the rural portion of the wasteshed. This portion of the wasteshed is similar to the all rural wastesheds in that no recycling is available locally, no on-route collection is provided and persons who wish to recycle are referred to either The Dalles or Madras.

The Jefferson Wasteshed has some recycling available in Madras. However, the garbage collector has no direct involvement in the recycling program. There is no residential on-route or commercial recycling collection required or available in the Jefferson Wasteshed.

All of the disposal sites in the six wastesheds, except the North Wasco Landfill and Box Canyon Landfill, are small rural sites. These sites either have very limited recycling available or have no recycling and have posted signs referring users to larger sites with recycling.

Large regional disposal sites are currently being proposed for both Gilliam and Morrow Wastesheds. The permittees will be required to establish waste reduction programs in conjunction with the landfills. If these sites are developed, full-line recycling will be available to residents of those wastesheds. When that occurs, a variance from the education and promotion requirements will no longer be justified.

Alternatives and Evaluation

Each of the six wastesheds is asking to be relieved of the requirement that they provide a written recycling notice to each rural garbage customer. This required notice is normally accomplished by a one time, separate mailing or hand delivery by the garbage collector. Because the participation in garbage collection in rural areas is relatively low, a notice sent only to collection customers will not reach as many people as general promotion in the whole community.

In rural areas, providing this notice is the garbage collector's only involvement in the opportunity to recycle. Rather than a single notice, it may be more effective for the collectors to provide their customers with periodic recycling reminders as part of their regular billing. This could supplement some type of broader recycling promotion program developed by the county government.

Specific alternatives to providing a written notice include the following: regular reminders from the garbage collectors to their customers; signs at disposal sites and in public locations like the post office, grange hall, lodge hall or co-op; regular promotion or coverage of recycling events in the local media; and incorporation of recycling into the local school curriculum.

Only one of the six wastesheds has a substantial history of recycling activity. There has been recycling in The Dalles for a number of years. Beyond this, all six wastesheds have found very little public interest in recycling. Because of this lack of interest and the low density of population, it is difficult to generate public participation. However, all of the wasteshed representatives are committed to leaving the recycling promotion and education process open to citizen involvement if persons are found who are willing to participate.

The potential for recycling and the types of education and promotion which are effective in rural communities are different from that in more urban areas. There is less opportunity to get public involvement in program planning and more need to design activities around local resources.

It seems appropriate for rural wastesheds, where the opportunity to recycle is relatively limited, to identify the most effective methods of promoting recycling in their own communities. In many communities, a variety of simple promotional efforts may be more effective than the specific notice called for by administrative rule.

Summation

In the Gilliam, Morrow, Sherman and Wheeler Wastesheds, the following special conditions exist that make compliance with OAR 340-60-040(1)(a) and (2) impractical and unreasonable.

(1) Each wasteshed has a population of less than 8,000 persons.

(2) No on-route collection of recyclable materials is required or provided in the wasteshed.

(3) Many of the residents of the wasteshed do not have available or do not use garbage collection service.

(4) It would be more effective to provide information about recycling to both collection service customers and non-customers than to provide a single notice to customers only.

(5) The opportunity to recycle residential recyclable material is either very distant or does not exist in the wasteshed for most of the population of the wasteshed.

(6) A full recycling opportunity is available in a nearby wasteshed.

(7) There is little or no history of public involvement in recycling in these small rural wastesheds. There has been no public interest shown in participating in development of a recycling education and promotion program.

(8) The wasteshed representatives and the affected persons in the wastesheds are willing to provide promotion of recycling at a level which they feel is appropriate and effective for their geographic location and population.

In the Jefferson Wasteshed and the portion of the Wasco Wasteshed outside of the UGB of The Dalles the following special conditions exist that make compliance with OAR 340-60-040(1)(a) and (2) impractical and unreasonable.

(1) The area outside of the UGB of The Dalles and that portion of the Jefferson Wasteshed outside of Madras are as sparsely populated as the four smaller wastesheds.

(2) No on-route collection of recyclable materials is required or provided in the wasteshed.

(3) Many of the residents of the wasteshed do not have available or do not use garbage collection service.

(4) It would be more effective to provide information about recycling to both collection service customers and non-customers than to provide a single notice to customers only.

(5) A full recycling opportunity is available in the wasteshed but is not convenient to most of the population considered under the variance request.

(6) The wasteshed representatives and the affected persons in the wastesheds are willing to provide promotion of recycling at a level which they feel is appropriate and effective for their geographic location and population.

(7) There is little or no history of public involvement in recycling in the rural areas of these wastesheds. There has been very little public interest shown in participation in development of a recycling education and promotion program.

(8) These two wastesheds do have larger populations and more convenient opportunities to recycle than the four smaller wastesheds. It is appropriate that collection service customers should be made aware that some recycling opportunities are available to them.

Director's Recommendation

Gilliam Wasteshed

Based upon the findings in the summation, it is recommended that the Commission grant variances from the requirements of OAR 340-60-040(1)(a) and (2) to the Gilliam Wasteshed with the following conditions:

(1) The wasteshed implement an education and promotion program which includes the following:

(a) Signs at the two wasteshed landfills and at public locations throughout the wasteshed which promote the full-line recycling which is available in The Dalles and Hermiston.

(b) Information about recycling in The Dalles and Hermiston distributed to local media and community groups on at least a semi-annual basis. This information must include all the information required under OAR 340-60-040(1)(a)(B).

(c) Promotion of recycling in schools in the wasteshed, including using the recycling curriculum provided by the Department.

(2) This variance shall be in effect only as long as the Gilliam Wasteshed is served only by the existing small rural sites.

Jefferson Wasteshed

Based upon the findings in the summation, it is recommended that the Commission grant variances from the requirements of OAR 340-60-040(1)(a) and (2) to the Jefferson Wasteshed with the condition that the wasteshed implement an education and promotion program which includes the following:

(1) Signs at the two wasteshed landfills and at public locations throughout the wasteshed which promote the recycling available in Madras and Bend.

(2) Information about recycling in Madras and Bend distributed to local media and community groups on at least a semi-annual basis. This information must include all the information required under OAR 340-60-040(1)(a)(B).

(3) Promotion of recycling in schools in the wasteshed, including using the recycling curriculum provided by the Department.

(4) Distribution of either a one-time notice or a periodic, at least semi-annual, recycling reminder to all collection service customers.

Morrow Wasteshed

Based upon the findings in the summation, it is recommended that the Commission grant variances from the requirements of OAR 340-60-040(1)(a) and (2) to the Morrow Wasteshed with the following conditions:

(1) The wasteshed implement an education and promotion program which includes the following:

(a) Signs at the Turner Landfill and at public locations throughout the wasteshed which promote both the recycling available at the single material depots in the Morrow Wasteshed and the full-line recycling available in Hermiston.

(b) Information about recycling opportunities available in the Morrow Wasteshed and in Hermiston distributed to local media and community groups on at least a semi-annual basis. This information must include all the information required under OAR 340-60-040(1)(a)(B).

(c) Promotion of recycling in schools in the wasteshed, including using the recycling curriculum provided by the Department.

(2) This variance shall be in effect only as long as the Morrow Wasteshed is served only by the existing small rural sites and the Hermiston Landfill.

Sherman Wasteshed

Based upon the findings in the summation, it is recommended that the Commission grant variances from the requirements of OAR 340-60-040(1)(a) and (2) to the Sherman Wasteshed with the condition that the wasteshed implement an education and promotion program which includes the following:

(1) Signs at the county landfill and at public locations throughout the wasteshed which promote both the recycling available at the county landfill and the full-line recycling available in The Dalles.

(2) Information about recycling in the Sherman Wasteshed and in The Dalles distributed to local media and community groups on at least a semi-annual basis. This information must include all the information required under OAR 340-60-040(1)(a)(B).

(3) Promotion of recycling in schools in the wasteshed, including using the recycling curriculum provided by the Department.

Wasco Wasteshed

Based upon the findings in the summation, it is recommended that the Commission grant variances from the requirements of OAR 340-60-040(1)(a) and (2) to that portion of Wasco Wasteshed outside of the UGB of The Dalles with the condition that the wasteshed implement an education and promotion program which includes the following:

(1) Signs at the small rural sites and at public locations throughout the wasteshed which promote both the recycling available at the North Wasco and Box Canyon Landfills and the full-line recycling centers in The Dalles.

(2) Information about recycling opportunities in the wasteshed distributed to local media and community groups on at least a semi-annual basis. This information must include all the information required under OAR 340-60-040(1)(a)(B).

(3) Promotion of recycling in schools in the wasteshed, including using the recycling curriculum provided by the Department.

(4) The education and promotion programs shall include either a one time notice or a periodic, at least semi-annual, recycling reminder to all collection service customers.

Wheeler Wasteshed

Based upon the findings in the summation, it is recommended that the Commission grant variances from the requirements of OAR 340-60-040(1)(a) and (2) to the Wheeler Wasteshed with the condition that the wasteshed implement an education and promotion program which includes the following:

(1) Signs at the Mitchell and Spray Landfills and at public locations throughout the wasteshed which promote the recycling available at the Fossil Landfill.

(2) Information about recycling at the Fossil Landfill distributed to local media and community groups on at least a semi-annual basis. This information must include all the information required under OAR 340-60-040(1)(a)(B).

(3) Promotion of recycling in schools in the wasteshed, including using the recycling curriculum provided by the Department.

Fred Hansen

Attachments I. OAR 340-60-040
II. ORS 459.185
III. Gilliam Wasteshed Request for Variance
IV. Jefferson Wasteshed Request for Variance
V. Morrow Wasteshed Request for Variance
VI. Sherman Wasteshed Request for Variance
VII. Wasco Wasteshed Request for Variance
VIII. Wheeler Wasteshed Request for Variance

William R. Bree:m
SM1240
229-6975
September 16, 1987

OREGON ADMINISTRATIVE RULES
CHAPTER 340, DIVISION 60 - DEPARTMENT OF ENVIRONMENTAL QUALITY

Education, Promotion and Notification

340-60-040 (1) Affected persons in each wasteshed shall design, commit resources and implement an education and promotion program that provides:

(a) A written or more effective notice or combination of both that is reasonably designed to reach each person who generates recyclable materials in the wasteshed, and that clearly explains why people should recycle, the recyling opportunities available to the recipient, the materials that can be recycled and the proper preparation of those materials:

(A) The notice used for persons within the urban growth boundaries of cities with more than 4,000 people or within the urban growth boundary established by a metropolitan service district shall include:

(i) Reasons why people should recycle; and

(ii) The name, address and phone number of the person providing on-route collection; and

(iii) A listing of depots for recyclable materials at all disposal sites serving the area, including the materials accepted and hours of operation; and

(iv) A listing of depots for recyclable material at locations designated as more convenient to the public being served, including the materials accepted and hours of operation; or

(v) Instead of paragraphs (iii) and (iv) a phone number to call for all such information about depot locations.

(B) The notice used for persons not within the urban growth boundary of cities with more than 4,000 people or within the urban growth boundary established by a metropolitan service district, shall include:

(i) Reason why people should recycle; and

(ii) A listing of depots for recyclable materials at all disposal sites serving the area, including the materials accepted and hours of operation; and

(iii) A listing of depots for recyclable materials at locations designated as the more convenient to the public being served, including what materials are accepted and hours of operation; or

(iv) Instead of paragraphs (ii) and (iii) a phone number to call for all such information about depot locations and collection service.

(b) A written reminder, a more effective notice or combination of both about the on-route recycling collection program that is reasonably designed to reach all solid waste collection service customers every six (6) months.

(c) Written information to be distributed to disposal site users at all disposal sites with attendants and where it is otherwise practical:

(A) This written material shall include:

(i) Reasons why people should recycle; and

(ii) A list of materials that can be recycled; and

(iii) Instruction for the proper preparation of recyclable materials; and

(iv) A list of the recycling opportunities available at the disposal site or designated "more convenient location".

(B) At sites without attendants, a sign indicating the availability of recycling at the site or at the "more convenient location" shall be prominently displayed. The sign shall indicate the materials accepted and hours of operation.

(d) Recycling information (written materials, displays and/or presentations) to community groups and the general public.

(2) The affected persons in the wasteshed shall identify a procedure for citizen involvement in the development and implementation of the wasteshed's education and promotion program.

(3) The affected persons in each wasteshed shall provide notification and education materials to local media and other groups that maintain regular contact with the public, including local newspapers, local television and radio stations, community groups, neighborhood associations.

(4) Affected persons in each wasteshed should identify a person as the education and promotion representative for that wasteshed to be the official contact between the persons in that wasteshed and the Department in matters relating to recycling education and promotion.

(5) Information about the education and promotion program shall be included in the Recycling Report as outlined in OAR 340-60-045(2).

Stat. Auth.: ORS Ch. 459
Hist.: DEQ 26-1984, f. & ef. 12-26-84

459.185 Approval, disapproval of recycling report; effect of disapproval. (1) The department shall review a recycling report submitted under ORS 459.180 to determine whether the opportunity to recycle is being provided within all of the affected portion of the wasteshed.

(2) The department shall notify the affected persons who participated in preparing the report of acceptance or disapproval of the recycling report based on written findings.

(3) If the department disapproves a recycling report:

(a) An affected person may:

(A) Request a meeting with the department to review the department's findings, which meeting may include all or some of the affected persons who prepared the report; or

(B) Correct the deficiencies that the department found in the report.

(b) The department may grant a reasonable extension of time for the affected persons to correct deficiencies in the recycling report.

(c) The affected persons submitting the report shall notify the department of any action taken to correct a cited deficiency.

(4) In the event of disapproval and after a reasonable extension of time to correct deficiencies in the opportunity to recycle, the director of the department shall notify the commission that the affected persons within a wasteshed have failed to implement the opportunity or submit a recycling report.

(5) Upon notification under subsection (4) of this section, the commission shall hold a public hearing within the affected area of the wasteshed.

(6) If, after the public hearing and based on the department's findings on review of the recycling report and the hearing record, the commission determines that all or part of the opportunity to recycle is not being provided, the commission shall by order require the opportunity to recycle to be provided. The commission order may include, but need not be limited to:

(a) The materials which are recyclable;

(b) The manner in which recyclable material is to be collected;

(c) The responsibility of each person in the solid waste collection and disposal process for providing the opportunity to recycle;

(d) A timetable for development or implementation of the opportunity to recycle;

(e) Methods for providing the public education and promotion program;

(f) A requirement that as part of the recycling program a city or county franchise to provide for collection service; and

(g) Minimum standards for the mandatory franchising.

(7) If a recycling program is ordered under this section, the department shall work with affected persons and designate the responsibilities of each of them.

(8)(a) Upon written application by an affected person, the commission may, to accommodate special conditions in the wasteshed or a portion thereof, grant a variance from specific requirements of the rules or guidelines adopted under ORS 459.170 or a recycling program ordered by the commission under subsection (6) of this section.

(b) The commission may grant all or part of a variance under this section.

(c) Upon granting a variance, the commission may attach any condition the commission considers necessary to carry out the provisions of ORS 459.015, 459.165 to 459.200 and 459.250.

(d) In granting a variance, the commission must find that:

(A) Conditions exist that are beyond the control of the applicant;

(B) Special conditons exist that render compliance unreasonable or impractical; or

(C) Compliance may result in a reduction in recycling.

(9) An affected person may apply to the commission to extend the time permitted under ORS 459.005, 459.015, 459.035, 459.165 to 459.200, 459.250, 459.992 and 459.995 for providing for all or a part of the opportunity to recycle or submitting a recycling report to the department. The commission may:

(a) Grant an extension upon a showing of good cause;

(b) Impose any necessary conditions on the extension; or

(c) Deny the application in whole or in part.
[1983 c.729 §7]

Attachment III
EQC Agenda Item
October 9, 1987, EQC Meeting

DEPARTMENT OF ENVIRONMENTAL QUALITY
Waste Reduction Program
Hazardous & Solid Waste Division

REQUEST FOR VARIANCE

Requested in accordance with the provisions of ORS 459.185.

REQUESTED BY:

The Honorable Laura Pryor
Gilliam County Court
P.O. Box 644
Condon, OR 97823

WASTESHED:

Gilliam

LOCATION IN WASTESHED

Full Wasteshed

WASTESHED REPRESENTATIVE

Laura D. Pryor
Signature

Aug. 24, 1987
Date

Under the provisions of ORS 459.185(8)(a) the Gilliam Wasteshed is requesting a variance from the requirements of OAR 340-60-040(1)(a), and (2) which respectively require the affected persons in the wasteshed to provide notice to each solid waste collection service customer and identify a process for citizen involvement in education and promotion programs.

The Gilliam Wasteshed is all of the area within Gilliam County. It has a total population of 1,800. The cities within the Gilliam Wasteshed are Arlington (440), Condon (710), and Lone Rock (20). The Wasteshed has two disposal sites, the Arlington landfill and the South Gilliam County Landfill, located near Condon. The principal recyclable materials identified by the Department for the Gilliam Wasteshed are ferrous and non-ferrous metal and used oil. Both disposal sites are small rural sites and refer user to the recycling opportunities in The Dalles and Hermiston.

The following conditions exist in the Gilliam Wasteshed which render compliance with OAR 340-60-040(1)(a), notice of the opportunity to recycle to all collection service customers, unreasonable and impractical.

The only opportunity to recycle for the wasteshed is outside of the wasteshed at least fifty (50) miles away in The Dalles or Hermiston.

No on-route collection of recyclable material is required or provided in the wasteshed.

It would be more effective to provide general promotion of the full range of recycling opportunities in The Dalles and Hermiston than notice to only collection service customers.

The size and distribution of the population in the Gilliam Wasteshed make citizen involvement in the development of an education and promotion program, as required by OAR 340-60-040(2) impractical.

The affected persons in the Gilliam Wasteshed feel that the intent of the education and promotion requirements of the Opportunity to Recycle Act can best be met by a program which includes the following:

Signs at the two landfills and at public locations throughout the wasteshed which promote line recycling is available in The Dalles and Hermiston.

Information similar to that on the signs distributed to local media and community groups on at least a semi-annual basis.

Promotion of recycling in schools in the wasteshed, including using recycling curriculum provided by the Department.

The opportunity to recycle in the Gilliam Wasteshed is very limited and those individuals who wish to recycle can best be served by the recycling programs in The Dalles and Hermiston. Therefore, it is appropriate for the education and promotion program in the wasteshed to encourage the public to use the recycling opportunities available to them outside of the Gilliam Wasteshed. The limited education and promotion resources that are available should be oriented in this direction.

Attachment IV
EQC Agenda Item
October 9, 1987, EQC Meeting

DEPARTMENT OF ENVIRONMENTAL QUALITY
Waste Reduction Program
Hazardous & Solid Waste Division

REQUEST FOR VARIANCE

Requested in accordance with the provisions of ORS 459.185.

REQUESTED BY:

Donald Wood
Jefferson County Roadmaster
P.O. Box 709
Madras, OR 97741

WASTESHED:

Jefferson

LOCATION IN WASTESHED:

Full Wasteshed

WASTESHED REPRESENTATIVE:

(see attached letter)
Signature

Date

Under the provisions of ORS 459.185(8), the Jefferson Wasteshed is requesting a variance from the requirements of OAR 340-60-040(1)(a) and (2) which respectively require the affected persons in the wasteshed to provide notice to each solid waste collection service customer and identify a process for citizen involvement in education and promotion programs.

The Jefferson Wasteshed is all of the area within Jefferson County. It has a population of 12,200. The cities within the Jefferson Wasteshed are Culver (510), Madras (2,325) and Metolius (427). The wasteshed has two disposal sites, Camp Sherman Transfer site and the Box Canyon Landfill, located near Madras. The principal recyclable materials identified by the Department for the Jefferson Wasteshed are ferrous and non-ferrous metal, used oil, glass, newspaper and cardboard. All of the principal recyclable materials can be recycled at Box Canyon or in Madras. The Camp Sherman Transfer Site is a small rural site and refers users to the recycling opportunities in Bend.

The following conditions exist in the Jefferson Wasteshed which render compliance with OAR 340-60-040(1)(a), notice to all collection service customers, unreasonable and impractical.

The only opportunity to recycle for the wasteshed is in Madras or outside of the wasteshed in Bend.

No on-route collection of recyclable materials is required or provided in the Wasteshed.

The garbage collector has no direct involvement in the wasteshed's recycling programs.

A large percentage of the population outside of Madras does not have garbage collection service and would not receive a notice sent to collection service customers.

The size and distribution of the population in the Jefferson Wasteshed make citizen involvement in the development of an education and promotion program, as required by OAR 340-60-040(2), impractical.

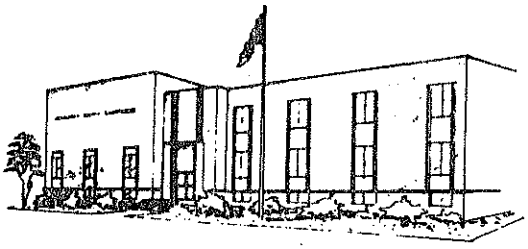
The affected persons in the Jefferson Wasteshed feel that the intent of the education and promotion requirements of the Opportunity to Recycle Act can best be met by a program which includes the following:

Signs at the two landfills and at public locations throughout the wasteshed which promote the recycling available in Madras and Bend.

Information similar to that on the signs distributed to local media and community groups on at least a semi-annual basis.

Promotion of recycling in schools in the wasteshed, including using the recycling curriculum provided by the Department.

The opportunity to recycle in the Jefferson Wasteshed is somewhat limited. Those individuals who wish to recycle must use the recycling programs in Madras or in the Deschutes Wasteshed, in Bend. There is no direct connection between the recycling programs and the garbage collector in the Jefferson Wasteshed. The limited education and promotion resources available in the wasteshed should be oriented to increase public awareness and acceptance of recycling.



Road Department
of
Jefferson County

Madras, Oregon 97741

August 25, 1987

William R. Bree
Recycling Specialist
Dept. of Environmental Quality
811 S.W. Sixth Avenue
Portland, OR. 97204-1334

RE: VARIANCE REQUEST FOR JEFFERSON COUNTY WASTESHED

Dear William;

Under the provision of O.R.S. 459.185 (8)(a), the Jefferson Wasteshed is requesting a variance from the requirements of OAR 340-60-040 (1)(a) and 2 which respectively require the affected persons in the Wasteshed to provide notice to each solid waste collection service customer and identify a process for citizen involvement in education and promotion programs.

The following conditions exist in the Jefferson Wasteshed which render compliance with OAR 340-60-040 (1)(a); notice of the opportunity to recyle to all collection service customers, unreasonable and impractical. No on-route collection of recyclable material is required or provided in the Wasteshed. We have through cooperation with our local collector sent a notice for opportunity to recycle on monthly billings, however these would possibly not meet the requirements of OAR 340-60-040.

We feel we would be more effective if we would provide general promotion of the recycling opportunities to both collection service customers and non-customers through general promotion in the community.

The size and distribution of the population in the Jefferson Wasteshed make citizen involvement in the development of an education and promotion program, as required by OAR 340-60-040 (2) impractical.

We feel the intent of the education and promotion requirements of the act can best be met by a program which includes the following:

1. Signs at the Camp Sherman transfer station which promote the recycling available at the Fryrear Landfill in Deschutes Co.
2. Keep the media and community informed.
3. Promotion of recycling in the schools in the Wasteshed.

The opportunity to recycle in the Jefferson Wasteshed is limited as we have only one landfill in an area of 1,791 square miles. We would encourage all promotion resources to be oriented in this direction.

Thank you for your consideration on this matter.

Sincerely,

Don Wood
Roadmaster

DW/kd

Attachment V
EQC Agenda Item
October 9, 1987, EQC Meeting

Hazardous & Solid Waste Division
Dept. of Environmental Quality

RECEIVED
AUG 31 1987

DEPARTMENT OF ENVIRONMENTAL QUALITY
Waste Reduction Program
Hazardous & Solid Waste Division

REQUEST FOR VARIANCE

Requested in accordance with the provisions of ORS 459.185.

REQUESTED BY:

Phillip Aikman
Morrow County Public Works Department
P.O. Box 453
Lexington, OR 97839

WASTESHED:

Morrow

LOCATION IN WASTESHED

Full Wasteshed

WASTESHED REPRESENTATIVE

Signature

Aug 26, 1987
Date

Under the provisions of ORS 459.185(8)(a) the Morrow Wasteshed is requesting a variance from the requirements of OAR 340-60-040(1)(a), and (2) which respectively require the affected persons in the wasteshed to provide notice to each solid waste collection service customer and identify a process for citizen involvement in education and promotion programs.

The Morrow Wasteshed is all of the area within Morrow County. It has a total population of 7,570. The cities within the Morrow Wasteshed are Boardman (1,440), Heppner (1,375), Ione (340),Irrigon (850), and Lexington (240). The Wasteshed has two disposal sites, the Turner Landfill and a limited access landfill at the Umatilla Army Depot. The principal recyclable materials identified by the Department for the Morrow Wasteshed are ferrous and non-ferrous metal, newspaper and used oil. The Turner Landfill is a small rural site and refers users to other locations for recycling.

The following conditions exist in the Morrow Wasteshed which render compliance with OAR 340-60-040(1)(a), notice of the opportunity to recycle to all collection service customers, unreasonable and impractical.

The only opportunity to recycle in the wasteshed is at single material collection sites for scrap metal, newspaper, or used oil. Typical residential recyclables (glass, cans, newspaper and cardboard) are not accepted for recycling at the Turner Landfill. The Army Depot disposal site has very limited public access.

The majority of waste generated in the Morrow Wasteshed is disposed of outside the wasteshed at the Hermiston disposal site.

No on-route collection of recyclable material is required or provided in the wasteshed.

It would be more effective to provide general promotion of single material recycling depots and the recycling opportunity in Hermiston than provide notice only to collection service customers.

The size and distribution of the population in the Morrow Wasteshed make citizen involvement in the development of an education and promotion program, as required by OAR 340-60-040(2) impractical.

The affected persons in the Morrow Wasteshed feel that the intent of the education and promotion requirements of the Opportunity to Recycle Act can best be met by a program which includes the following:

Signs at the Turner Landfill and at public locations throughout the wasteshed which promote both the recycling available at the single material depots in the Morrow wasteshed and the full line recycling available in Hermiston.

Information similar to that on the signs distributed to local media and community groups on at least a semi annual basis.

Promotion of recycling in schools in the wasteshed, including using recycling curriculum provided by the Department.

The opportunity to recycle in the Morrow Wasteshed is very limited and those individuals who wish to recycle more than one material can best be served by the recycling programs in Hermiston. Therefore, it is appropriate for the education and promotion program in the wasteshed to encourage the public to use the recycling opportunities available to them outside of the Morrow Wasteshed. The limited education and promotion resources that are available should be oriented in this direction.

Attachment VIII
EQC Agenda Item
October 9, 1987 EQC Meeting

DEPARTMENT OF ENVIRONMENTAL QUALITY
Waste Reduction Program
Hazardous & Solid Waste Division

REQUEST FOR VARIANCE

Requested in accordance with the provisions of ORS 459.185.

REQUESTED BY:

The Honorable Lee Hoover
Wheeler County Court
P.O. Box 327
Fossil, OR 97830

WASTESHED:

Wheeler

LOCATION IN WASTESHED

Full Wasteshed

WASTESHED REPRESENTATIVE

Signature Date July 23, 1987

Under the provisions of ORS 459.185(8)(a), the Wheeler Wasteshed is requesting a variance from the requirements of OAR 340-60-040(1)(a) and (2) which respectively require the affected persons in the wasteshed to provide notice to each solid waste collection service customer and identify a process for citizen involvement in education and promotion programs.

The Wheeler Wasteshed is all of the area within Wheeler County. It has a total population of 1,400. The cities within the Wheeler Wasteshed are Fossil (530), Spray (195) and Mitchell (185). The Wasteshed has three disposal sites, the Fossil, Spray and Mitchell Landfills. The principal recyclable materials identified by the Department for the Wheeler Wasteshed are ferrous and non-ferrous metal and used oil. All the principal recyclable materials are collected at the Fossil Landfill. Newspaper, bottles and aluminum cans are also collected for recycling. Scrap metal salvage at the Fossil Landfill has been an established practice for a number of years.

The Mitchell and Spray disposal sites are small, rural sites and do not provide a place to collect recyclable material. The public is referred to the recycling facilities at the Fossil disposal site.

The following conditions exist in the Wheeler Wasteshed which render compliance with OAR 340-60-040(1)(a), notice of the opportunity to recycle to all collection service customers, unreasonable and impractical.

> The opportunity to recycle metal, used oil, newspaper, bottles and aluminum cans is available at the Fossil Landfill. A display advertisement about this recycling has been run in the local weekly paper, circulation 375. Notice to collection service customers would reach substantially fewer homes. Collection service is only available to approximately 100 customers.
>
> No on-route collection of recyclable material is required or provided in the wasteshed.
>
> It would be more effective to provide general promotion of the recycling opportunities to both collection service customers and non-customers through general promotion in the community.

The size and distribution of the population in the Wheeler Wasteshed make citizen involvement in the development of an education and promotion program, as required by OAR 340-60-040(2), impractical.

The affected persons in the Wheeler Wasteshed feel that the intent of the education and promotion requirements of the Opportunity to Recycle Act can best be met by a program which includes the following:

> Signs at the Mitchell and Spray Landfills and at public locations throughout the wasteshed which promote the recycling available at the Fossil Landfill.
>
> Information similar to that on the signs distributed to local media and community groups on at least a semi-annual basis.
>
> Promotion of recycling in schools in the wasteshed, including using recycling curriculum provided by the Department.

The opportunity to recycle in the Wheeler Wasteshed is limited. Those individuals who wish to recycle can be served by the recycling program at the Fossil Landfill. The limited education and promotion resources that are available should be oriented in this direction.

Attachment VI
EQC Agenda Item
October 9, 1987, EQC Meeting

DEPARTMENT OF ENVIRONMENTAL QUALITY
Waste Reduction Program
Hazardous & Solid Waste Division

REQUEST FOR VARIANCE

Requested in accordance with the provisions of ORS 459.185.

REQUESTED BY:

Dennis Illingsworth
Wasco-Sherman Public Health Department
400 East 5th Street
The Dalles, OR 97058

WASTESHED:

Sherman

LOCATION IN WASTESHED

Full Wasteshed

WASTESHED REPRESENTATIVE

Signature _____ Date _____

Under the provisions of ORS 459.185(8)(a) the Sherman Wasteshed is requesting a variance from the requirements of OAR 340-60-040(1)(a), and (2) which respectively require the affected persons in the wasteshed to provide notice to each solid waste collection service customer and identify a process for citizen involvement in education and promotion programs.

The Sherman Wasteshed is all of the area within Sherman County. It has a total population of 2,200. The cities within the Sherman Wasteshed are Grass Valley (175), Moro (320), Rufus (380) and Wasco (445). The Wasteshed has one disposal site, Sherman County Landfill, located near the unincorporated area of Biggs. The principal recyclable materials identified by the Department for the Sherman Wasteshed are ferrous and non-ferrous metal and used oil. All of the principal recyclable materials are collected at the Sherman County Landfill. Scrap metal salvage at the county landfill has been an established practice for a number of years.

The following conditions exist in the Sherman Wasteshed which render compliance with OAR 340-60-040(1)(a), notice of the opportunity to recycle to all collection service customers, unreasonable and impractical.

The only opportunity to recycle in the wasteshed is for scrap metal and used oil at the county landfill. Typical residential recyclables (glass, cans, newspaper and cardboard) are not accepted for recycling at the landfill.

No on-route collection of recyclable material is required or provided in the wasteshed.

Individuals with regular garbage collection service do not normally deliver material to the landfill.

It would be more effective to provide general promotion of the full range of recycling opportunities in The Dalles than specific notice of the very limited recycling opportunity at the Sherman County Landfill.

The size and distribution of the population in the Sherman Wasteshed make citizen involvement in the development of an education and promotion program, as required by OAR 340-60-040(2) impractical.

The affected persons in the Sherman Wasteshed feel that the intent of the education and promotion requirements of the Opportunity to Recycle Act can best be met by a program which includes the following:

Signs at the county landfill and at public locations throughout the wasteshed which promote both the recycling available at the county landfill and the full line recycling available in The Dalles.

Information similar to that on the signs distributed to local media and community groups on at least a semi annual basis.

Promotion of recycling in schools in the wasteshed, including using recycling curriculum provided by the Department.

The opportunity to recycle in the Sherman Wasteshed is very limited and those individuals who wish to recycle can best be served by the recycling programs in The Dalles. Therefore, it is appropriate for the education and promotion program in the wasteshed to encourage the public to use the recycling opportunities available to them outside of the Sherman Wasteshed. The limited education and promotion resources that are available should be oriented in this direction.

Attachment VII
EQC Agenda Item
October 9, 1987, EQC Meeting

DEPARTMENT OF ENVIRONMENTAL QUALITY
Waste Reduction Program
Hazardous & Solid Waste Division

REQUEST FOR VARIANCE

Requested in accordance with the provisions of ORS 459.185.

REQUESTED BY:

Dennis Illingsworth
Wasco-Sherman Public Health Department
400 East 5th Street
The Dalles, OR 97058

WASTESHED:

Wasco

LOCATION IN WASTESHED:

Area outside of the UGB of The Dalles

WASTESHED REPRESENTATIVE:

(see attached letter) _____
Signature Date

Under the provisions of ORS 459.185(8) the Wasco Wasteshed is requesting a variance, for that portion of the wasteshed outside of the urban growth boundary (UGB) of The Dalles, from the requirements of OAR 340-60-040(1)(a) and (2) which respectively require the affected persons in the wasteshed to provide notice to each solid waste collection service customer and identify a process for citizen involvement in education and promotion programs.

The Wasco Wasteshed is all of the area within Wasco County. It has a total population of 22,500. The cities within the Wasco Wasteshed are Antelope (60), Maupin (510), Mosier (340), Shaniko (40) and The Dalles (10,900). The area outside of the UGB of The Dalles has a population of approximately 7,000. The Wasco Wasteshed has four disposal sites. The North Wasco County Landfill is located near The Dalles. The Antelope, Shaniko and Rajneeshpuram disposal sites are all small rural sites. The principal recyclable materials identified by the Department for the Wasco Wasteshed are ferrous and non ferrous metal, used oil, newspaper, glass, cardboard, tin cans, and office paper. All of the principal recyclable material are collected at two recycling depots in The Dalles. Metal, newspaper, cardboard, glass and aluminum are collected at the North Wasco County Landfill. There are no recyclable materials collected at the small rural sites.

The following conditions exist in the Wasco Wasteshed outside of the UGB of The Dalles which render compliance with OAR 340-60-040(1)(a), notice of the opportunity to recycle to all collection service customers, unreasonable and impractical.

The only opportunities to recycle in the wasteshed are at the North Wasco County Landfill and recycling depots in The Dalles.

No on-route collection of recyclable material is required or provided outside of the UGB of The Dalles.

The nearest opportunity to recycle for much of south Wasco County is at the Box Canyon Landfill in the Jefferson Wasteshed near Madras.

A large percentage of the population outside of the UGB of The Dalles do not have garbage collection service and would not receive a notice sent to collection service customers.

It would be more effective to provide general promotion of the full range of recycling opportunities in The Dalles than send a specific notice to collection service customers identifying the limited recycling opportunity at the small rural sites.

The size and distribution of the population in the Wasco Wasteshed outside of the UGB of The Dalles make citizen involvement in the development of an education and promotion program, as required by OAR 340-60-040(2), impractical.

The affected persons in the Wasco Wasteshed feel that the intent of the education and promotion requirements of the Opportunity to Recycle Act can best be met by a program which includes the following:

Signs at the small rural sites and at public locations throughout the wasteshed which promote both the recycling available at the North Wasco and Jefferson County Landfills and the full line recycling centers in The Dalles.

Information similar to that on the signs distributed to local media and community groups on at least a semi-annual basis.

Promotion of recycling in schools in the wasteshed, including using the recycling curriculum provided by the Department.

The opportunity to recycle in the Wasco Wasteshed outside of the UGB of the Dalles is very limited and those individuals who wish to recycle can best be served by the recycling programs in The Dalles and in the Jefferson Wasteshed. The limited education and promotion resources that are available should be oriented in this direction.

WASCO-SHERMAN
PUBLIC HEALTH DEPARTMENT
TELEPHONE (503) 296-4636
400 EAST FIFTH STREET
COURT HOUSE ANNEX A
THE DALLES, OREGON 97058

August 19, 1987

William Bree
Department of Environmental Quality
811 S.W. Sixth Street
Portland, OR. 97204-1334

Dear Bill:

Enclosed is a copy of the Sherman wasteshed request for variance from portions of OAR 340-60-040. Used oil has been identified as a principal recyclable material for Sherman wasteshed. Based on past experience used oil has not been collected at the Sherman County Landfill in quantities large enough to justify its collection at the landfill. In the past year only 8 quarts were collected at the landfill and 7 of the 8 quarts were from the landfill operators equipment. We would like to drop the collection of used oil at the Sherman County Landfill and identify the recycling centers in The Dalles for used oil.

The area outside the urban growth boundaries of The Dalles, is very similar to Sherman County in population distribution. Therefore we would like to request for variance from portions of OAR 340-60-040 the area outside The Dalles urban growth boundary similar to Sherman County's variance.

Sincerely,

Glenn Pierce

Glenn Pierce, R.S.
Sanitarian II

GP/cat

NEIL GOLDSCHMIDT
GOVERNOR

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, October 9, 1987, EQC Meeting

Status Report on Yard Debris Recycling in the Portland Metropolitan Area

BACKGROUND

The Department became involved with yard debris recycling in 1980 when it was proposed as one of several alternatives to backyard burning in the Portland metropolitan area. When the Commission restricted backyard burning in 1983, it identified yard debris recycling as one of several available alternative disposal methods. Since that time, the Department has been working with local government and private industry to assist in the development of yard debris collection and processing programs.

In December of 1984, the Commission discussed the issue of whether, as a part of implementation of the Opportunity to Recycle Act, yard debris should be designated as a principal recyclable material in the Portland Wasteshed. At that time, the Commission found that there was not adequate information to justify adding yard debris to the list of principal recyclable materials.

The Department held a series of information gathering meetings and returned to the Commission in January, 1986. The Department requested authority to hold public hearings on a proposed rule which would identify yard debris as a principal recyclable material in all five Portland area wastesheds. The Department held hearings on March 3, 4, 5 and 6, 1986 and on January 28, 1987.

When yard debris was first proposed as a recyclable material a large number of issues were raised. Over time, many of these issues have been resolved. However, even after the considerable effort by the Department and local government over the past seven years, several of the major issues are still not completely resolved.

NEIL GOLDSCHMIDT
GOVERNOR

Environmental Quality Commission

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

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When yard debris was first proposed as a recyclable material a large number of issues were raised. Over time, many of these issues have been resolved. However, even after the considerable effort by the Department and local government over the past seven years, several of the major issues are still not completely resolved.

ISSUES

The following major issues were brought forth at the Commission meetings and public hearings:

1) Can yard debris be recycled into a marketable product?

2) How large is the market for recycled yard debris products?

3) Will the public source separate yard debris and deliver it to a processor or put it out for separate collection?

4) What is the cost of collection and processing of yard debris?

5) How much will the public be willing to pay for yard debris collection or processing service?

6) Can and will the solid waste collection industry provide collection service for source separated yard debris?

7) Will local government provide the opportunity to recycle for yard debris?

8) What are acceptable alternatives to on-route collection of source separated yard debris?

STATUS

1) Source separated yard debris can be recycled into a marketable product. In 1983, 6,000 cubic yards; in 1984, 7,000 cubic yards; in 1985, 16,500 cubic yards; and in 1986, 26,600 cubic yards of recycled yard debris products were marketed. It is estimated that in 1987, 45,000 cubic yards of recycled yard debris products will be marketed.

2) The potential market for recycled yard debris products is estimated to be more than ten times the total theoretical supply of recycled yard debris products and one hundred times the present supply. The penetration of recycled yard debris into existing soil amendment, ground cover and nursery growing medium markets is progressing without major resistance.

3) The public is presently delivering source separated yard debris to six collection or processing sites. Over the last five years the growth rate of public delivery to these sites has been approximately 25% per year. The public is making source separated yard debris available for collection when such service is available. On-call yard debris chipping services are also experiencing a steady growth in business.

4) The cost of recycling yard debris is less than the cost of disposal of the same material. The public is charged less to deliver yard debris to a recycling site than to a disposal site. It also costs less to have a large quantity of yard debris chipped on-site than to hire a solid waste collector to haul the same material to a disposal site. In direct comparison, it is less expensive to provide separate collection of source separated yard debris than it is to provide collection of garbage. A collection system model designed by Metro demonstrates that a separate collection system for yard debris would be less expensive than a solid waste collection system. Participation is highest in those cities which have weekly yard debris collection service which is funded through the local tax base.

5) The public has demonstrated that they are willing to pay the present cost for delivery of yard debris to recycling sites. The public has supported yard debris collection service as a tax base funded program. Oregon City recently passed a three year serial levy to fund weekly collection of yard debris. The public pays for yard debris chipping service and, where it is available, separated yard debris collection service. Because most communities do not have separate yard debris collection service available, we do not have experience to tell us how much a separate collection program for yard debris costs and how much it saves the public in extra garbage collection costs. It appears that the public is willing to pay a reasonable price for this service if it is convenient and if there is some associated savings in normal garbage collection costs.

6) The solid waste collection industry is providing successful weekly on-route collection service for source separated yard debris in two Portland area cities. Some members of the collection industry have indicated that they would provide weekly or monthly yard debris service if they were paid sufficient collection fees. However, for the most part, the solid waste collection industry has not shown interest in providing this type of service.

7) With the exception of the cities of West Linn, Oregon City and Gladstone, where yard debris collection service is provided, local governments oppose providing the opportunity to recycle yard debris. Local government views yard debris collection as an additional level of service and is not willing to incorporate the cost of this service into the present solid waste collection system.

8) Because of the seasonal nature of yard debris generation and the types of collection service already available, alternative methods (other than on-route collection) for providing collection or recycling of yard debris may be justified in some communities. Alternative methods of providing collection of yard debris must be as effective in recovery of yard debris as scheduled monthly collection and be convenient to the public served. Seasonal collection service that meets this criteria

would be an acceptable alternative. Scheduled on-site chipping service might also meet these criteria.

DISCUSSION

There is an accumulation of unprocessed yard debris at several of the yard debris recycling facilities. As long as this material remains unprocessed, the collection industry and local governments question whether there is an adequate market for recycled yard debris. While some yard debris processors are significantly reducing their backlog, others are just starting to develop markets for their material. By the end of 1987, there should be a dramatic reduction in the total amount of material held in backlog.

If yard debris collection systems were implemented, it might produce new large quantities of yard debris. There is a concern that an increase in the amount of material delivered to yard debris recyclers would overload their processing capacity and would "flood the market" for recycled yard debris products.

The collection industry has indicated that cost increases will occur if they are required to collect yard debris as a separate recyclable material. Most local governments which regulate solid waste collection do not want to add the cost of a separate yard debris collection system to the present solid waste collection rate structure.

Metro has been a major actor in the development of processing and marketing recycled yard debris. Metro is still active in expanding the market for yard debris products. They are also starting to update their regional solid waste management plan. That plan will include an economic analysis of yard debris collection and may include functional planning for yard debris collection and recycling. As part of the planning process, Metro may also be assisting local governments in deciding how they will deal with yard debris as a recyclable material.

DEPARTMENT RECOMMENDATION

In their July 17, 1987 letter to Chairman Petersen, the Oregon Environmental Council has requested that the Commission direct the Department to bring the proposed amendments to OAR 340-60-010 and 030, identifying yard debris as a principal recyclable material in the Clackamas, Multnomah, Portland, Washington and West Linn Wastesheds, back to the Commission for a final ruling: (Attachment I). Several significant issues related to yard debris recycling and collection were raised in the public hearings on these proposed rules. As discussed above, some of these issues still remain to be resolved. The Department has not returned to the Commission with the proposed rules while we are seeking resolution of these issues. The

Department would prefer to continue to work with the affected persons in these five wastesheds until all of the major issues are resolved before recommending that the Commission formalize the position of yard debris as a principal recyclable material.

The Department feels that identification of yard debris as a principal recyclable material at this time will not result in a substantial increase in yard debris recycling and might have a significant negative impact on the yard debris processing industry and local government recycling efforts. The Department would like to continue to work with Metro, other local governments and yard debris processors to improve the conditions for long-term yard debris recycling before yard debris is added to the list of principal recyclable materials.

Specific activities which need to continue include the following:

- Elimination of the backlog of unprocessed yard debris.
- Increasing utilization of recycled yard debris products by the Department of Transportation, local parks departments, Port of Portland and other large institutional users of ground cover and soil conditioner.
- Evaluation of yard debris collection programs.
- Identification of the role of local government in yard debris collection through the regional solid waste management and functional planning process.
- Identification and evaluation of acceptable alternative methods of collecting source separated yard debris.

If the Commission wishes to take a final action on the proposed rules, the Department suggests that the issue be scheduled for a meeting in Portland so that all interested persons would have an opportunity to address the Commission. In the meantime, the Department will continue to work on the issues and activities identified in this staff report, unless the Commission directs otherwise.

Fred Hansen

Attachments: I. July 17, 1987 OEC Letter
II. Other correspondence

William R. Bree
229-6975
October 9, 1987
YB7022

Attachment I
EQC Agenda Item I
October 9, 1987, EQC Meeting

OREGON ENVIRONMENTAL COUNCIL

2637 S.W. Water Avenue, Portland, Oregon 97201
Phone: 503/222-1963

Hazardous & Solid Waste Division
Dept. of Environmental Quality
RECEIVED
JUL 22 1987

James Petersen
Chairman
Environmental Quality Commission
835 N.W. Bond
Bend, Oregon 97701

July 17, 1987

Re: Definition of Yard Debris as a Principal Recyclable Material

Dear Chairman Petersen,

In 1983 the Oregon Legislature recognized the sound economic and social policy behind the utilization of recycling as a tool for solid waste management. Accordingly, the legislature enacted the Opportunity for Recycling Act. The goals of the act provide that:

a) the opportunity to recycle should be provided for every person in Oregon;
b) there is a shortage of appropriate sites for landfills in Oregon, and
c) it is in the best interests of the people of Oregon to extend the useful life of existing solid waste disposal sites by encouraging the recycling and reuse of materials whenever recycling is economically feasible. ORS 459.015 et seq.

The Act instructed the Commission to implement these goals. Specifically, the Commission was instructed to identify the principal recyclable materials in each wasteshed. ORS 459.175.

The Commission adopted rules pursuant to these instructions on December 14, 1984. At that time the Commission did not identify yard debris as a principal recyclable material, but rather directed the Department of Environmental Quality to return to the Commission within one year with a recommendation regarding yard debris.

On November 25,1985 the Department received additional instructions from the Commission to meet with affected parties regarding the comparative costs of processing versus the disposal of yard debris in the Portland, Washington, Multnomah, Clackamas, and West Linn wastesheds. In a January, 1986 report to

the Commission the Department stated that yard debris should be identified as a principal recyclable material. The Department recommended that the Commission authorize public hearings to discuss the proposed rule change and identification of yard debris as a principal recyclable material, effective July 1, 1987, in the five Portland metropolitan wastesheds.

Public hearings were held in March 1986. On April 25, 1986 the Department stated in a memorandum to the Commission that "[i]t remains the Department's opinion that source separated yard debris is a principal recyclable material in all five of the Portland metropolitan wastesheds." The Department requested additional time to hold further meetings and stated that they would present a proposed rule to the Commission at its July 25,1986 meeting. One additional public hearing was held on January 28, 1987.

It has now been four years since the Legislature first acted; three years since the Commission first instructed the Department to investigate yard debris as a principal recyclable material; over a year since the Department first forwarded their opinion to the Commission that yard debris could be identified as a principal recyclable material in the Portland metropolitan area wastesheds; and a year since the Department stated that they would make a recommendation to the Commission regarding yard debris. No action, however, has been taken to identify yard debris as a principal recyclable material. The Department has yet to forward a proposed rule to the Commission. The process appears to be deadlocked with no indication of future progress.

This delay and lack of direction comes at a time when the St. Johns landfill is rapidly nearing capacity and yard debris at conservative estimates represents 13.4% of the material being deposited. Currently yard debris represents the largest single component of the solid waste stream in the Portland metropolitan area. This posture calls into question compliance with statutory duties and departmental rules which recognize the necessity of recycling to extend the life of existing landfills and call for the identification of principal recyclable materials. The Department's reluctance or refusal to present a proposed rule and recommendations to the Commission effectively usurps the Commission's decision making authority.

The data submitted by the Department to the Commission in their January 1986 report indicated that yard debris met the test for inclusion as a principal recyclable material. This report included a white paper by Metro which also identified yard debris

as a principal recyclable material. Concerns have been voiced by local governments, local haulers, and more recently Metro, that adequate markets and processing plants do not exist to deal with an increase in the collection of yard debris. However, no direct evidence has been presented to support these concerns or dispute the original conclusions formulated by the Department and Metro.

The two major processors, Grimm's Fuel Co. and McFarlane's Bark, indicate that their processing capacity is greater than their current intake. The volume of yard debris processed by these two companies has increased at an approximate rate of 25% each year since 1983. In fact, Grimm's Fuel Co. recently contracted with Metro to process yard debris currently deposited at St. Johns. Although it is arguable whether a recycling program would result in the collection of all yard debris, assuming that it did, this collection would only represent 20% of the existing market for the material.

Undocumented claims regarding the lack of markets should not prevent regulatory action by the Commission. The evidence in the Rule-making record proves that yard debris meets the definition of a principal recyclable material. The policy behind the Opportunity to Recycle Act argues that the burden should not be on the public but rather on the individuals who contest this evidence to demonstrate that yard debris is not a principal recyclable material. Opponents of the Department's original proposed rule have not met this burden.

OEC believes that the Commission should adopt a rule which identifies yard debris as a principal recyclable material in the Portland, Clackamas, Washington and West Linn wastesheds. Defining yard debris as such will not leave affected individuals who oppose this action without remedy. Affected individuals may demonstrate that yard debris does not meet the definition at a specific site, OAR 340.060.030(9)(b)(10) and need not be recycled; or they may request a variance, OAR 340.60.030(11), and propose alternative methods of recycling. OAR 340.60.035.

At the very least, the Commission should direct the Department to bring this matter back to the Commission for a final ruling one way or the other. By failing to bring the issue back to the EQC pursuant to the instructions adopted by the Commission at its January, 1986 meeting, the Director has, in effect, substituted his judgment for that of the Commission. Since all rulemaking authority resides with the Commission, not the Department, this is clearly inappropriate.

During the next several months the public in Portland will be educated regarding the opportunities for recycling various materials. There is no reason why yard debris cannot be among these materials. In the Department's January 1986 report, the Department stated "[t]he major factor limiting the processing of yard debris is the lack of a large scale collection and delivery system." Identifying yard debris as a principal recyclable material addresses this problem and prevents further unnecessary use of much needed landfill space.

Sincerely

John A. Charles
Executive Director

cc: Commissioners Bishop, Brill, Buist, Denecke
Fred Hansen
Mike Downs
Lorie Parker
Bill Bree
Michael Huston

Attachment IIa
EQC Agenda Item I
October 9, 1987, EQC Meeting

OSSI
Reply to: 2202 SE Lake Road
Milwaukie, OR 97222

MEMBER
NSWMA
National Solid Wastes
Management Association

OREGON SANITARY SERVICE INSTITUTE 654-9533

October 1, 1987

ENVIRONMENTAL QUALITY COMMISSION
811 SW Sixth Avenue
Portland, OR 97204

Re: Testimony on Action Item I. EQC Agenda October 9, 1987
STATUS REPORT ON YARD DEBRIS RECYCLING IN THE PORTLAND METROPOLITAN AREA

Over the past two years, cost data for yard debris collection programs has been compiled. There currently are two types of yard debris collection programs:

1. Annual or Semi-Annual City Clean-Ups in numerous jurisdictions throughout the state.

2. Tax funded weekly yard debris collection for all city residents in the Cities of Gladstone and Oregon City. No other cities in the state have such programs.

The city clean-up campaigns have been quite successful, and the solid waste industry has been a cooperative partner in this success. In a city the size of Milwaukie it is estimated the cost to the collectors for an annual clean-up is approximately $10,000. There is no reimbursement to the collectors except to eventually pass on this cost through the rate structure to their customers. Some cities pay the disposal fees and the collectors furnish all vehicles and labor, with volunteers assisting in the monitoring process. In many cities, collectors pay all costs including disposal.

The following are figures that have been compiled on weekly collection of yard debris: (tax funded)

Oregon City

Metro staff worked for many months with Oregon City Garbage Co. to develop figures based on the Oregon City collection program. The reason they were using this city as a model was it and the City of Gladstone (also owned by the same company) were the only two yard debris collection programs in the Metro region offering weekly collection to all residents of the city. Both the Oregon City and the Gladstone programs are tax funded and paid through the city budget. Thus, the unit cost is spread to all property owners. The 1986 cost per ton in Oregon City was $58.62/ton.

Generic Model

Metro staff developed a generic model based on the data developed in Oregon City, but using the demographics in the City of Beaverton. Attached is a copy of this generic model, which shows the unit cost to be $50/ton. However, this is based on the assumption that there would be 75% tonnage recovery. The Oregon City experience has been a much lower tonnage recovery level, which would increase the per ton cost.

Average Collection Costs (non-tax funded)

In meetings where local government representatives were given the opportunity to express the likelihood that their city would include a yard debris program in their city budget, there was a totally negative response. The most common retort was, "We cannot pay for necessary police and fire services. Our citizens would never agree to pay taxes for this kind of program." Thus, there are political/budgetary constraints in assuming a tax funded yard debris program could be implemented throughout the Metro region or in other parts of the state. This leads us to assume that a weekly yard debris collection program would have to be paid on the same basis as garbage collection service through the rate schedule. Average collection costs would be computed as follows:

(a) Assume the average per can rate in the region is $8/month.

(b) Assume disposal to be 17% of the can rate, leaving 83% as the collection cost. This amounts to $6.64 per can for collection.

(c) Assume the average can weighs 35 pounds and is picked up 4.3 times per month for a total of 152 pounds per month. This amounts to 4.4¢ per pound for collection costs, and when this is multiplied times 2000 pounds in a ton, the collection cost per ton is $88/ton.

(d) To this would have to be added the disposal fee which is now $2.76/yard at Grimm's for bagged, non-contaminated yard debris. Grimm's expects to increase this fee by approximately 50¢/yard in the near future.

Total average collection cost: $88/ton, plus disposal.

In addition, there is a further constraint in that Rod Grimm is now saying the market has fallen for their processed product and he does not want large volumes beyond what he is now taking from Oregon City and Gladstone. Add to this the precarious position of MacFarlane's Bark who is no longer able to take the Oregon City and Gladstone yard debris, and there is a real question as to processing capability as well as market feasibility.

SUMMARY

1. Economically, it is not feasible to institute collection programs for yard debris.
2. Processors and markets are not in place to handle large volumes of yard debris.
3. Neighborhood clean-ups or drop-off centers for seasonal yard debris promotions remain the viable option.

EH:e
Enclosure

Respectfully submitted,

Estle Harlan

ESTLE HARLAN, Solid Waste Industry Consultant

C: FRED HANSEN, Director, DEQ
RENA CUSMA, Metro Executive
BILL BREE, Yard Debris Manager, DEQ
DENNIS MULVAHILL, Waste Reduction Manager, Metro
OSSI
TRI-COUNTY COUNCIL
AOR

.MPLE CITY CASE

City: Beaverton, OR

Population: 33,950 Residential Dwelling Structures: 13,338

Street Miles: 108 Dwelling Structures per Street Mile: 124

Number of Required Routes: 11.49 per week

75% of Yard Debris Generated: 4,001 tons/year

Disposal Site: Grimms Fuel Co. Distance to Site: 11.5 miles

Disposal Rate: $2.00/Compacted CY now 2.76/yd + To go up 50¢/yd
(Disposal at McFarlanes: $2.76/Compacted CY;
at St.Johns - '87 rates: $2.78/Compacted CY)

Monthly Cost of Collection & Disposal for Sample City

	WAGE RATE FOR COLLECTION		
Items	$8/hr	$10/HR	$12/HR
Labor	4,983.19	5,990.97	7,038.60
Truck	2,999.47	2,999.47	2,999.47
Fuel	389.36	389.36	389.36
Disposal	2,223.00	2,223.00	2,223.00
Promotion	686.25	686.25	686.25
Administration	1,819.33	1,819.33	1,819.33
Profit	1,310.06	1,410.84	1,515.60
TOTAL COST Monthly	14,410.66	15,519.22	16,671.61
Cost per Cubic Yard	4.32	4.65	5.00
Cost per Dwelling Structure	1.08	1.16	1.25

= 200,059 yr.

1 person/crew
2.149 employees

BUT To this needs to be added The Add. 76¢/yd. Grimm now Charging for bagged & yard debris, plus 50¢/yd. Anticipated increase

NEIL GOLDSCHMIDT
GOVERNOR

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, October 9, 1987, EQC Meeting

Proposed Salt Caves Hydroelectric Project:

1) City of Klamath Falls Appeal of the Director's Denial to the Environmental Quality Commission filed September 4, 1987.

2) Northwest Environmental Defense Center et. al. Cross-Appeal filed September 9, 1987.

Background

On August 25, 1986, the City of Klamath Falls filed an application for 401 certification of their proposed Salt Caves Hydroelectric Project. On September 25, 1986, DEQ notified the City that the application was incomplete because it lacked information required by Commission rules. The City provided some additional information and then petitioned the Commission for a waiver of the provision of the rules requiring the applicant to submit land use information. The Commission denied the petition for waiver, but initiated modification of the rule to provide an alternative way for the necessary land use information to be obtained. The City submitted a land use statement which was forwarded to Klamath County for review pursuant to the revised rule. The City was notified by letter dated March 20, 1987 that its 401 certification application was deemed complete for processing effective March 10, 1987.

The Department issued public notice on April 2, 1987. Public Hearings were held on May 12 and May 15, 1987. Public Comments were received through May 18, 1987. The Department finalized the report of its analysis of the application on August 17, 1987.

At about 5 p.m. on Friday, August 14, 1987, the applicant's representatives hand delivered a letter to DEQ offices. This

letter anticipated the Department conclusions regarding temperature standards compliance based on ongoing technical discussions between Department staff and the City's technical representatives. Among other things, the letter suggested that it may be appropriate for DEQ to condition a certificate to require a higher minimum stream flow to alleviate temperature concerns. No revised flow regime was proposed by the City in the letter. Finally, the letter indicated that the suggestion for a conditioned certificate was offered "...without prejudice to any legal positions it may be necessary to assert in the future."

The Department explored the potential to pursue the discussions of a modification of the proposed minimum flow with the Federal Energy Regulatory Commission (FERC). Specifically, we explored the potential for FERC acceptance of an agreement between the Department and the City (assuming such an agreement could be reached) to extend the one-year deadline for processing a 401 certification request as interpreted in FERC's recent Order No. 464 adopting rules on this subject. (Under FERC's interpretation, 401 certification would be waived on August 25, 1987 if a decision to grant or deny certification had not been made.) FERC officials verbally advised the Department that they have no ability to recognize any extension of the one-year period.

The Department further concluded that revising the minimum flow was not a simple matter that the Department could accomplish in a condition of a certificate. A specific proposal to maintain continuous compliance with the Commission's temperature standard needed to be developed and justified by the applicant's technical experts based on detailed modeling and analysis of weather, water temperature, and flow conditions. In addition, a revised project proposal would have to be made available to other agencies and the public for review and comment before final action could be taken by the Department.

The Department had no choice but to deny certification based on the time it would take to properly develop and consider a proposed revision of the project, the inability of FERC to consider any proposed mechanism for extending their interpretation of the one-year deadline for acting on an application, and the suggestion of the City that pursuit of a revised minimum flow option was "... without prejudice to any legal positions it may be necessary to assert in the future". This conclusion was based on our analysis of the application before us -- an application that proposed a minimum flow of 350 cubic feet per second in the 7.5 mile stream reach between the dam (diversion structure) and the power house.

By letter dated August 19, 1987, the Department of Environmental Quality denied 401 certification of the City of Klamath Falls' proposed Salt Caves Hydroelectric Project (Attachment C). Accompanying the denial letter was the August 17, 1987, report setting forth the Department's detailed analysis of the

application filed by the City. The denial letter advised the applicant of the right to appeal the denial to the Environmental Quality Commission.

The original denial letter was mailed by Certified Mail to Mr. William Miller, Project Director. Copies were also hand delivered to Mr. Miller and to legal representatives of the City on August 19, 1987.

On September 4, 1987, a hand delivered letter from Peter S. Glaser, Counsel for the City of Klamath Falls, requested a contested case hearing before the Environmental Quality Commission with respect to the Department's denial of 401 certification of the proposed Salt Caves Hydroelectric Project. This letter (Attachment A) sets forth 13 reasons for requesting the hearing. The City has expressed concern about delays in their proposed project and has requested that all pre-hearing and hearing procedures be accomplished as expeditiously as possible.

The City of Klamath Falls letter also requests that ....

> "In order to save time and possibly avoid a contested case hearing, we request that we be heard by the EQC at its October 9, 1987 meeting on the matter of issuance of the section 401 certificate subject to higher summertime flows. We would defer the contested case hearing until that time."

On September 9, 1987, a hand delivered letter from Karl G. Anuta filed a Cross-Appeal on behalf of the Northwest Environmental Defense Center (NEDC), the Oregon Wildlife Federation (OWF), the Oregon Natural Resources Council (ONRC), the League of Women Voters of Oregon (LWVOR), the Portland Audubon Society (PAS), the Oregon Rivers Council (ORC), the Oregon Chapter of the Sierra Club, and Oregon Trout. This letter (Attachment B) sets forth 8 Cross Appeal Issues.

Required EQC Action

The appeal letter filed by the applicant and the cross-appeal request filed by NEDC require action by the EQC to:

a. Rule on the City's request that a 401 certificate be issued subject to a higher summertime flow.

b. Appoint a Hearings Officer or authorize the Chairman to appoint a Hearings Officer for the Contested Case Hearing requested by the City of Klamath Falls.

c. Clarify or establish the procedures for the Contested Case Hearing.

d. Rule on the Cross-Petition by NEDC et. al. and determine whether the cross petitioners will be granted party status in the Contested Case Hearing requested by the City of Klamath Falls.

e. If the Cross-Petitioners are granted party status in the contested case hearing requested by the City of Klamath Falls, rule on the extent to which the issues raised by the cross-petitioners (which are different from the issues raised by the applicant City of Klamath Falls) will be considered.

Department Position on Issues Requiring EQC Action

a. Request for Certification Subject to Increased Flow.

The City has suggested in their appeal letter that the contested case hearing may be resolved if 401 certification were to be issued subject to higher summertime flows (see Attachment A, Page 3, Paragraph 4).

The Department strongly believes that it is inappropriate for the Commission to consider this proposal. Certification decisions, by law and by Commission rule, are made by the Director. The Attorney General has advised that the only available procedure for contesting the Director's certification decision is by contested case proceeding before the Commission. Such contested case appeal has been filed in this case. Any consideration by the Commission of any aspect of 401 certification for the proposed Salt Caves Project, outside the contested case proceeding, therefore is not an available procedure as a matter of law and could seriously prejudice the outcome of the contested case.

The Department believes, and notified the City in the denial letter, that it may be possible to achieve standards compliance through modification of their project proposal. This would require the applicant to develop a specific revised proposal, provide technical analysis to demonstrate that the revised proposal would comply with water quality standards, and submit a new application for 401 certification presenting the revised proposal. The new (or revised) application must be processed according to EQC rules, including public notice and opportunity for public input on the revised proposal. The Department advised the City that, barring unforeseen developments, a decision on a modified application could be completed within the 90 days outlined in the Commission rules.

It is therefore strongly recommended that the Commission reject the request by the City of Klamath Falls to consider the issuance of 401 certification subject to increased summertime flows because it is inappropriate for the Commission to consider the matter outside the pending contested case hearing.

b. Appointment of a Hearings Officer.

The full Commission could either hear the contested case directly, appoint a hearings officer to preside over the contested case hearing, or authorize the Chairman to appoint a hearings officer. This contested case hearing is expected to be complex and will likely extend for several days.

The Department would recommend that the Chairman be authorized to appoint a Hearings Officer to preside over this hearing, and that the Hearings Officer be authorized to establish any necessary procedures or ground rules that are not adequately addressed by procedural rules.

c. Procedures for Hearing.

The existing rules of the Commission for Contested Case hearings contained in OAR 340-11-097 through 340-11-140 will apply for a contested case hearing in this matter unless alternative rules are adopted.

The existing Commission rules for contested case hearings were developed in 1974 and last modified in 1976. The existing rules differ in some significant respects from the Attorney General's Model Rules for contested case proceedings.

The existing Commission rules were specifically written to address issues surrounding appeal of civil penalty assessments, and appeal of decisions regarding issuance, modification, or denial of permits for existing sources. The rules did not anticipate petitions by others for party status and therefore did not provide procedures for handling such petitions. However, the wording of the rules in several places suggest that there can be additional parties in a contested case hearing. The rules limit the scope of the hearing to the issues raised in the request for hearing. The rules further detail the process for appealing the hearings officer's decision to the Commission. The issues addressed in the Commission's rules are more detailed and less flexible than the Attorney General's Model Rules relative to the same issues.

The Attorney General's Model Rules, on the other hand, specifically address issues not included in the Commission's existing rules including petitions for party status in contested case hearings, ex parte communications, and procedures for further contesting a final order (petitions for rehearing and request for stay).

The Commission recently adopted a temporary rule to make the Attorney General's Model Rules the applicable procedural rules for the contested case hearing on its order selecting a landfill

disposal site pursuant to Chapter 679, Oregon Laws 1985. The Department advised the Commission at that time that it was evaluating the procedural rules for contested cases and would return in the future with a recommendation regarding potential rule amendments. That evaluation has not yet been completed.

The Department believes that the existing Commission rules are not adequate for the contested case hearing requested by the City of Klamath Falls on the denial of 401 certification for the proposed Salt Caves Hydroelectric Project, particularly in light of the cross-petition filed by NEDC. The Department further believes that the Attorney General's Model Rules would address these inadequacies.

ORS 183.341 provides that "Any agency may adopt all or part of the model rules by reference without complying with the rulemaking procedures under ORS 183.335. Notice of such adoption shall be filed with the Secretary of State in the manner provided by ORS 183.355 for the filing of rules."

Therefore, the Department recommends that the Commission adopt the Attorney General's Model Rules in lieu of the Commissions existing contested case procedural rules, to apply to the contested case hearing on the Director's decision to deny 401 certification on the proposed Salt Caves Hydroelectric Project.

d. Cross Petition filed by NEDC et. al.

The existing Commission rules regarding 401 certification specifically provide for the applicant to appeal a 401 certification decision of the Director to the Commission. As previously noted, the rules make no provision for third party appeals. The Commission has previously rejected proposals that rules be amended to grant the right of a contested case hearing to parties other than the applicant.

As previously noted, the existing rules of the Commission for Contested Cases do not specifically deal with the issue of petitions for party status. However, the wording of sections of the contested case procedural rules contemplate parties in addition to the Department and the Applicant.

Since EQC 401 certification rules do not specifically grant the right of a contested case hearing to non-applicants (NEDC et. al.), the Department believes that the NEDC petition can only be considered as a petition for party status.

The Commission should be aware that pursuant to ORS 183.310 (6)(c), the Commission's decision on a request for party status is subject to judicial review after the Commission has issued a final order in the proceedings.

If the Commission adopts the Attorney General's Model Rules as recommended in the previous section of this report, it will have some guiding criteria for determining whether to grant party status to NEDC et. al. The model rules state the following criteria:

> "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."

If the Attorney General's Model Rules are not adopted, it will still be necessary to decide whether or not to grant NEDC et. al. party status, however, the decision will be without the benefit of guiding criteria.

The Department believes that NEDC et. al. represents a public interest in the matter. As a result, the Department believes that the NEDC et. al. petition for party status is appropriate and recommends that it be accepted.

e. Scope of the Contested Case Hearing.

NEDC has raised issues regarding the Department's decision to deny 401 certification of the Proposed Salt Caves Project that were not raised by the applicant City of Klamath Falls.

As previously noted, an existing Commission rule (OAR 340-11-107) restricts the applicant from raising issues during a contested case hearing that are not raised in their answer (request for hearing). OAR 340-11-120 (4) further provides that "Except for good cause shown, evidence shall not be taken on any issue not raised in the notice and the answer." These rules do not specify how issues raised by other parties in the proceeding are to be treated.

The Attorney General Model Rules do not provide guidance regarding the scope of the hearing. If the Attorney General's Model Rules are adopted in lieu of the Commission's existing contested case rules, the limitations of existing Commission rules would not apply.

Whether the Attorney General's Model Rules are adopted or the existing rules retained, the Hearings Officer would be under an independent duty under ORS 183.415 and case law to develop a full and fair record. Thus, notwithstanding, OAR 340-11-120(4), the hearing officer would have the discretion to consider issues not raised by the applicant.

The Department believes that the additional issues raised by NEDC are important issues that should be addressed in the contested case hearing. Failure to do so may result in additional legal challenges and further delays in reaching a final decision on the Salt Caves 401 certification. The Department believes the public interest is best served by expanding the scope of the contested case hearing to include the additional issues raised by NEDC.

Notwithstanding the authority of the Hearings Officer to expand the issues considered, we believe it appropriate for the Commission to direct that the scope of the contested case hearing be expanded to include the additional issues raised by NEDC in its petition for party status.

Summation

1. The Department completed processing of the City of Klamath Falls application for 401 certification of the proposed Salt Caves Hydroelectric Project and denied certification by letter dated August 19, 1987. In making the decision to deny certification, the Department considered an August 14, 1987, suggestion from the City that a certificate should be issued subject to an unspecified higher minimum flow.

2. The City of Klamath Falls has requested a contested case hearing before the EQC regarding the decision of the Director to deny 401 certification for the proposed Salt Caves Hydroelectric Project. The City has also requested Commission consideration of issuance of 401 certification subject to higher summertime flows.

3. The Northwest Environmental Defense Center (NEDC), the Oregon Wildlife Federation (OWF), the Oregon Natural Resources Council (ONRC), the League of Women Voters of Oregon (LWVOR), the Portland Audubon Society (PAS), the Oregon Rivers Council (ORC), the Oregon Chapter of the Sierra Club, and Oregon Trout have filed a Cross-Appeal raising issues different from those raised by the City of Klamath Falls in their appeal.

4. The appeal letters filed by the applicant and the cross-appeal request filed by NEDC require action by the EQC to:

   a. Rule on the City's request that a 401 certificate be issued subject to a higher summertime flow.

   b. Appoint a Hearings Officer or authorize the Chairman to appoint a Hearings Officer for the Contested Case Hearing requested by the City of Klamath Falls.

c. Clarify or establish the procedures for the Contested Case Hearing.

d. Rule on the Cross-Petition by NEDC et. al. and determine whether the cross petitioners will be granted party status in the Contested Case Hearing requested by the City of Klamath Falls.

e. If the Cross-Petitioners are granted party status in the contested case hearing requested by the City of Klamath Falls, rule on the extent to which the issues raised by the cross-petitioners (which are different from the issues raised by the applicant City of Klamath Falls) will be considered.

Director's Recommendation

Based on the discussion in this report, the Director recommends that the Commission:

1. Reject the request by the City of Klamath Falls to consider the issuance of 401 certification subject to increased summertime flows because it is inappropriate for the Commission to consider the matter outside the pending contested case hearing.

2. Authorize the Chairman to appoint a Hearings Officer to preside over the Contested Case Hearing requested by the City of Klamath Falls regarding the Director's denial of 401 Certification for the proposed Salt Caves Hydroelectric Project.

3. Adopt Attachment D which would adopt the Attorney General's Model Rules for Contested Case Hearings in lieu of the Commissions existing contested case procedural rules, to apply to the contested case hearing on the Director's decision to deny 401 certification on the proposed Salt Caves Hydroelectric Project, and instruct the Department to file Attachment D with the Secretary of State in the manner provided by ORS 183.355.

4. Recognize the petition of NEDC et. al. as a petition for party status in the contested case hearing and grant the petitioners party status.

5. Authorize expansion of the scope of the contested case hearing to include the additional issues raised by NEDC in its petition for party status.

Fred Hansen

Attachments:

A. City of Klamath Falls Appeal Letter
B. NEDC Cross-Appeal Letter
C. 401 Certification Denial Letter
D. Proposed Rule Adopting Attorney General's Model Rules for Contested Cases.
E. Attorney General's Model Rules for Contested Cases.

Dick Nichols/Harold Sawyer
229-5324/229-5776
September 28, 1987

ATTACHMENT A

Law Offices

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September 4, 1987

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
RECEIVED
SEP 4 1987
OFFICE OF THE DIRECTOR

hand delivered 9:25 am KP

Hand Delivered

Mr. Fred Hansen, Director
Department of Environmental Quality
811 S.W. Sixth Avenue
Portland, Oregon 97204

Re: City of Klamath Falls, Salt Caves Hydroelectric Project, Request for Certification Under Section 401 of the Clean Water Act.

Dear Mr. Hansen:

Pursuant to OAR 340-48-035, the City of Klamath Falls demands a contested case hearing before the Environmental Quality Commission (EQC) with respect to the Department's proposed denial of certification for the above-referenced project. As reasons for such demand, the City states as follows:

1. The Department erred by not issuing certification conditioned on the City releasing sufficient minimum flows during appropriate summertime periods to meet the Department's temperature and antidegradation standards.

2. The temperature and antidegradation standards applied by the Department were not approved by the United States Environmental Protection Agency and are therefore invalid.

3. The temperature and antidegradation standards applied by the Department were not approved by EQC and are therefore invalid.

4. The temperature and antidegradation standards applied by the Department were not adopted in compliance with the Oregon Administrative Procedure Act, applicable regulations and appropriate procedures, and are therefore invalid.

5. The temperature and antidegradation standards applied by the Department are arbitrary and capricious, not necessary to protect beneficial uses and not rationally related to their intended purposes, and are therefore invalid.

6. The Department's conclusions with respect to temperature impacts of the project are arbitrary and capricious, not supported by any credible evidence and therefore in error.

7. The Department's conclusions that the project cannot be constructed and operated in accordance with the water quality standards adopted by EQC are contradicted by information in the Department's Evaluation Report and Findings and are therefore in error.

8. The Department required of the City a burden of proof far beyond that required of any previous applicant to the Department for section 401 certification; such action was arbitrary, discriminatory, not supported by law and therefore in error.

9. The Department's application of its temperature and antidegradation standards was a radical departure from the Department's application of such standards to other section 401 certifications, which was unexplained, arbitrary, discriminatory and therefore in error.

10. The Department's analysis of temperature impacts of the project did not disclose any "measurable" impacts and is therefore in error.

11. The Department's conclusions misrepresented and misunderstood the City's temperature analyses and are therefore in error.

12. The Department's conclusions with respect to the impact of the project on fishery uses are not supported by credible evidence and are therefore in error.

13. The Department and EQC have waived certification by not acting within a reasonable period of time.

The City will wish to take discovery of the Department's files in advance of the contested case hearing and conduct depositions of appropriate Department personnel. We hope that the pre-hearing and hearing procedures can be accomplished as expeditiously as possible.

Your letter of August 19, 1987, to the City stated that the Department did not have sufficient time to fully consider our letter to you of August 14, 1987. Our letter suggested that the Department should issue a section 401 certification to the City conditioned on the City providing sufficient minimum flows during hot summer days to meet the Department's interpretation of the temperature standard. Your failure to issue the certificate subject to such conditions is the basis for our first assignment of error above.

Our letter was predicated on our discussions with your staff in which it was indicated to us that staff had concluded that the project -- at proposed flows of 350 cfs -- might cause some minor warming in the diversion reach. These discussions are confirmed in your Evaluation Report and Findings, which indicates that any warming that might occur would be minor and would occur only for relatively short periods of certain summer days. The Evaluation Report and Findings also indicates that this perceived warming could be mitigated by the provision of higher summertime flows. Our August 14, 1987 letter, as stated, offered to provide such flows, in order to eliminate any possible concerns.

In order to save time and possibly avoid a contested case hearing, we request that we be heard by the EQC at its October 9, 1987 meeting on the matter of issuance of the section 401 certificate subject to higher summertime flows. We would defer the contested case hearing until that time. We believe early EQC consideration of our request for a conditional certificate is the most expeditious way of solving this matter. The City, as you know, is greatly concerned about delays that have already taken place on the City's section 401 request and desires that this matter be resolved at the earliest possible time.

In the meantime, we intend to follow up on our discussions at our August 21 meeting and have the City's technical advisors and your staff meet to discuss the project further. Specifically, the technical personnel are expected to discuss and conduct the additional analyses that the Department believes are necessary to allow it to reach final conclusions as

to the amount and duration of flows that would meet the temperature standard as interpreted by the Department.

Sincerely yours,

Peter S. Glaser

Peter S. Glaser
Counsel for the City
of Klamath Falls

cc: Environmental Quality Commissioners
Honorable George Flitcraft
James Keller
William G. Miller

ATTACHMENT B

Northwest Environmental Defense Center
10015 S.W. Terwilliger Blvd., Portland, Oregon 97219
(503) 244-1181 ext.707

September 9, 1987

Fred Hansen
Director
Department of Environmental Quality
811 S.W. Sixth Street
Portland, Oregon 97204

HAND DELIVERED

Re: **Salt Caves II, Denial of 401 Certification**

Dear Fred:

On August 19, 1987, the Department denied the City of Klamath Falls' request for a 401 Certificate. On September 4, 1987, the City appealed that denial by "demanding" a contested case hearing, pursuant to OAR 340-48-035. The Northwest Environmental Defense Center (NEDC), Oregon Trout, The Oregon Chapter of the Sierra Club, the Oregon Natural Resources Council (ONRC), the Oregon Wildlife Federation (OWF), the Portland Audubon Society (PAS), the League of Women Voters of Oregon (LWVOR) and the Oregon Rivers Council (ORC) hereby cross-appeal on the issues listed on page two.

NEDC, OWF, ONRC, ORC, PAS, LWVOR, Oregon Trout and The Sierra Club believe that the Department's denial of a 401 Certificate was fully justified. The currently proposed project does not meet Oregon's water quality standards. Unless the City withdraws the current application and files a new and entirely different application the 401 denial must stand.

We note, however, that the staff report on the denial also specifies that the proposed project will violate only the state's temperature and anti-degradation standards. We strongly disagree with this conclusion. We believe the evidence before the Department proves that the proposed project will violate numerous water quality and water quality related state standards.

The City has appealed under OAR 340-48-035, which provides a denied applicant the right to a contested case hearing. This regulation does not speak to the issue of an appeal by other parties who have fully participated in the 401

process. NEDC and other public interest organizations have long contended that participating parties must also be given a contested case right. See eg., NEDC and Sierra Club's Comments on DEQ's Proposed 401 Regulations, EQC Meeting December 12, 1986, Agenda Item L.

Generally the decision to allow a party a contested case is discretionary. NEDC v. Mid-Willamette Air Pollution Auth., 16 Or App 638, 519 P2d 1271 (1974)(DEQ vested with discretion whether to allow contested case hearing). However, an agency which is vested with such discretion may limit its discretion by its own regulations. Wyers v. Dressler, 42 Or App 799, 807-8, 601 P2d 1268 (1979) rev. den. 288 Or 527 (1980)(EFSC regulation granting right to contested case removed agencies' discretion in such area). DEQ has limited its discretion in this area by providing a denied applicant a "right" to a contested case. Due process and equal protection considerations dictate that a similar right must also be provided to other participating parties.

CROSS-APPEAL ISSUES:

1. DEQ incorrectly concluded that the project will not violate OAR 340-41-150, the Nuisance Phytoplankton Growth regulation.

2. DEQ incorrectly concluded that the project will not violate OARs 340-41-965(2)(1), 340-41-965(2)(i), and 340-41-965(2)(k), by producing nuisance algae growths (otherwise known as "floating mats of putrifying algal scum") that will be aesthetically offensive, unpalatable, an objectionably discoloring.

3. DEQ incorrectly concluded that the project will not impair the beneficial uses of the river identified in OAR 340-41-962.

4. DEQ incorrectly concluded that the project will not degrade the water quality of the river by increasing the concentrations of the parasite **Ceratomyxa Shasta.**

5. DEQ incorrectly concluded that the project will not violate the state anti-degradation policy, except as to temperature increases, despite having acknowledged in its testimony before EFSC/WRC on Salt Caves I that the policy is applicable and would be violated.

6. DEQ incorrectly concluded that the project will not violate state water quality standards by reducing the quantity of water in the river.

7. DEQ incorrectly concluded that the project will not violate state water quality standards by causing harm to the existing designated wild trout habitat and population.

8. DEQ incorrectly concluded that the project is exempt from the provisions of ORS Chapter 569, Oregon Laws 1985 (HB 2990).

Further information and support for each of these conclusions will be provided in the contested case hearing.

Sincerely,

Karl G. Anuta
721 S.W. Oak
Portland, OR 97205

on behalf of
NEDC, OWF, ONRC,
LWVOR, Oregon Trout,
PAS, ORC and The Sierra Club.

cc: Jack Smith, NEDC
Roy Elicker, OWF
Andy Kerr, ONRC
Bob Doppelt, ORC
Linda Craig, PAS
Sharon Little, LWVOR
Bill Baake, Or. Trout
Liz Frenkel, Sierra Club

Peter Glaser
Richard Glick

VICTOR ATIYEH
GOVERNOR

Department of Environmental Quality

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

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

August 19, 1987

Mr. William Miller, Project Director
Resource Management International, Inc.
1010 Hurley Way, Suite 500
Sacramento, California 95825

Re: 401 Certification Request
City of Klamath Falls
Proposed Salt Caves
Hydroelectric Project
FERC No. 10199

Dear Mr. Miller:

By letter to the Department of Environmental Quality (DEQ) dated August 25, 1986, you requested certification for the above referenced project as required by Section 401 of the federal Clean Water Act. In support of your request, you filed extensive documentation for the proposed project.

Following submittal of your request, extensive discussions occurred between you and Department staff regarding the requirements of applicable 401 Certification procedural rules adopted by the Environmental Quality Commission (EQC) and the completeness of your application. Further information was submitted in support of your request both before and after the EQC adopted modifications to the procedural rules on January 23, 1987.

On March 20, 1987, the DEQ notified you by certified mail that your application for project certification was deemed complete. As prescribed by federal law and EQC rules, the DEQ gave public notice of your application on April 7, 1987, held public hearings on May 12 and 15, 1987, and received written comments until May 18, 1987. In addition, the Department received supplemental

information from the applicant's technical consultants until August 3, 1987.

The DEQ has evaluated your application and supplemental information, plus all information received through the public participation process. The department's evaluation, findings, and recommendations are presented in the attached report entitled "Evaluation Report and Findings on the Application for Certification Pursuant to Section 401 of the Federal Clean Water Act, submitted by the City of Klamath Falls for the Proposed Salt Caves Hydroelectric Project on the Klamath River, Klamath County, Oregon (FERC No. 10199); August 17, 1987."

Based on the requirements of Section 401 of the federal Clean Water Act and the reasoning and findings set forth in the attached report, I hereby deny your request for water quality standards compliance certification for the proposed Salt Caves Hydroelectric Project (FERC No. 10199). In summary, the reasons for denial are that the water quality standard for temperature as set forth in OAR 340-41-965(2)(b)(A) and the antidegradation policy as set forth in OAR 340-41-026(1)(a) and OAR 340-41-965(1) would not be met in a portion of the Klamath River between the diversion dam and the powerhouse. The temperature standard effectively prohibits any discharge or activity that would cause measurable increase in the temperature of the Klamath River during summer periods when stream temperatures naturally exceed 58°F. The measurable temperature increase that we project in the diversion reach would also be a violation of the antidegradation policy.

Your application indicates that construction and operation of the proposed project would result in daytime stream flows in the Klamath River between the Salt Caves Diversion Dam and the Powerhouse being reduced from approximately 1500 cubic feet per second (cfs) to 350 cfs. These diminished flows would result in shallower water depth, increased travel or residence time, and a resultant increase in stream temperature due to the effects of solar heating. Our analysis generally confirms information submitted in the application and suggests that maximum daily temperature projected after the project is in operation would be between 1.2 and 2.5°F higher than temperatures would be without the project. This level of increase is measurable and would exceed Oregon's federally approved water quality standards.

Your application expressed concern that our temperature standard could not literally be applied to a diversion hydroelectric project such as that proposed by the City. The application went on to state "given the impossibility of applying the temperature standard literally to the Project, the City would suggest that DEQ apply the standard in light of its purpose, that is, to protect the salmonid population in the affected portion of the Klamath River." We agree that the standard must be applied in

light of its purpose to protect the salmonid (trout) population in the affected portion of the Klamath River and have done so in our evaluation of your application.

We have conducted further analysis to determine whether some flow higher than 350 cfs could potentially result in negligible temperature increases due to solar heating in the diversion reach. This very preliminary analysis suggests that a significantly higher summertime daily stream flow through the diversion reach may effectively eliminate the projected temperature standard violation. Additional analysis by the applicant and modification of the project proposal conceivably could result in a demonstration of compliance with the temperature standard.

On Friday August 14, 1987, a letter from you was hand delivered to our office at about 5:00 p.m. This letter anticipated our conclusions regarding temperature based on ongoing technical discussions between our staff and the City's technical representatives. The letter reiterated that although the City was proposing a minimum flow through the diversion reach of 350 cfs, a final minimum flow had not been established because discussions were still ongoing with fishery agencies. The letter suggested that it may be appropriate for DEQ to condition a certificate to require a higher minimum flow to alleviate temperature concerns. Finally, the letter indicated that the suggestion for a conditioned certificate was offered "...without prejudice to any legal positions it may be necessary to assert in the future."

We have explored the potential to pursue discussions of a modification of the proposed minimum flow prior to our making a final determination on your application. Since this would take some time, we have conferred with FERC officials to determine whether they would accept an agreement between the Department and the City to extend the one-year deadline for processing a 401 certification request as interpreted in FERC's recent Order No. 464 adopting rules on this subject. FERC officials have verbally advised us that they have no ability to recognize any extension of the one-year period as interpreted by their Commission. This fact, together with your suggestion that pursuit of this option is "... without prejudice to any legal positions it may be necessary to assert in the future," leaves us with little choice but to deny your application based on our analysis of your proposed minimum flow of 350 cfs.

This denial is without prejudice and shall become effective twenty (20) days from the date of this letter unless within that time period you request a hearing before the Environmental Quality Commission. Such a request for hearing shall be made in writing to this office and shall state the grounds for the request. If you conclude, based on further analysis, that a revised proposal may qualify for certification and submit a revised application for

certification together with the necessary technical analysis to support your project revisions, the department will promptly proceed to public notice as required by our rules and render a new decision. In such a circumstance, barring unforeseen developments, a decision on a modified application could be completed within the 90 days outlined in our rules.

Sincerely,

Fred Hansen

Fred Hansen
Director

FH:h

cc: FERC
City of Klamath Falls
Richard Glick, Attorney at Law
Peter Glaser, Attorney at Law
Oregon Water Resources Department
Oregon Department of Energy
Oregon Division of State Lands
Oregon Land Conservation and Development Commission
Klamath County Commissioners
California North Coast Water Quality Control Board
California Department of Fish & Game
U. S. Fish and Wildlife Service
U. S. Bureau of Land Management
Northwest Environmental Defense Center

ATTACHMENT D

PROPOSED RULE

OAR 340-11-142

350-11-142. **Rules/Applicability.**

(1) 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 denial pursuant to OAR 340-48-035 of 401 certification of the proposed Salt Caves Hydroelectric Project.

(2) The Model Rules shall only apply to the contested case (or cases) described in subsection 340-11-141(1). 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.

ATTORNEY GENERAL'S

MODEL RULES FOR CONTESTED CASES

Contested Case Notice

137-03-001 In addition to the requirements 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.

(ORS 183.415; 183.450)

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 ORS 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 137-03-002(1) 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.

(ORS 183.413, 183.415)

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 a 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 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 which 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 interests identified in 137-03-005(3)(d) or (e).

(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 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).

(ORS 183.310; 183.415)

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.

(ORS 180.060; 183.310; 183.413)

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.

(ORS 183.430)

Conducting Contested Case Hearings

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 137-03-055.

(ORS 183.415)

Evidentiary Rules

137-03-050 (1) Evidence of a type commonly relied upon by reasonably prudent persons in the 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 days or more before a hearing, the agency, an 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 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.

(6) If cross-examination is requested of the affiant, certificate preparer, or other document preparer or custodian as provided in 137-03-050(5), and the requestor is informed within five 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.

(ORS 183.450)

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.

(ORS 183.415(8); 183.462)

Proposed Orders in Contested Cases, Filing of Exceptions, Argument, and 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.

(ORS 183.460)

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.

(ORS 183.470)

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.

(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 137-03-075(2) and (4).

(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 137-03-075(7)(a) 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 137-03-075(7)(e).

(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).

(ORS 183.415; 183.470)

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 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 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.

(ORS 183.482)

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 137-03-090(2)(d), that they may participate in the stay proceeding before the agency if they file a response in accordance with 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:

(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 137-03-090(2)(f) and (g). 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 137-03-090(2)(d).

(ORS 183.482)

Request for Stay — Motion to Intervene

137-03-091 (1) Any party identified under 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 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 137-03-091(2)(c) and (d).

(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.

(ORS 183.482)

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 137-03-090(2)(a)-(e) or (3). All amendments and supplements shall be delivered or mailed as provided in 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 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 137-03-091(3). If there are further proceedings pursuant to 137-03-092(2), the agency staff may present additional evidence in the same manner that parties are permitted to present additional evidence.

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 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.

(ORS 183.482)

Miscellaneous Rules — 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.

NEIL GOLDSCHMIDT
GOVERNOR

Environmental Quality Commission

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

MEMORANDUM

TO: Environmental Quality Commission DATE: September 11, 1987

FROM: Linda K. Zucker, Hearings Officer

SUBJECT: Appeal of DEQ vs. Vandervelde
Case No. 5-WQ-WVR-86-39

Roy Vandervelde has appealed the Hearings Officer's order affirming the $5,500 in civil penalties assessed for unpermitted pollution caused by silage and manure discharges. Review is scheduled for the Commission's October 9, 1987 meeting in Bend.

I have enclosed for your review the following:

1. Hearings Officer's Findings of Fact, Conclusions of Law and Final Order and Judgment dated February 19, 1987.
2. Respondent's Notice of Appeal.
3. Respondent's Appellate Brief dated June 24, 1987.
4. Department's Motion to Dismiss Appeal and in the Alternative, Department's (Appellee) Response Brief.
5. The hearing transcript.
6. The hearing exhibits.
7. DEQ's Notice of Assessment.

LKZ:p
HP1036
cc: Roger Kromer
Arnold Silver, Assistant Attorney General

BEFORE THE ENVIRONMENTAL QUALITY COMMISSION

OF THE STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY OF THE STATE OF OREGON, Department, v. ROY VANDERVELDE, Respondent.	)	HEARING OFFICER'S FINDINGS OF FACT, CONCLUSIONS OF LAW AND FINAL ORDER NO. 05-WQ-WVR-86-39

BACKGROUND

Roy Vandervelde has appealed from civil penalties totaling $5,500 assessed by DEQ for unpermitted pollution caused by silage and manure discharges from his property.

Vandervelde requested Environmental Quality Commission review of DEQ's action, and disputed the facts contained in DEQ's Notice of Assessment. He also said that in connection with the alleged violations, he had not knowingly or intentionally violated any rule; he had taken all reasonable steps or procedures necessary or appropriate to correct any violation; and that the gravity and magnitude of any violation were minor compared to other farmers' practices and to those of other Oregon businesses.

A hearing was conducted on November 6, 1986. Roy Vandervelde was represented by Roger Kromer, his attorney. DEQ was represented by Brad Petersen, a certified law student supervised by Arnold Silver, Assistant Attorney General. DEQ submitted post hearing memoranda.

FINDINGS OF FACT

1. Roy Vandervelde operates a 150 acre dairy in Yamhill County, Oregon. In March, 1986, the dairy had approximately 1,200 cattle. Silage

and manure were present on the property. The dairy does not have a permit to discharge wastewater into state waters.

2. On March 4, 1986, DEQ staff went to the dairy to investigate a water pollution complaint. Denied access to the property, the investigators took three off-site samples. The first was from a drainage ditch near the silage liquor lagoon. The discharge here was green and slimy and smelled like silage liquor, the leachate from fodder fed to livestock. The second sample was taken from a ditch at a point approximately 1/3 to 1/2 mile from the dairy. The ditch was slimy and the water at this site was chocolate colored and smelled like cow manure. The third sample was taken approximately 100 yards from the property. This site also smelled of cow manure, was discolored and had marked slime growth.

3. The water courses at the three sample points eventually reach Salt Creek. The ditches and Salt Creek are state waters.

4. The samples were analyzed at DEQ's laboratory. The results are as reported in Exhibits 6 and 7 which are attached and incorporated in these findings.

5. Test results of Sample 1 are consistent with water having a high content of silage material. As silage liquor decomposes in water, it depletes the water's oxygen content. Introduction of silage liquor into water increases the nutrient content of the water. Nutrients encourage algae and bacteria growth. Depletion of oxygen and increase in nutrient content to the levels identified in Sample 1 make the water harmful to aquatic life; that is, polluted.

6. Test results of Samples 2 and 3 show the presence of extremely

high quantities of fecal coliform, bacteria which originate in the intestines of warm blooded animals, and which indicate the presence of fecal material in the water. The presence of fecal coliform in water at the levels identified in Samples 2 and 3 tends to render the water detrimental to public health and harmful to aquatic life; that is, polluted.

7. The configuration of the dairy property is such that surface water from it flows into the surrounding ditches.

On March 4, 1986 surface water contaminated by manure liquor flowed from the dairy property into a drainage ditch which empties into Salt Creek. On March 4, 1986 silage liquor flowed from the dairy silage liquor collection pond's emergency overflow pipe into an open agricultural drainage ditch which empties into Salt Creek.

8. Agricultural tiles deflect water from neighboring property and from the dairy property into the surrounding ditches which feed into Salt Creek. While neighboring property is, then, a source of creek water, it is not found to be a source of any significant contamination or pollution. At most, a few head of livestock are maintained on neighboring land. The scale of the measured contamination was too great to have been caused by contamination associated with a few head of domestic livestock or by wildlife.

9. A penalty was assessed against Roy Vandervelde for an unpermitted March 14, 1984 discharge of silage and manure wastewater which polluted public waters. The penalty was appealed to the Environmental Quality Commission and affirmed by hearings officer's order. Further appeal was dismissed as not timely.

10. Since the assessment described above, Roy Vandervelde has spent $40,000 to construct a lagoon and collection pond for storage and treatment of animal waste and silage liquor prior to on-site use of these wastes. However, the facilities have not been operated with reasonable effort to avoid waste discharge. The case record shows incomplete construction and misuse of the facility, neither promptly addressed by dairy management. This failure may have reflected the dairy management's view that lagoons and ponds were costly but ineffective dairy facilities.

11. The case record does not support a finding that the violations were minor compared to other farming and business practice in Oregon.

12. DEQ failed to provide Vandervelde with a sample analysis report as requested in time for Vandervelde to obtain valid sample analyses independently. The failure appears to have been the result of a misunderstanding.

CONCLUSIONS OF LAW

1. The Environmental Quality Commission has jurisdiction.

2. On March 4, 1986 Roy Vandervelde caused pollution of state waters by permitting silage liquor to discharge from his property into state waters in violation of ORS 468.720(1) and OAR 340-51-020(1).

3. On March 4, 1986 Roy Vandervelde caused pollution of state waters by permitting manure liquor to discharge from his property into state waters in violation of ORS 468.720(1) and OAR 340-51-020(1).

4. On March 4, 1986 Roy Vandervelde discharged waste from his dairy operation into state waters without a permit in violation of ORS 468.740 and OAR 340-45-015(1)(a).

5. Penalties greater than the minimum scheduled for the proved

violations are supported by aggravating factors which include: Prior violation of the statutes and regulations violated in this case; failure to take all feasible steps or procedures necessary or appropriate to correct the violation (although a costly pollution control facility was installed); and the gravity and magnitude of the violation.* The penalties assessed are within the range of authorized discretion. OAR 340-12-045(2); 340-12-055(2)(b) (cited by DEQ in error as OAR 340-12-055(1)(c)).

6. Roy Vandervelde is liable for civil penalties of $2,500, $2,500 and $500, or a total of $5,500.

Dated this _____ day of _____, 19____.

Linda K. Zucker
Hearings Officer

NOTICE: If you disagree with this Order you may request review by the Environmental Quality Commission. Your request must be in writing directed to the Environmental Quality Commission, 811 SW 6th Avenue Portland, Oregon 97204. The request must be <u>received</u> by the Environmental Quality Commission within 30 days of the date of mailing or personal service of Order. If you do not file a request for review within the time allowed, this order will become final and thereafter shall not be subject to review by any agency or court.

A full statement of what you must do to appeal a hearings officer's order is in Oregon Administrative Rule (OAR) 340-11-132. That rule is enclosed.

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* Vandervelde has not suggested the existence of a specific remedy for DEQ's failure to provide him timely sample analysis results. Vandervelde was aware of the investigation and could have taken samples independently or pursued his request more attentively. The issue has not been considered in evaluating the penalty.

EGAL

EXHIBIT 11-6

Ex 6

DEPARTMENT OF ENVIRONMENTAL QUALITY
Request for Analysis

Laboratory No. 86-0150

Location/Site: VandeVelde Dairy, Amity Date: 3-4-86 1 of 3

Date Received Lab: MAR 04 1986 1250

Collected By: Tom Fisher Program: WQ 3256D

Date Reported:

Purpose: Document runoff from Dairy of waste into stock water. Report Data To:

Comments:

lab prepared

(P) unpreserved; Nutrient (R) add H_2SO_4 in field; Metals (Tm) HNO_3 added in lab--don't rinse; Organic(X) mason jar

Item No.	Sampling Point Description (include time)	*Sample Container (bottle) #'s Nutrients Basic	DO BOD	Metals Organic	Fecal Coliform	Test Required
9:20 Am 1	Drainage Ditch of Bo Hum of VandeVelde Dairy along Lancefield Rd	S195	0783		128	PH, Bod NO_3, NH_3 TPO_4, TOC, Fecal Coliform
9:40 Am 2	Drainage Ditch at culvert on Amity ~~Calvert~~ Bellevue highway. by Rt. 1 Box H. - 1CFS	S196	0731		028	"
10:02 Am 3	Drainage Ditch on Hughes property approximately 1/3 mile SE of Dairy Buildings. 1-CFS	S208	0374		161	"
4						
5						
6						

Laboratory comments would like results by 3-14-86 jr

GHL

EXHIBIT 7

DEPARTMENT OF ENVIRONMENTAL QUALITY
Laboratory Data Sheet

Laboratory No: 86-0150 EX 7
Program Code: 32560
Page: 1 of: 2
Analysis Completed:

Vanderveekle Dairy — Fisher

Item No.	Test Results (All units in mg/l or ~~ug/ml~~)											
	basic	nutrient	BOD	pH	NO_3 r NO_2-N	NH_3-N	T-PO_4 as P	TOC				
1	0783	S195	3500	4.9	0.18	71	46	1870				
2	0731	S196	75	6.5	1.3	4.4	360	41				
3	0374	S208	120	6.5	5.6	5.5	4.12	75				

Comments: BOD's set up in the lab 3/5/86.

results available (preliminary) phoned to T. Fisher 3-11-86 ij

rec'd 3/19/87

BEFORE THE ENVIRONMENTAL QUALITY COMMISSION

OF THE STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY OF THE STATE OF OREGON, DEPARTMENT, v. ROY VANDERVELDE, RESPONDENT.	Case No. 05-WQ-WVR-86-39 NOTICE OF APPEAL AND REQUEST FOR REVIEW

Respondent Roy Vandervelde hereby gives notice of appeal from the decision and determination of the hearings officer of the Department of Environmental Quality by Linda Zuecker on or about the 19th day of February 1987 and further requests review of the hearing officer's final order by the Department of Environmental Quality.

Dated: March 19, 1987.

Roger L. Kromer
Attorney for Respondent

I hereby certify that I served the Notice of Appeal and Request for Review on the 19th day of March 1987, by hand delivering the original notice in a sealed envelope and addressed to the Department of Environmental Quality at 811 S.W. Sixth Avenue, Portland, Oregon, and by hand delivering a true copy sealed in an

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/ / /

ROGER L. KROMER - 67097
Attorney at Law
1500 Plaza Bldg., Suite 540
1500 N.E. Irving Street
Portland, Oregon 97232
(503) 231-7765

envelope and addressed to Linda Zuecker, Hearings Officer, Department of Environmental Quality, 811 S.W. Sixth Avenue, Portland, Oregon and by mailing a true copy to the Department of Justice, 500 S. W. Yamhill, Portland, Oregon 97204.

Roger L. Kromer

CERTIFIED A TRUE COPY
ROGER L. KROMER
BY _____
ATTORNEY FOR _____

ROGER L. KROMER - 67097
Attorney at Law
1500 Plaza Bldg., Suite 540
1500 N.E. Irving Street
Portland, Oregon 97232
(503) 231-7765

BEFORE THE ENVIRONMENTAL QUALITY COMMISSION

OF THE STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY OF THE STATE OF OREGON, Department, v. ROY VANDERVELDE, Respondent.	)	No. Ø5-WQ-WVR-86-39 RESPONDENT'S APPELLATE BRIEF

Roy Vandervelde hereby appeals from civil penalties assessed by DEQ and takes exception to the Hearing Officer's Findings of Fact, Conclusions of Law and Final Order dated February 19, 1987. The grounds for the appeal are as follows:

1.

The Department's exhibits numbers 6 and 7 should not have been allowed into evidence. There was no proper foundation set for the admission of these documents. The documents offered were photocopies. There was no evidence that the documents introduced were true and correct copies of the originals.

These documents were offered to show that pollution had occurred. No testimony was offered to establish that the tests that allegedly were conducted by the DEQ were done in a proper manner or according to established standards. That is, there was no showing that these exhibits are showing that proper tests were conducted and that the exhibits were a compilation of the result of those tests.

Further, being that this information is hearsay, respondent

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did not have an opportunity to cross examine to verify whether the tests were conducted properly or the results shown by the documents were an accurate reflection of those tests. In short, introduction of Exhibits 6 and 7 without a foundation was the offer of hearsay in its most blatant form. Oregon Rule of Evidence 801.

The Department contends that the exhibits in question should be admitted under an exception of the hearsay rule that these documents were public records. There was no offer of evidence at the hearing that the documents were being offered as public records. There was no evidence that Exhibits 6 and 7 were documents that were kept or compiled by the Department in the ordinary course of its regularly conducted business or activity. Without some foundation, as to the maintenance or custody of these documents, their purpose and use, procedurally, it is impossible to establish that they are public records. For these reasons, there was insufficient evidence introduced to find Vandervelde guilty of the three claims of pollution as alleged by the Department.

2.

Even if it had been established that a pollution had occurred at the three test sites conducted by the DEQ, there is no evidence that any of it, if at all, ever reached or was likely to reach or escape into the waters of the state. First the tests were taken adjacent to the respondent's property. The sources of the tests were ditches adjacent to the Vandervelde Dairy. There

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was no evidence introduced to show or establish that any pollution reached any waterway of the state such as creeks or rivers. No tests were taken from any other sites which would establish that this had occurred. Mr. Fisher, the agent of the DEQ who took the tests, testified that no additional tests were taken at any other sources other than adjacent to the Vandervelde Dairy. Therefore, there is no evidence in the record that any alleged pollutants in fact reached Salt Creek or any other waterway of the state. An opposite conclusion could logically reached that if there had been any pollutants discharged into the ditches that any such pollutants could have dissipated through normal drainage into the ground or naturally filtered out before reaching any state waterway.

There is no clear definition as to what is meant by "waters of the state." ORS 468.720 does not establish what that means. It would seem that that means more than a ditch.

3.

In the event either of respondent's exceptions to the Hearing Officer's Final Order are denied, respondent offers by way of mitigation of the penalty the following factors:

A. There was no evidence that respondent intentionally allowed any pollutants to drain into or enter any waterways of the State of Oregon.

B. There is a substantial question based on the evidence in the record as to the source of the waters running into the ditch from which tests two and three were taken near Bridewell Road and

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considering the location of the tests, a reasonable conclusion could be reached that if there was any pollution in that ditch, that the source of the pollution should be considered suspect. Also, test site No. 3 was a substantial distance from the Vandervelde Dairy. The boundary of the Vandervelde Dairy was several hundred yards away and the dairy buildings were at least 2/3 of a mile away from that test site. In any event, the source of the water entering into the ditch near the test site was not certain as the evidence used at the hearing indicates.

C. There was evidence that the storage lagoon that was constructed on the Vandervelde Dairy was faulty and unusable. Mr. Boatwright, the engineer, testified that he made final inspection in January, 1986, and did not return to recheck the storage lagoon until October, when called there because of complaints by the respondent. His testimony was that was a specific leakage found upon his inspection in October and had the lagoon been used to any considerable extent, there would have been leakage and the leakage would have increased proportionately by the amount of the usage until the leakage problem had been corrected. There was also testimony that respondent had attempted on numerous occasions to contact the engineer to inspect the lagoon to determine the cause of the leakage, which was suspected to have been caused by a tile drainage system not discovered by the engineer in the construction process. There was justification by the respondent in not using the lagoon to any extent because of this problem. Otherwise, Mr. Boatwright testified

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that the amount of leakage that he discovered was occurring upon his inspection was an unacceptable amount for a water storage facility of its kind.

D. To the knowledge of the respondent, there have been no subsequent complaints of any water pollution occurring at or near the Vandervelde Dairy which could be attributed to the respondent.

CONCLUSION

The Hearing Officer's decision and order should be reversed on the grounds that there is insufficient evidence to establish that a pollution occurred or in the alternative that any pollution resulted in pollution reaching or would likely reach a waterway of the State of Oregon.

Respectfully Submitted,

Roger L. Kromer, OSB #67097
Attorney for Respondent

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Attorney at Law
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(503) 231-7765

CERTIFICATE - TRUE COPY

I hereby certify that the foregoing copy of Respondent's Appellate Brief is a complete and exact copy of the original.

Dated June 24, 1987.

Attorney for Respondent

CERTIFICATE OF SERVICE

I hereby certify that I served the foregoing Respondent's Appellate Brief on Department of Justice, attorney of record for Environmental Quality Commission, by mailing to said attorney(s) a true copy thereof, certified by me as such, contained in a sealed envelope, with postage paid, addressed to said attorney(s) at said attorney(s) last known address, to-wit: Department of Justice, 500 Pacific Building, 520 SW Yamhill, Portland, Oregon 97204 and deposited in the post office at Portland, Oregon, on said day.

Dated June 24, 1987.

Attorney for Respondent

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Portland, Oregon 97232
(503) 231-7765

8/14/87

BEFORE THE ENVIRONMENTAL QUALITY COMMISSION

OF THE STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY OF THE STATE OF OREGON, Department, v. ROY VANDERVELDE, Respondent.	No. 05-WQ-WVR-86-39 MOTION TO DISMISS APPEAL AND IN THE ALTERNATIVE DEPARTMENT'S (APPELLEE) RESPONSE BRIEF

The Department of Environmental Quality (DEQ) moves the Environmental Quality Commission (EQC) to dismiss Respondent's appeal for failure to comply with OAR 340-11-132(4)(a) and in the alternative files its Brief in Response to Respondent's Appellate Brief.

MOTION TO DISMISS APPEAL

OAR 340-11-132(4)(a) requires the Appellant (Respondent) to specify those Findings and Conclusions of the Order objected to with reasoning, and to include proposed alternative Findings of Fact, Conclusions of Law and Order with specific references to those portions to the record upon which Appellant relies. Appellant has failed to comply with this rule and his appeal should be dismissed.

Rather than bifurcate this process and prolong the appeal, the Department also submits its Appellate Brief in the event this Motion is denied.

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DEPARTMENT OF JUSTICE
500 PACIFIC BLDG., 520 S.W. YAMHILL
PORTLAND, OREGON 97204-1381
TELEPHONE 229-5725

DEPARTMENT MEMORANDUM - BRIEF

1.

Respondent summarizes his first ground of appeal as follows:

> "In short introduction of Exhibits 6 and 7 without a foundation was the offer of hearsay in its most blatant form. Oregon Rule of Evidence 801."

(Brief, Lines 3-6, p. 2)

Respondent's major ground of appeal is not well taken. ORS 40.015 (Rule 101) describes the applicability of the Oregon Evidence Code. Subsection (1) states in part:

> "The Oregon Evidence Code applies to all courts in this state * * * "

(Emphasis added.)

This proceeding, is not a proceeding in the courts in this state, and Respondent's citation to Rule 801 does not apply to this proceeding.

The statute that is applicable to this proceeding is ORS 183.450. Subsection (1) of this statute provides that "irrelevant immaterial or unduly repetitious evidence shall be excluded * * * . ". Respondent does not claim Exhibits 6 or 7 fall into this category. Subsection (1) then goes on to state in part:

> " * * * all other evidence of a type commonly relied upon by reasonably prudent persons in conduct of their serious affairs shall be admissible."

Exhibits 6 and 7 were state governmental documents. The documents were identified by department witnesses to be state

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governmental records of test results conducted by a state governmental laboratory. Such documentary evidence is of a type commonly relied upon by reasonably prudent persons in conduct of their serious affairs.

The admission of reports in administrative hearings does not, by their hearsay nature, constitute a denial of due process. Felling v. Motor Vehicles Division, 30 Or App 479 (1977). Hearsay evidence may be used to support an agency's action. Higley v. Edwards, 67 Or App 488, 491 (1984).

Thus, in Felling a written police report without the police officer being present to testify was the sole evidence relied upon at the heating to suspend an operator's license. The suspension was affirmed by the court citing ORS 183.450(1).

While it is Respondent's counsel's view that it is "ridiculous" to suggest he could cross-examine the testers by way of subpena, (Page 172 Tran), the Court of Appeals disagrees with him.

> "In this proceeding * * * the petitioner had available the power to request an agency subpena if the presence of a witness was desired. ORS 183.440."

Felling v. MVD, p. 481-482, supra.

The Court of Appeals followed the logic of the United States Supreme Court in Richardson v. Perales, 402 US 389 (1971). The Richardson court said:

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> "Although the claimant complains of the lack of opportunity to cross-examine the reporting physicians, he did not take the advantage of the opportunity afforded him * * * to request subpoenas for the physicians * * * ."

402 US at 404-405.

Finally, ORS 183.460(1) applicable to administrative hearings in Oregon, provides that "any part of the evidence may be received in written form." ORS 183.460(2) further provides "Documentary evidence may be received in the form of copies or experts or by incorporation by reference." Nothing in these statutes requires exhibits to be certified, notarized or to carry a seal. While a certification may be required for a court proceeding, certifications are generally desired by lawyers in an administrative hearing only because lawyers traditionally feel "comfortable" when a document has a certification.

Finally, even if the Oregon Evidence Code was applicable to Respondent's contention, the Code would defeat his argument. First, the exhibits in question were records of a regularly conducted activity, as shown by department witnesses. Rule 803, ORS 40.460(6). "Activity and business" includes public activity. State v. Roisland, 1 Or App 68 (1969) (Jail). Second, the exhibits were "public records" under ORS 192.410(4). They were authenticated and identified by department staff. Rule 901, ORS 40.505(1), (2)(a),(g). A certification or seal is not required under this rule.

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DEPARTMENT OF JUSTICE
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Respondent next contends there is no evidence that pollution reached the waters of the state because the tests were taken in ditches adjacent to Respondent's dairy. Respondent further contends no evidence was introduced to show or establish any pollution reached any waterways of the state. The problem with this contention is that it overlooks the fact that ditches are the waters of the state. ORS 468.700(8) defines "waters of the state." This statutory subsection provides:

> "(8) 'Water' or 'the waters of the state' include lakes, bays, ponds impounding reservoirs, springs, wells, rivers, streams, creeks, estuaries, marshes, inlets, canals, the Pacific Ocean within the territorial limits of the State of Oregon and all other bodies of surface or underground waters, natural or artificial, inland or coastal, fresh or salt, public or private (except those private waters which do not combine or effect a junction with natural surface or underground waters), which are wholly or partially within or bordering the state or within its jurisdiction."

Ditches of water are, at least within "all other bodies of surface waters natural or artificial, inland or coastal, fresh or salt, public or private * * * which are wholly or partially within or bordering Oregon or within its jurisdiction." In addition, the ditches involved in this proceeding combine with other natural surface waters. The ditches flow into Salt Creek (p. 51, Tran) which in turn flows into the South Yamhill River. (P. 61, Tran).

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Notwithstanding Respondent's feeling that ORS 468.720 does not clearly define what is meant by "waters of the state," the statute is patently clear. "Ditches" may be waters of the state.

3.

Finally, Respondent attempts to set forth circumstances mitigating the amount of the penalty assessed by the Department. These circumstances are labeled by Respondent as A, B, C, D, pps. 3-5, "Respondent's Appellate Brief."

A. INTENTIONAL CONDUCT

Whether Respondent's conduct was intentional or negligent is only of slight relevance. The Department believes the violation was either intentional or negligent conduct. Assuming Respondent's conduct was found to be negligent and not intentional, this finding hardly helps Respondent. Respondent's negligent conduct was found by the hearings officer to be combined with the following aggravating factors: (1) prior violation of statutes and rules; (2) a failure to take feasible steps that are necessary or appropriate to correct the violation; and (3) the serious gravity and magnitude of the current violation. This combination of factors demonstrate the logic of an enhanced penalty. If Respondent's conduct was not intentional, it was grossly negligent, showing a total and reckless disregard of the environmental laws of Oregon.

B. LACK OF SUBSTANTIAL QUESTION

Respondent merely wishes to re-argue the evidence presented to the hearings officer. There is no substantial question as to

DEPARTMENT OF JUSTICE
500 PACIFIC BLDG., 520 S.W. YAMHILL
PORTLAND, OREGON 97204-1381
TELEPHONE 229-5725

the source of the polluted waters running into ditches and Salt Creek. The hearings officer found in Finding 8, p. 3, Order:

> "8. Agricultural tiles deflect water from neighboring property and from the dairy property into the surrounding ditches which feed into Salt Creek. While neighboring property is, then, a source of creek water, it is not found to be a source of any significant contamination or pollution. At most, a few head of livestock are maintained on neighboring land. The scale of the measured contamination was too great to have been caused by contamination associated with a few head of domestic livestock or by wildlife."

C. STORAGE LAGOON

There was no evidence that the treatment lagoon was faulty and unusable. On the contrary, the evidence shows that the lagoon was properly constructed and that Respondent intentionally decided not to utilize the lagoon; implement necessary ancillary steps and abused its construction specifications.

The engineering firm that designed the lagoon, designed it to be both a storage and treatment lagoon. The lagoon would reduce the nutrient level in the liquors inside the ponds. (Tran, p. 110). Respondent was notified by the engineering firm the lagoon's earthwork and piping was completed. Respondent was required to perform additional pollution abatement work: (a) a pump stand to irrigate the liquor; (2) plant earth surfaces to minimize erosion; (3) fence livestock; (4) roof drains; (5) diversionary groundwater trenching; (6) collector system; and (7) solids separator. (Tran pps. 112-113.) Respondent failed to complete this pollution abatement program.

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Respondent's cited violation was March 4, 1986. The Department's Notice of Violation was dated May 14, 1986. The first attempt by Respondent to claim there was a problem with the lagoon was in June, 1986, after the Department's Notice of Violation. (Tran, p. 17.) It seems fairly clear that Respondent attempted to "manufacture" a lagoon defect to counter the Department's Notice of Violation.

The engineering firm inspected the lagoon on or about October 9, 1986. In addition to Respondent's son being present at the inspection, Respondent's counsel also attended. (Tran, p. 113.) The inspection showed Respondent did not even attempt to utilize the lagoon to make it operable. (Tran, p. 115.)

Respondent continued to allow livestock to graze on the sides of the dikes, damaging the surface and causing premature erosion. (Tran, pp 2. 119-120 et seq.)

The record demonstrates Respondent never intended to use the lagoon. For example, he was not in favor of its construction. He terms the lagoon a "monstrosity." (Tran, p. 216.) Respondent feels he does not need the lagoon. (Tran, p. 249.) While not an engineer, he claims it was not a "completed" lagoon. (Tran, p. 218.) He did not even attempt to put water into it, until after being cited by the Department. (Tran, p. 218.) The record shows Respondent just flat-out did not want to complete the lagoon because he was not going to get any federal money to assist him in the completion of the project. (Tran, pps. 219-220.)

/ / /

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500 PACIFIC BLDG., 520 S.W. YAMHILL
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TELEPHONE 229-5725

Respondent further refused to allow Department staff onto his property to take samples or inspect the lagoon. (Tran, p. 234.)

D. SUBSEQUENT COMPLAINTS

The argument is totally irrelevant to the cited violation. If there are a lack of complaints it is probably due to Respondent's going out of the dairy business and the removal of his dairy herd.

CONCLUSION

The hearings officer's Findings, Conclusion and analysis were not only fair, but accurate and correct based on the evidence presented. The Order should be affirmed.

DATED this 13th day of August, 1987.

Respectfully submitted,

DAVE FROHNMAYER
Attorney General

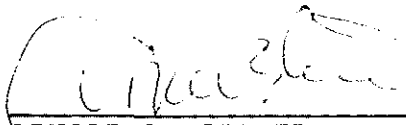
ARNOLD B. SILVER
Assistant Attorney General
Of Counsel for the Department
of Environmental Quality

DEPARTMENT OF JUSTICE
500 PACIFIC BLDG., 520 S.W. YAMHILL
PORTLAND, OREGON 97204-1381
TELEPHONE 229-5725

CERTIFICATE OF SERVICE

I hereby certify that on the 13th day of August, 1987, the within MOTION TO DISMISS APPEAL/DEPARTMENT'S (APPELLEE) RESPONSE BRIEF was served on the attorney for Respondent by placing said document in a postage prepaid envelope and depositing it in the United States mail at Portland, Oregon addressed as follows:

Roger L. Kromer
Attorney at Law
1500 Plaza Building
Suite 540
1500 N.E. Irving Street
Portland, Oregon 97232



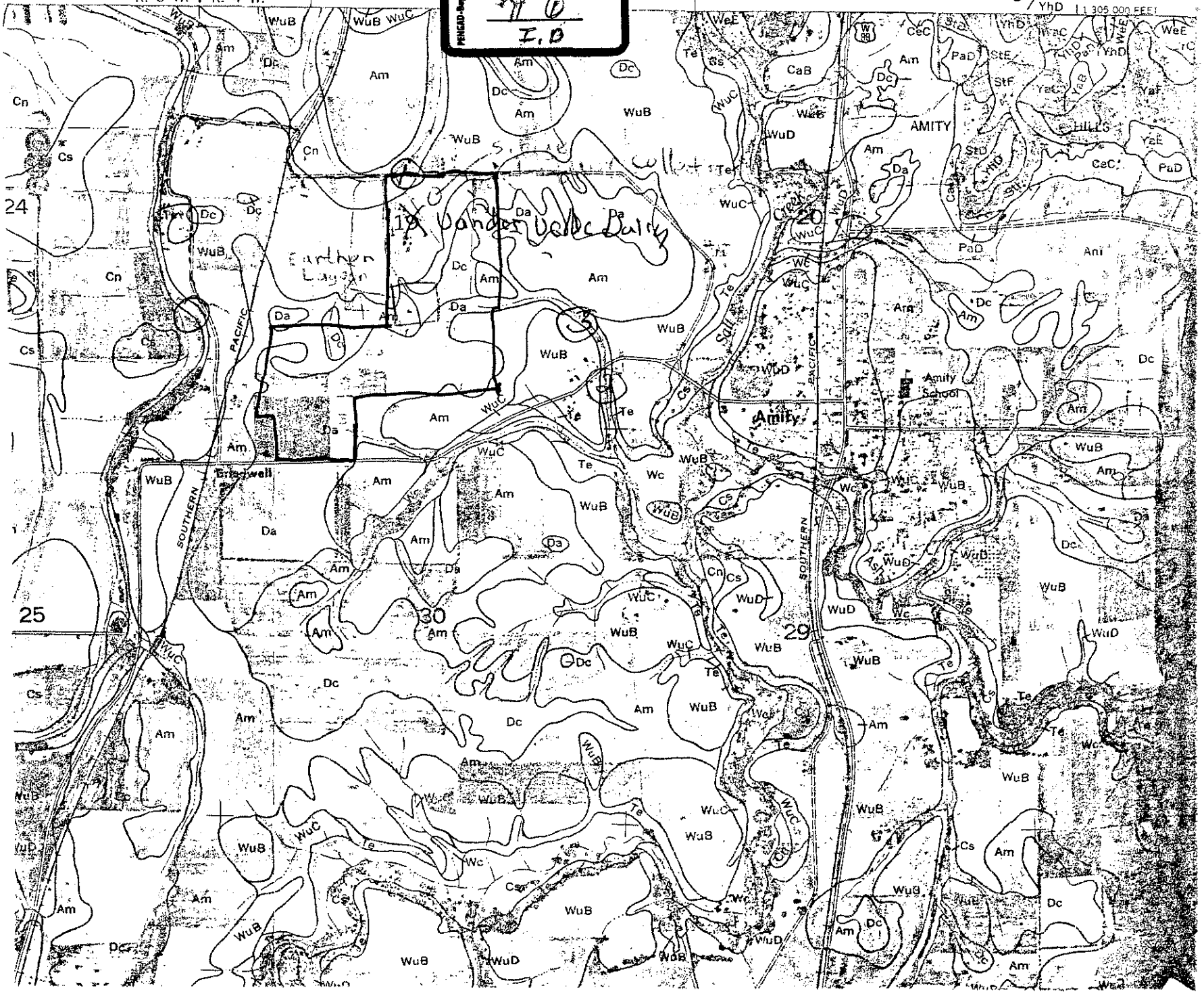
ARNOLD B. SILVER
Assistant Attorney
Of Attorneys for Department

CERTIFICATE OF SERVICE

YAMHILL AREA, OREGON — SHEET NUMBER 50

EXHIBIT
I. D

Ef 1



Ex 2

EXHIBIT
7A

3-14-86; 9:20 a.m.

Tom Fisher collecting a sample from the discharge at the bottom of the Vandervelde driveway along Lancefield Road. Also in the picture are the dairy buildings and the silage liquor collection pond.

Ex 3

3-4-86; 9:40 a.m.

Tom Fisher collecting a sample in the drainage ditch below the culvert along the Amity-Briedwell Highway. This is approximately 100 yards downstream from the sample taken on the Hughes' property.

Ex 4

3-4-86

Dyke Mace pointing to Vandervelde Dairy and the drainage ditch on the Hughes' property.

Ex5

3-4-86; 10:02 a.m.

Tom Fisher collecting sample of run off from the Vandervelde Dairy. Picture was taken from the Hughes' property, approximately 1/3 mile southeast of dairy buildings.

LEGAL

EXHIBIT H-6

Ex 6

DEPARTMENT OF ENVIRONMENTAL QUALITY
Request for Analysis

Laboratory No. 86-0150

Location/Site: VanderVelde Dairy, Amity Date: 3-4-86

Date Received Lab: MAR 04 1986 1250

Collected By: Tom Fisher Program: Wq 3256D

Date Reported:

Purpose: Document runoff from Dairy of waste into state water. Report Data To:

Comments:

*Basic (P) unpreserved; Nutrient (R) add H_2SO_4 in field; Metals (Tm) HNO_3 added in lab--don't rinse; Organic(X) mason jar lab prepared

Item No.	Sampling Point Description (include time)	*Sample Container (bottle) #'s: Nutrients / Basic	DO / BOD	Metals / Organic	Fecal Coliform	Test Required KO
9:20 Am 1	Drainage Ditch of Bottom of VanderVelde Dairy along Lancefield Rd	S195	0783		128	PH, Bod NO3, NH3 TPO4, TOC, Fecal Coliform
9:40 Am 2	Drainage Ditch at culvert on Amity ~~Culvert~~ Bellevue highway by Rt. 1 Box H. - 1CFS	S196	0731		028	"
10:02 Am 3	Drainage Ditch on Hughes property approximately 1/3 mile SE of Dairy Buildings. 1-CFS	S208	0374		161	"
4						
5						
6						

Laboratory comments would like results by 3-14-86

-LUAL

EXHIBIT 7

DEPARTMENT OF ENVIRONMENTAL QUALITY
Laboratory Data Sheet

Laboratory No: 86-0150 Ex 7
Program Code: 32560
Page: 1 of: 2
Analysis Completed:

Vanderveekle Dairy — Fisher

Item No. — Test Results (All units in mg/l or ~~ug/ml~~)

Item No.	basic	nutrient	BOD	pH	NO_3 + NO_2 N	NH_3 N	T-PO_4 as P	TOC				
1	0783	S195	3500	4.9	0.18	71	46	1870				
2	0731	S196	75	6.5	1.3	4.4	360	41				
3	0374	S208	120	6.5	5.6	5.5	4.12	75				

Comments: BODs set up in the lab 3/5/86.
results available (preliminary) phoned to T. Fisher 3-11-86 jf

Ex 8

VICTOR ATIYEH
GOVERNOR

Department of Environmental Quality
WILLAMETTE VALLEY REGION
895 SUMMER, N.E., SALEM, OR 97310 PHONE (503) 378-8240

June 16, 1986

Mr. Roger L. Kromer, Attorney at Law
Suite 400, Riviera Plaza
1618 SW First Avenue
Portland, OR 97201-5761

RE: DEQ vs. Roy Vandervelde
Case No. 20-WQ-WVR-80-01

Enclosed are the sample results from my March 4, 1986 sampling of the runoff from the Vandervelde Dairy.

If you have questions, please contact me at the above number.

Sincerely,

Tom Fisher
Environmental Analyst

TRF/wr

Attachment: Sample results.

cc: Van Kollias, Regional Operations w/att

LEGAL

DEPARTMENT OF ENVIRONMENTAL QUALITY
Request for Analysis

Laboratory No. 86-0150

Location/Site: VanderVelde Dairy, Amity Date: 3-4-86 1 of 3

Date Received Lab: MAR 5 1986 1250

Collected By: Tom Fisher Program: WQ 3256D

Date Reported:

Purpose: Document runoff from Dairy of waste into stok water. Report Data To:

Comments:

lab prepared

* Basic (P) unpreserved; Nutrient (R) add H_2SO_4 in field; Metals (Tm) HNO_3 added in lab--don't rinse; Organic (X) mason jar

Item No.	Sampling Point Description (include time)	*Sample Container (bottle) #'s Nutrients Basic	DO BOD	Metals Organic	Fecal Coliform	Test Required
9:20 Am 1	Drainage Ditch of Bo Hum of VanderVelde Dairy along Lonesfield Rd	S195	0783		128	PH. Bod NO_3, NH_3 TPO_4, TOC, Fecal Coliform
9:40 Am 2	Drainage Ditch at culvert on Amity ~~Belmont~~ Bellevue highway. by 17t. 1 Box H. - 1CFS	S196	0731		028	" "
10:02 Am 3	Drainage Ditch on Hughes property approximately 1/3 mile SE of Dairy Buildings. 1-CFS	S208	0374		161	" "
4						
5						
6						

Laboratory comments would like results by 3-14-86

RECEIVED
MAR 31 1986
State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY
SALEM, OFFICE

LEGAL

DEPARTMENT OF ENVIRONMENTAL QUALITY
Laboratory Data Sheet

Laboratory No: 860150
Program Code: 32560
Page: 1 of: 2
Analysis Completed:

Vanderveekle Dairy — Fisher

Item No.	Test Results (All units in mg/l or ~~ug/ml~~)											
	basic	nutrient	BOD	pH	NO_3+ NO_2-N	NH_3 N	T-PO_4 as P	TOC				
1	0783	S195	3500	4.9	0.18	71	46	1820				
2	0731	S196	75	6.8	1.3	4.4	3.60	41				
3	0374	S208	120	6.8	5.6	5.5	4.12	75				

Comments: BODs set up in the lab 3/5/86.

results available (preliminary) phoned to J. Fisher 3-11-86 lj

LEGAL

DEPARTMENT OF ENVIRONMENTAL QUALITY
Water Bacteriological Membrane Filter Analysis

Location/Site: Vanderuelde | Laboratory No.: 86-0150 | Date/Time Tested: 3-4/1330
Collected By: T. Fisher | Program Code: 32560 | Date Reported: 3-5-86
Date Collected: 3-4-86 | Date/Time Received: 1250 | Reported By: A. Schwind

COMMENTS:

ITEM #	BOTTLE #	SAMPLING POINT DESCRIPTION (time)	IN LAB #	TOTAL COLIFORMS Dil. (ml)	TOTAL COLIFORMS MF Count	TOTAL COLIFORMS No. /100 ml	FECAL COLIFORMS Dil. (ml)	FECAL COLIFORMS MF Count	FECAL COLIFORMS No. /100 ml	FECAL STREPTOCOCCI Dil. (ml)	FECAL STREPTOCOCCI MF Count	FECAL STREPTOCOCCI No. /100 ml
1	STP 128	Drainage Ditch of bottom of Vanderuelde Dairy along Lancefield Rd (0920) Cl_2 ____ Turb. 3+	97	10			50		est. 19,400	10		
				1			10			1		
				0.1			1	194		0.1		
				0.01			0.1	106,13		0.01		
				0.001			0.01	2		0.001		
2	STP 028	Drainage ditch @ Culvert on Amity - Bellevuelly by Rt 1 Box 16 ICFS (0940) Cl_2 ____ Turb. 3+	98	10			50		est. 680,000	10		
				1			10			1		
				0.1			1	TNTC		0.1		
				0.01			0.1	TNTC		0.01		
				0.001			0.01	TOG,68		0.001		
3	STP 161	Drainage ditch on Hughes property 2 1/3 mi. SE of dairy bldgs ICFS (1002) Cl_2 ____ Turb. 3+	99	10			50		est. 760,000	10		
				1			10			1		
				0.1			1	TNTC		0.1		
				0.01			0.1	TNTC		0.01		
				0.001			0.01	TOG,76		0.001		
		Cl_2 Turb.		10			50			10		
				1			10			1		
				0.1			1			0.1		
				0.01			0.1			0.01		

Ex 9

BEFORE THE ENVIRONMENTAL QUALITY COMMISSION

OF THE STATE OF OREGON

STATE OF OREGON by and through the Department of Environmental Quality,	)	
Plaintiff,	)	NO WQ-WVR-86-39
v.	)	Yamhill County
ROY VANDERVELDE,	)	AFFIDAVIT
Defendant.	)	

STATE OF OREGON

I, Segrid Schwind, being duly sworn, depose and say:

1. I am now and have been with the Department of Environmental Quality for seven years. Part of my duties include performing tests on samples taken by DEQ investigators in relation to possible environmental quality statute and rule violations:

2. I have received a B.A. in Biology from Willamette University and a M.S. in Water Quality from the University of Washington. I have been working for DEQ as a Microbiologist for four years, and prior to that as a Lab Technician for three years.

3. The form marked as plaintiff's Exhibit #15 is the LEGAL SAMPLE Chain of Custody. This document indicates that at the Vandervelde site near Amity, Tom Fisher took nine (9) samples between 09:20 and 10:02 on March 4, 1986. The document also indicates that these samples were received by the DEQ labs at 12:50 on March 4, 1986. The samples were numbered 0374, 0731,

DEPARTMENT OF JUSTICE
500 PACIFIC BLDG., 520 S.W. YAMHILL
PORTLAND, OREGON 97204-1381
TELEPHONE 229-5725

0783, S196, S195, S208, STP 028, STP 161 and STP 128. The document also indicates that the samples were received by Laurie McCulloch who was the sample tracker.

4. The document marked plaintiff's Exhibit #16 is the Chain of Custody list which I compiled for the samples taken by Tom Fisher at the Vandervelde Dairy. The Chain of Custody indicates every time a sample is handled or moved and who handles the sample.

5. Exhibit #15 indicates that at 12:50 on March 4, 1986, the samples marked STP 128, STP 028, and STP 162 were given to me for bacteriological analysis.

6. I performed the fecal coliform tests. The fecal coliform test reveals the amount of fecal coliform present in the water sample.

7. Fecal coliform is an indicator organism which indicates the fecal material present in the water system. Fecal coliform also indicates the possibility that other pathagenic, or disease causing, organisms are present in the water.

8. The document marked as plaintiff's Exhibit #17 is the data sheet from the Department of Environmental Quality Water Bacteriological Membrane Filter Analysis. I was the person who performed this test at 13:30 on March 4, 1986. This test is done by taking a volume of the sample, filtering the volume, and extracting the bacteria on a membrane. The membrane is composed of a material upon which bacteria will grow. As the bacteria grow they will form colonies. After a period of time the number

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500 PACIFIC BLDG., 520 S.W. YAMHILL
PORTLAND, OREGON 97204-1381
TELEPHONE 229-5725

of colonies are counted. The number of colonies indicate the amount of fecal coliforms in the water.

9. Item #1 on Exhibit #17 indicates that first sample, bottle STP 128, was taken from the drainage ditch at the Vandervelde Dairy along Lancefield Road. The lab number for the sample is 97. The number under the heading FECAL COLIFORMS, No. /100 ml. indicates there were approximately 19,400 fecal coliform bacteria per 100 milileters of water.

10. Item #2 on Exhibit #17 indicates the second sample, bottle STP 028, was taken from the drainage ditch culvert on Amity-Bellevue Highway. The sample's lab number is 98. The test indicates the fecal coliform level was approximately 680,000 per 100 milileters of water.

11. Item #3 on Exhibit #17 indicates that the third sample, bottle STP 161, was taken from the drainage ditch on the Hughes property, one-third of a mile southeast of the dairy buildings. The lab number for the sample is 99. The fecal coliform count was approximately 760,000 per 100 milileters of water.

12. The est. before the fecal coliforms stands for estimate. The reason the numbers are estimates and not actual counts is that the fecal coliform count was so high. With counts of this magnitude it is impossible to achieve an exact count.

13. The fecal coliform count in these three samples are extremely high. The numbers would not occur this high naturally. These numbers indicate that there is an introduction of fecal material into the water system.

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TELEPHONE 229-5725

14. As previously mentioned fecal coliform is an indicator organism for other bacteria. The high numbers in these three tests are significant in that with numbers this high there is a strong possibility that other pathogenic organisms are present such as: salmonella; which causes food poisoning and gastro intestinal diseases, viruses such as hepatitis; and other viruses causing flu-like symptoms. This water could be a health hazard.

Segrid Schwind
SEGRID SCHWIND

SUBSCRIBED AND SWORN to before me this 3rd day of October, 1986.

Carol A Sittauer
NOTARY PUBLIC for Oregon
My Commission Expires: 12/19/88

DEPARTMENT OF JUSTICE
500 PACIFIC BLDG., 520 S.W. YAMHILL
PORTLAND, OREGON 97204-1381
TELEPHONE 229-5725

EX 10

Dyke MACE
Jim Wagner (Sheriffs Dept.)

3/4/86

1st Sample Taken at Driveway. (Lancefield Rd.)
- Nutrient - 5195 [Acid placed in sample (12 drops)]
- Bacteriological - STP 128
- 9:20 AM
- BOD - STP-0783

Silage Discharge - Pictures #1, 2 & 3

---

* Briedwell Road Discharge point appeared to be running clear - ≈ ½ mile WEST OF DAIRY

Bellbird Hwy Ditch - Green; sticks like manure; sporadic low bacteria (9:40 A.M.)
Pictures #4 & 5 & 6

- Bacteriological - 028 STP
- Nutrient - 5196 (12 drops of acid placed in bottle to "Fix" the sample)
- BOD - STP-0731

Hughes Property Discharge Point - ≈ ⅛ mi SE of Dairy - Tributary of Salt Creek
* Picture #7 & 8 (Cows (11-12) on Dike around the lagoon)
- Bacteriological - STP 161 (10:02 AM)
- Nutrient - S 208 [Acid placed in sample (12 drops)]
- BOD - 0374

* Picture #10 - Ditch Flowing to pond Bellbird Hwy on Hughes property
* picture #9 - Dyke pointing at creek & Vanderveldes barn (1CFS)

X

LEGAL

DEPARTMENT OF ENVIRONMENTAL QUALITY
Request for Analysis

Laboratory No. 86-0150

Location/Site: VanderVelde Dairy, Amity Date: 3-4 to 3 *6 Date Received Lab: MAR 04 1986 1250

Collected By: Tom Fisher Program: W Date Reported:

Purpose: Document runoff from Dairy of wa ...ater. Report Data To:

Comments:

Basic (P) unpreserved; Nutrient (R) add H_2SO_4 in field; ...lab prepared ...ded in lab--don't rinse; Organic(X) mason jar

Item No.	Sampling Point Description (include time)	*Sam... Nutr. Basic	...e) #'s ...is ...anic	Fecal Colifom	Test Required
9:20 Am 1	Drainage Ditch of Bo Hum of VanderVelde Dairy along Lonefield Rd	S195	0783	128	PH, Bod NO_3, NH_3 TPO_4, TOC, Fecal Colifom KO
9:40 Am 2	Drainage Ditch at culvert on Amity ~~Colum~~ Bellevue highway by Rt. 1 Box H. - 1CFS	S196	0731	028	〃
10:02 Am 3	Drainage Ditch on Hughes property approximately 1/3 mile SE of Dairy Buildings 1-CFS	S208	0374	161	〃
4					
5					
6					

Laboratory comments would like results by 3-14-86

EGAL

DEPARTMENT OF ENVIRONMENTAL QUALITY
Water Bacteriological Membrane Filter Analysis

Location/Site: Vandervelde | Laboratory No.: 86-0150 | Date/Time Tested: 3-4/1330
Collected By: T. Fisher | Program Code: 3256D | Date Reported: 3-5-86
Date Collected: 3-4-86 | Date/Time Received: 1250 | Reported By: L. Schwind

COMMENTS:

TUBE #	BOTTLE #	SAMPLING POINT DESCRIPTION (time)	IN LAB #	TOTAL COLIFORMS Dil. (ml)	TOTAL COLIFORMS MF Count	TOTAL COLIFORMS No. /100 ml	FECAL COLIFORMS Dil. (ml)	FECAL COLIFORMS MF Count	FECAL COLIFORMS No. /100 ml	FECAL STREPTOCOCCI Dil. (ml)	FECAL STREPTOCOCCI MF Count	FECAL STREPTOCOCCI No. /100 ml
1	STP 128	Drainage Ditch of bottom of Vandervelde Dairy along Lancefield Rd (0920) Cl_2 ____ Turb. 3+	97	10			50		est. 19,400	10		
				1			10			1		
				0.1			1	194		0.1		
				0.01			0.1	106,13		0.01		
				0.001			0.01	2		0.001		
2	STP 028	Drainage ditch @ culvert on Amity - Bellevue Hy by Rt 1 Box 16 ICFS (0940) Cl_2 ____ Turb. 3+	98	10			50		est. 680,000	10		
				1			10			1		
				0.1			1	TNTC		0.1		
				0.01			0.1	TNTC		0.01		
				0.001			0.01	TOG,68		0.001		
3	STP 161	Drainage ditch on Hughes property 2 ½ m. SE of dairy bldgs ICFS (1002) Cl_2 ____ Turb. 3+	99	10			50		est. 760,000	10		
				1			10			1		
				0.1			1	TNTC		0.1		
				0.01			0.1	TNTC		0.01		
				0.001			0.01	TOG,76		0.001		
				10			50			10		
				1			10			1		
				0.1			1			0.1		
				0.01			0.1			0.01		

EGAL

DEPARTMENT OF ENVIRONMENTAL QUALITY
Laboratory Data Sheet

Laboratory No: 86-0150
Program Code: 32560
Page: 1 of: 2
Analysis Completed:

Vanderveldе Dairy — Fisher

Item No. | Test Results (All units in mg/l or ~~ug/ml~~)

Item No.	basic	nutrient	BOD	pH	NO_3 NO_2-N	NH_3-N	T-PO_4 as P	TOC				
1	0783	S195	3500	4.9	0.18	71	46	1820				
2	0731	S196	75	6.8	1.3	4.4	3.60	41				
3	0374	S208	120	6.8	5.6	5.5	4.12	75				

Comments: BODs set up in the lab 3/5/86.

results available (preliminary) phoned to J. Fisher 3-11-86 jf

EXHIBIT

DEPARTMENT OF ENVIRONMENTAL QUALITY
Laboratories and Applied Research Division
1712 S.W. 11th Avenue, Portland, OR 97201

LEGAL SAMPLE

Chain of Custody Record

Site Name: Vandervelde
Location: Amity
Date Sampled: March 4, 1986
Time Sampled: 0920 - 1002
Collected By: Tom Fisher

Laboratory Number: 86-0150
Program Code: 32561D
Date Received: March 4, 1986
Time Received: 1250

Sample Container Information

Container Type/Number	Container Type/Number	Container Type/Number
1 l poly /0374	glass bact. /STP028	/
same /0731	same /STP161	/
same /0783	same /STP128	/
500 ml poly /S196	/	/
same /S195	/	/
same /S208	/	/

Total Number of Containers Received: 9 (nine)

Relinquished By: Tom Fisher
(signature)

Received By: Laurie J McCulloch
(signature)

Initial Placement in Refrigerator #_____

Subsequent Out of Laboratory Transfers:

Relinquished By: (time/date)	Received By: (time/date)

(LEGAL FILE COPY)

EXHIBIT

Chain of Custody
Vandervelde Dairy
86-0150

3-4-86	9:20-10:02	Samples collected by Tom Fisher (DEQ)
3-4-86	12:50	Samples received from Tom Fisher and logged in by Laurie McCulloch (DEQ laboratories). Samples STP 128, STP 028, STP 162 given to Sigrid Schwind (DEQ Laboratories) for Bacteriological analysis. Samples 0783, 0731, 0374, given to Ken Aldrich (DEQ Laboratories) for pH analysis.
3-4-86	1324	Samples S195, S196 & S208 placed in legal refrigerator 5067 by Laurie McCulloch.
3-4-86	1330	Samples STP 128 & 028, and 161 analyzed for fecal coliform by Sigrid Schwind.
3-4-86	1410	0783, 0731, 0374, STP 128, STP 028 and 161 placed in legal refrigerator 5067 by Laurie McCulloch.
3-5-86	1310	S195, S196 & S208 removed for TOC analysis by Kim Orrett (DEQ Laboratories)
3-5-86	1330	Bottles 0783, 0731, 0374 removed for BOD analysis by Al Van Hoeter (DEQ Laboratories).
3-5-86	1515	Bottles S195, S196, and S208 returned to legal refrigerator #5067 by Kim Orrett and bottles 0783, 0731 and 0374 returned to refrigerator #5067 by Al Van Hoeter.
3-7-86	0900	Bottles S195, S196 & S208 removed for NO_3+ NO_2 -N, NH_3 -N analysis by Joy Dela Rosa.
3-7-86	0935	Bottles S195, S196 and S208 returned to refrigerator #5067 by Laurie McCulloch.
3-10-86	1105	Bottles S195,S196, and S208 removed for T-PO_4 analysis by Ken Aldrich.
3-10-86	1300	Bottles S195, S196, S208 returned to refrigerator #5067 Laurie McCulloch.
3-11-86	1400	Bottles S195, S196, and S208 removed for TOC analysis by Kim Orrett.

3-18-86		Analysis results logged out of DEQ Laboratories by Laurie McCulloch.
6-18-86	1115	Samples STP 128, 028, and 161, S195, S196, S208, 0783, 0731,and 0374 transferred to shelves in cage by Steve Fortuna (DEQ Laboratories).

SS:ah

LEGAL

EXHIBIT

DEPARTMENT OF ENVIRONMENTAL QUALITY
Water Bacteriological Membrane Filter Analysis

Location/Site: Vanderuelde | Laboratory No.: 86-0150 | Date/Time Tested: 3-4/1330

Collected By: T. Fisher | Program Code: 32560 | Date Reported: 3-5-86

Date Collected: 3-4-86 | Date/Time Received: 1250 | Reported By: L. Schwind

COMMENTS:

ITEM #	BOTTLE #	SAMPLING POINT DESCRIPTION (time)	IN LAB #	TOTAL COLIFORMS Dil. (ml)	TOTAL COLIFORMS MF Count	TOTAL COLIFORMS No. /100 ml	FECAL COLIFORMS Dil. (ml)	FECAL COLIFORMS MF Count	FECAL COLIFORMS No. /100 ml	FECAL STREPTOCOCCI Dil. (ml)	FECAL STREPTOCOCCI MF Count	FECAL STREPTOCOCCI No. /100 ml
1	STP 128	Drainage Ditch of bottom of Vanderuelde Dairy along Lancefield Rd (0920) Cl_2____ Turb. 3+	97	10			50		est. 19,400	10		
				1			10			1		
				0.1			1	194		0.1		
				0.01			0.1	106,13		0.01		
				0.001			0.01	2		0.001		
2	STP 028	Drainage ditch @ Culvert on Amity-Bellevuelly by Rt 1 Box 16 1CFS (0940) Cl_2____ Turb. 3+	98	10			50		est. 680,000	10		
				1			10			1		
				0.1			1	TNTC		0.1		
				0.01			0.1	TNTC		0.01		
				0.001			0.01	TOG,68		0.001		
3	STP 161	Drainage ditch on Hughes property 2 ½ m. SE of dairy bldgs 1CFS (1002) Cl_2____ Turb. 3+	99	10			50		est. 760,000	10		
				1			10			1		
				0.1			1	TNTC		0.1		
				0.01			0.1	TNTC		0.01		
				0.001			0.01	TOG,76		0.001		
				10			50			10		
				1			10			1		
				0.1			1			0.1		
				0.01			0.1			0.01		
		Cl_2____ Turb.____		0.001			0.01			0.001		

VICTOR ATIYEH
Governor

Department of Environmental Quality

522 S.W. FIFTH AVENUE, BOX 1760, PORTLAND, OREGON 97207 PHONE: (503) 229-5696

MAY 19 1986

HAND DELIVERY

Roy Vandervelde
Route 1, Box 229
McMinnville, OR 97128

Re: Notice of Assessment
of Civil Penalty
WQ-WVR-86-39
Yamhill County

Although this Department has sent you formal warning notices in 1977 and 1983, and a civil penalty assessment in 1984, you have continued to allow manure and silage waste water to discharge from your dairy farm into public waters. You know that such discharges are in violation of state law.

A March 4, 1986 investigation by staff of the Department, and the Yamhill County Sheriff's office and Land Management Section, revealed that you were again allowing the discharge of silage liquor and manure into waters of the state. These latest discharges occurred more than six weeks after Tom Fisher of our staff wrote you and stressed the importance of ensuring that discharges of your waste go only into your earthen storage lagoon, and not into public waters. Mr. Fisher warned you then of additional enforcement action if there was additional pollution of public waters.

Consequently, I have enclosed a formal notice assessing you a civil penalty of $5,500 for your discharges into public waters. In determining the amount of the penalty, I have considered Oregon Administrative Rule 340-12-045. The Department's civil penalty schedule provides for penalties of from $50 to $10,000 for each day of each violation. Further discharges will likely result in larger penalty assessments and/or other enforcement action.

The penalty is due and payable immediately. Your check in the amount of $5,500 should be sent to the address on this letterhead. Appeal procedures are outlined in Paragraph VII of the enclosed notice. If you fail to either pay the penalty or appeal this action within twenty (20) days, a Default Order and Judgment will be entered against you.

Questions regarding this letter or the enclosed notice should be directed to Mr. Larry Cwik with the Department's Enforcement Section in Portland at 229-5152, or toll-free at 1-800-452-4011.

Sincerely,

Fred Hansen
Director

LC:b
GB5679.L
Enclosures(s)
cc: Willamette Valley Region, DEQ
Water Quality Division, DEQ
Oregon Department of Justice
Oregon Department of Agriculture
Environmental Protection Agency
Yamhill County Board of Commissioners
Yamhill Soil & Water Conservation District
Yamhill County Legal Counsel

BEFORE THE ENVIRONMENTAL QUALITY COMMISSION

OF THE STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY, OF THE STATE OF OREGON, Department, v. ROY VANDERVELDE, Respondent.	)	NOTICE OF ASSESSMENT OF CIVIL PENALTY No. WQ-WVR-86-39 YAMHILL COUNTY

I

This notice is given to Respondent, Roy Vandervelde, pursuant to Oregon Revised Statutes (ORS) 468.125 through 468.140, ORS Chapter 183 and Oregon Administrative Rules (OAR) Chapter 340, Divisions 11 and 12.

II

The following notices are on file with the Environmental Quality Commission in this case and are incorporated herein by this reference:

Notice of Violation and Intent to Assess Civil Penalty WQ-SNCR-77-216, dated September 19, 1977, from Fred M. Bolton to Respondent, received by Respondent on October 10, 1977.

Notice of Violation and Intent to Assess Civil Penalty WQ-WVR-83-93, dated October 14, 1983, from Fred M. Bolton to Respondent, received by Respondent on October 19, 1983.

Notice of Assessment of Civil Penalty WQ-WVR-84-01, dated May 23, 1984, from Fred Hansen to Respondent, received by Respondent on May 29, 1984.

///

///

///

///

Through these notices, the Department notified Respondent that Respondent had committed one or more violations and that a civil penalty would be assessed if any of these violations continued or if any similar violation occurred five or more days after receipt of these notices, as is more fully set forth in these notices.

III

A. On or about March 4, 1986, Respondent caused or allowed liquid waste to discharge from Respondent's silage liquor collection pond located on real property described as Tax Lots 700 and 800, Section 19, Township 5 South, Range 4 West, Yamhill County, Oregon, into an intermittent tributary of Salt Creek, waters of the state, causing pollution thereof, in violation of ORS 468.720(1) and OAR 340-51-020(1).

B. On or about March 4, 1986, Respondent discharged animal waste (manure) into a different intermittent tributary of Salt Creek, waters of the state, causing pollution thereof, in violation of ORS 468.720(1) and OAR 340-51-020(1).

C. Respondent discharged waste on March 4, 1986 into waters of the state as described above, without first obtaining a permit from the Director of the Department, in violation of ORS 468.740(1) and OAR 340-45-015(1)(a).

IV

The Director hereby imposes upon the Respondent a civil penalty of $2,500 for the one or more violations alleged in Paragraph IIIA, $2,500 for the one or more violations alleged in Paragraph IIIB, and $500 for the one or more violations alleged in Paragraph IIIC, for a total civil penalty of $5,500, plus interest until paid in full.

///

V

The one or more violations alleged in Paragraph III involve aggravating factors which support the assessment of a civil penalty larger than the minimum civil penalty which may be assessed pursuant to the schedule of civil penalties contained in OAR 340-12-055~~(1)(c)~~ 2b and 3. LKB The mitigating and aggravating factors considered by the Director in establishing the amount of the penalty are attached hereto and incorporated herein by this reference.

VI

This penalty is due and payable immediately upon receipt of this notice. Respondent's check or money order in the amount of $5,500 should be made payable to "State Treasurer, State of Oregon" and should be sent to the Director of the Department of Environmental Quality.

VII

Respondent has the right, if Respondent so requests, to have a formal contested case hearing before the Environmental Quality Commission or its hearing officer regarding the matters set out above pursuant to ORS Chapter 183, ORS Chapter 468.135(2) and (3), and OAR Chapter 340, Divisions 11 and 12 at which time Respondent may be represented by an attorney and subpoena and cross-examine witnesses. **That request must be made in writing to the Director, must be received by the Director within twenty (20) days from the date of mailing of this notice (or if not mailed, the date of personal service), and must be accompanied by a written "Answer" to the charges contained in the notices referenced above.** In the written "Answer," Respondent shall admit or deny each allegation of fact contained in the notices referred to above and Respondent shall affirmatively allege any and

all affirmative claims or defenses to the assessment of this civil penalty that Respondent may have and the reasoning in support thereof. Except for good cause shown:

A. Factual matters not controverted shall be presumed admitted;

B. Failure to raise a claim or defense shall be presumed to be a waiver of such claim or defense;

C. Evidence shall not be taken on any issue not raised in the notice and the "Answer."

If Respondent fails to file a timely "Answer" or request for hearing or fails to appear at a scheduled hearing, the Director on behalf of the Environmental Quality Commission may issue a default order and judgment, based upon a prima facie case made on the record, for the relief sought in this notice. Following receipt of a request for hearing and an "Answer," Respondent will be notified of the date, time and place of the hearing.

VIII

If the one or more violations set forth in Paragraph III continue, or if any similar violation occurs, the Director will impose an additional civil penalty upon the Respondent.

MAY 19 1986
Date

Fred Hansen, Director
Department of Environmental Quality

HAND DELIVERY

CIVIL PENALTY: MITIGATING AND AGGRAVATING FACTORS

(OAR 340-12-045(1))

RESPONDENT: Roy and Renne Vandervelde

COUNTY: Yamhill

CASE NUMBER: WQ-WVR-86-39

TYPE OF VIOLATION: Oregon Revised Statutes and Oregon Administrative Rules

PENALTY LIMITS: Minimum $50 Maximum $10,000
(each violation or day of violation)

1. **Prior violations:**

   Notice of Violation and Intent to Assess Civil Penalty No. WQ-SNCR-77-216, dated September 19, 1977, sent to Respondent for discharge of manure and milk parlor wash-down waters into waters of the state.

   Notice of Violation and Intent to Assess Civil Penalty No. WQ-WVR-83-93, dated October 14, 1983, sent to Respondent for placement of silage in a location where liquid wastes from the silage entered waters of the state.

   Notice of Assessment of Civil Penalty No. WQ-WVR-84-01, dated May 23, 1984, sent to Respondent for discharge of waste water from Respondent's silage pile into waters of the state and discharge of animal waste, manure, into public waters.

2. **History of Respondent in taking all feasible steps or procedures necessary or appropriate to correct any violation:**

   Respondent complied with the 1977 notice. Respondent did not correct the violations in the 1983 notice, resulting in the 1984 civil penalty.

   Since Respondent received the 1984 civil penalty, Respondent has installed a lagoon to store animal wastes from Respondent's farming operations. However, Respondent has apparently not ensured that animal wastes are always placed in this lagoon. This has resulted in the discharge of waste to public waters.

   Also, although Respondent in the fall of 1984 installed a collection pond to store silage liquor, Respondent nonetheless allowed such liquor to discharge into public waters, through an overflow pipe intended only for emergency use.

3. **The economic and financial condition of the Respondent:**

   Unknown - not considered.

4. **The gravity and magnitude of the violation:**

Respondent's discharges have caused animal manure and silage waste to enter tributaries of Salt Creek. Neighbors near Respondent's dairy operation have complained of the pollution. Sample results show the magnitude of the pollution to be significant.

Samples were taken on March 4, 1986 from the intermittent tributary into which Respondent's animal waste entered. The samples contained more than 600,000 fecal coliform bacteria per one hundred milliliters of sample, indicating a very high level of manure contamination. Also, that tributary had a strong odor of manure.

Samples were also collected on March 4, 1986 from the intermittent tributary into which Respondent's silage waste water entered. On that date, the emergency overflow pipe from Respondent's silage liquor collection pond was discharging. The samples contained a biochemical oxygen demand of 3,500 milliliters per liter of sample, indicating a very high level of organic pollution.

5. **Whether the violation was repeated or continuous:**

Repeated.

6. **Whether a cause of the violation was an unavoidable accident, or negligence or an intentional act of the Respondent:**

Negligent or intentional.

7. **The opportunity and degree of difficulty to correct the violation:**

Respondent has installed pollution control facilities. Respondent had the opportunity to prevent manure from entering public waters by using those facilities. Respondent needs to ensure that the earthen lagoon is consistently used for Respondent's animal waste, and that Respondent follows the technical assistance for such use provided by Respondent's consultant. Also, Respondent needs to ensure that its management practices regarding the silage liquor collection pond are improved. Excess silage liquor should not be allowed to discharge through the emergency overflow pipe to waters of the state, as it did on March 4, 1986, unless there is an emergency. Such excess should be pumped to a suitable location on Respondent's property, such as the earthen lagoon for Respondent's animal wastes. It is not difficult to pump such excess wastes.

8. **Respondent's cooperativeness and efforts to correct the violation:**

Respondent has been generally uncooperative. Although Respondent has installed the earthen storage lagoon, Respondent has not ensured that it is consistently used. Although Respondent has installed the silage liquor collection pond, Respondent has not ensured that it is maintained so as to prevent overflow to public waters.

9. **The cost to the Department of investigation and correction of the violation prior to the time the Department receives Respondent's answer to the written notice of assessment of civil penalty:**

Not considered.

10. **Any other relevant factor:**

None.

I have considered the above factors in establishing the amount of Respondent's civil penalty. The major aggravating factors were Respondent's previous history of discharges to public waters and that the current discharges were preventable through the use of sound waste management practices. There were no major mitigating factors.

MAY 19 1986
Date

Fred Hansen
Director

CONCERNED OREGONIANS FOR PROPER WASTE DISPOSAL

~~Star Route Box 50~~ PO Box 8
~~Arlington, Oregon 97812~~ IONE, OR 97843

(503) 454-2511, 454-2871, 454-2806

Mr. Bill Bree
Dept.of Environmental Quality
Portland, Or 97204

Dear Mr. Bree,

I have received the recent tentative agenda for the October 9, 1987 meeting of the Environmental Quality Commission and have a concern in relation to item "H" under the topic heading ACTION ITEMS.

Concerned Oregonians for Proper Waste Disposal(COPWD) has discussed the request for variance from portions of OAR 340-60-040(1)(a) and (2), relating to Education and Promotion of the Opportunity to Recycle, for the Gilliam, Jefferson, Morrow, Sherman, Wasco and Wheeler Wastesheds. As COPWD has neither been approached by the Gilliam county court with respect to this issue nor has Waste Management of Oregon discussed this request with our group, COPWD is requesting the DEQ to delay reviewing this request for a variance until the Gilliam county court holds a public meeting to explain the reasons for requesting these variances and to receive any public comment.

Thank you and I would appreciate any information you might have regarding the above request as COPWD would like to review this process.

Very Truly,

Richard E. Harper

Chairman, COPWD

L-D Ranch
Ronald W. and Gloria P. Davis
OLEX STAR ROUTE
ARLINGTON, OREGON
97812
10-5-87

Envoronmental Quality Commission
811 S. W. 6th
Portland, Oregon

Gentlemen:

It has come to our attention that the Gilliam County Court has applied for waivers so that they will not have to comply with the state recycling program.

There has been no public discussion on this matter and we feel Gilliam county must recycle as well as everyone else. This decision should not be considered at the state level until the people of Gilliam county have made a decision, anyway we have to recycle.

We have recylced for years, news paper, cardboard, glass, tin and aluminum. We take it to The Dalles.

Yours truly,
Gloria & Ron Davis
Gloria and Ron Davis

OSSI
OREGON SANITARY SERVICE INSTITUTE

Reply to: 2202 SE Lake Road
Milwaukie, OR 97222

654-9533

October 1, 1987

ENVIRONMENTAL QUALITY COMMISSION
811 SW Sixth Avenue
Portland, OR 97204

Re: Testimony on Action Item I. EQC Agenda October 9, 1987
STATUS REPORT ON YARD DEBRIS RECYCLING IN THE PORTLAND METROPOLITAN AREA

Over the past two years, cost data for yard debris collection programs has been compiled. There currently are two types of yard debris collection programs:

1. Annual or Semi-Annual City Clean-Ups in numerous jurisdictions throughout the state.

2. Tax funded weekly yard debris collection for all city residents in the Cities of Gladstone and Oregon City. No other cities in the state have such programs.

The city clean-up campaigns have been quite successful, and the solid waste industry has been a cooperative partner in this success. In a city the size of Milwaukie it is estimated the cost to the collectors for an annual clean-up is approximately $10,000. There is no reimbursement to the collectors except to eventually pass on this cost through the rate structure to their customers. Some cities pay the disposal fees and the collectors furnish all vehicles and labor, with volunteers assisting in the monitoring process. In many cities, collectors pay all costs including disposal.

The following are figures that have been compiled on weekly collection of yard debris: (tax funded)

Oregon City

Metro staff worked for many months with Oregon City Garbage Co. to develop figures based on the Oregon City collection program. The reason they were using this city as a model was it and the City of Gladstone (also owned by the same company) were the only two yard debris collection programs in the Metro region offering weekly collection to all residents of the city. Both the Oregon City and the Gladstone programs are tax funded and paid through the city budget. Thus, the unit cost is spread to all property owners. The 1986 cost per ton in Oregon City was $58.62/ton.

Generic Model

Metro staff developed a generic model based on the data developed in Oregon City, but using the demographics in the City of Beaverton. Attached is a copy of this generic model, which shows the unit cost to be $50/ton. However, this is based on the assumption that there would be 75% tonnage recovery. The Oregon City experience has been a much lower tonnage recovery level, which would increase the per ton cost.

Average Collection Costs (non-tax funded)

In meetings where local government representatives were given the opportunity to express the likelihood that their city would include a yard debris program in their city budget, there was a totally negative response. The most common retort was, "We cannot pay for necessary police and fire services. Our citizens would never agree to pay taxes for this kind of program." Thus, there are political/budgetary constraints in assuming a tax funded yard debris program could be implemented throughout the Metro region or in other parts of the state. This leads us to assume that a weekly yard debris collection program would have to be paid on the same basis as garbage collection service through the rate schedule. Average collection costs would be computed as follows:

(a) Assume the average per can rate in the region is $8/month.

(b) Assume disposal to be 17% of the can rate, leaving 83% as the collection cost. This amounts to $6.64 per can for collection.

(c) Assume the average can weighs 35 pounds and is picked up 4.3 times per month for a total of 152 pounds per month. This amounts to 4.4¢ per pound for collection costs, and when this is multiplied times 2000 pounds in a ton, the collection cost per ton is $88/ton.

(d) To this would have to be added the disposal fee which is now $2.76/yard at Grimm's for bagged, non-contaminated yard debris. Grimm's expects to increase this fee by approximately 50¢/yard in the near future.

Total average collection cost: $88/ton, plus disposal.

In addition, there is a further constraint in that Rod Grimm is now saying the market has fallen for their processed product and he does not want large volumes beyond what he is now taking from Oregon City and Gladstone. Add to this the precarious position of MacFarlane's Bark who is no longer able to take the Oregon City and Gladstone yard debris, and there is a real question as to processing capability as well as market feasibility.

SUMMARY

1. Economically, it is not feasible to institute collection programs for yard debris.
2. Processors and markets are not in place to handle large volumes of yard debris.
3. Neighborhood clean-ups or drop-off centers for seasonal yard debris promotions remain the viable option.

EH:e
Enclosure

Respectfully submitted,

Estle Harlan

ESTLE HARLAN, Solid Waste Industry Consultant

C: FRED HANSEN, Director, DEQ
RENA CUSMA, Metro Executive
BILL BREE, Yard Debris Manager, DEQ
DENNIS MULVAHILL, Waste Reduction Manager, Metro
OSSI
TRI-COUNTY COUNCIL
AOR

.MPLE CITY CASE

City: Beaverton, OR

Population: 33,950 Residential Dwelling Structures: 13,338

Street Miles: 108 Dwelling Structures per Street Mile: 124

Number of Required Routes: 11.49 per week

75% of Yard Debris Generated: 4,001 tons/year

Disposal Site: Grimms Fuel Co. Distance to Site: 11.5 miles

Disposal Rate: $2.00/Compacted CY now 2.76/yd + To go up 50¢/yd
(Disposal at McFarlanes: $2.76/Compacted CY;
at St.Johns - '87 rates: $2.78/Compacted CY)

Monthly Cost of Collection & Disposal for Sample City

	WAGE RATE FOR COLLECTION		
Items	$8/hr	$10/HR	$12/HR
Labor	4,983.19	5,990.97	7,038.60
Truck	2,999.47	2,999.47	2,999.47
Fuel	389.36	389.36	389.36
Disposal	2,223.00	2,223.00	2,223.00
Promotion	686.25	686.25	686.25
Administration	1,819.33	1,819.33	1,819.33
Profit	1,310.06	1,410.84	1,515.60
TOTAL COST Monthly	14,410.66	15,519.22	16,671.61 = 200,059 yr.
Cost per Cubic Yard	4.32	4.65	5.00
Cost per Dwelling Structure	1.08	1.16	1.25

1 person/crew
2.149 employees

But To this needs to be added The Add. 76¢/yd. Grimm now Charging for bagged Yard debris, plus 50¢/yd. Anticipated increase

Association of Oregon Recyclers

October 7, 1987

Fred Hansen, Director
Department of Environmental Quality
811 SW Sixth
Portland, Oregon 97204

Dear Fred:

Subject: Consideration of identifying yard debris as a principal recyclable material under SB 405.

The Association of Oregon Recyclers would like to have you reveiw it's previous testimony (attached) on the issue of classifying yard debris as a prinicpal recyclable material.

It is still the Association's position that yard debris does not meet the economic feasibility test of SB 405. Even with the existing recycling programs throughout the state, yard debris collection would require a completely different collection technique and currently has no market to PURCHASE the material. These two factors would cause the material to fail the economic feasibility test.

Yard debris is a large part of the waste stream, however, simply removing an item from the waste stream to save landfill space is not the primary intent of the recycling ethic. Energy recovery and resource conservation should be the first consideration, not simply removing a bulky material from the landfill.

We appreciate the opportunity to share our views with you.

Sincerely,
ASSOCIATION OF OREGON RECYCLERS

Ken Sandusky
Chair

Attachment
CC: John Charles
KS:comp;k

P. O. Box 10051, Portland, OR 97210
(503) 227-1319

Association of Oregon Recyclers

January 19, 1987

Mr. Mike Downs
Solid Waste Division
Department of Environmental Quality
811 SW 6th Avenue
Portland, OR 97204

Dear Mike:

Subject: Proposed Amendment to AOR 340-60-010 and 030 to identify yard debris as a principal recyclable material.

The Board of Directors and members of the Association of Oregon Recyclers have directed me to respond to your request for public comment on the question of whether yard debris should be considered a principal recyclable material and be treated as such.

Please refer to both our oral and written public testimony presented to the Department on March 3, March 4, and May 6 of 1986. We at the Association believe now, as we stated then, that it would be a very poor decision for the E.Q.C. to include yard debris on the list of recyclables established under SB 405.

We believe that the major problem with yard waste recycling continues to be the lack of markets or demand for the material. Neither collection nor processing creates markets for the recovered material. Only small and changeable markets exist today for the use of processed yard material as soil amendment, ground cover and top soil. However, expanded and reliable end users must be secured in order to make large-scale recovery of yard debris viable. Once durable markets exist to create a demand for the material, private processors

can justify the necessary investment and secure long-term permits to handle substantial amounts of yard debris.

The reason for identifying old newspapers, corrugated containers, glass bottles, steel and other items as principal recyclable materials is that proven markets already exist. Markets provide the economic stimulus to risk investment and provide a basis for recycling legislation. This circumstance does not exist in the case of yard debris recycling. To be considered a potential recyclable material, reliable markets are required before a recycling collection system can be developed. Recycling yard debris does not meet the economic feasibility test presented in SB 405. It is less expensive to bury it now than it would be to collect it separately, process it and then bury it in the future.

The Metropolitan Service District is required by the state to solve the solid waste disposal problem in the Portland Tri-County Area. Metro has come forth with a plan which has been approved by the Department to handle solid waste. The plan addresses yard debris. Correctly, it does not make yard waste a principal recyclable material. The Association of Oregon Recyclers feels that it is inappropriate for the DEQ to use SB 405 to solve a Metro solid waste problem, while at the same time not treating yard debris as a statewide principal recyclable material. Simply requiring yard debris to be classified and treated as a recyclable will not cause it to be sold and recycled. It will not solve the region's solid waste problem.

The City of Portland has not come up with an approved residential, multi-material, curbside collection program for principal recyclables identified by SB 405. Why add to the City dilemma before staff are able to get that program on line? If the Department caused yard debris to be added to the list of recyclables, the City would have much more of a problem on its hands than it does currently. In other words, let's be successful at implementing SB 405 before we add a new and questionable recyclable to the list. Let's not jeopardize the success of taking today's recyclables out of the solid waste stream.

It would be nice to be able to recycle yard debris. But, obviously it is premature to mandate that either Metro or the entire state be required to do so. So, AOR would like to suggest some alternative approaches to the problem.

First. Try a test area. Select a community (such as West Linn) where you would have a successful yard debris collection program. Take the material to one of the private businesses that purchase limited quantities of yard waste; or take it to one of the Department-approved disposal sites. Make sure that the tax dollars do not subsidize the program. Make sure that the collection of the recyclable is market driven (i.e., there is a need and use for the material). Apply the SB 405 economic test. Report the effectiveness of the study. What lessons are there to be learned from this test area before we consider expanding it into a statewide program?

Second. The Department will be siting a new landfill in July of this year. Can processed yard debris be used as, or mixed with, daily landfill cover? What is the potential demand by cities, counties, Metro, state parks and state highways for composted yard debris in specifications for revegetation?

Please refer to other recommendations that were made by the Association last year.

Thank you for allowing us the opportunity to comment on the proposed rule change.

Sincerely,

John G. Drew

John G. Drew
Markets Chairman

cc: Bill Bree

Association of Oregon Recyclers

May 6, 1986

Mike Downs, Director
Solid Waste Division
OR Dept. of Environmental Quality
PO Box 1760
Portland, OR 97207

Dear Mike:

Enclosed is a statement which summarizes the concerns of a discussion group which the Association of Oregon Recyclers convened to address the issue of yard waste recycling. The group had met previously to find common ground on other waste reduction issues.

The people who met on the yard debris recycling topic were: Jeff Andrews, Mike Borg, Joe Cancilla, Kathy Cancilla, John Drew, Chuck Geyer, Rod Grimm, Estle Harlan, Delyn Kies, Dennis Mulvihill, Jerry Powell, Wayne Rifer, Judy Roumpf, Ken Sandusky, Buzz Walker, and me.

We look forward to DEQ's aggressive actions to establish a sound program in yard waste recycling based on reliable markets for the processed materials.

Sincerely,

Bill Webber
Chairman

Enc.

P. O. Box 10051, Portland, OR 97210
(503) 227-1319

Association of Oregon Recyclers

YARD WASTE COLLECTION AND PROCESSING

Chair
Bill Webber/
Valley Landfills, Inc.
P.O. Box 807
Corvallis 97339
757-9067

Vice Chairperson and Treasurer
Jeff Andrews/
Albany-Lebanon Sanitation
1214 S.Montgomery
Albany 97321
928-2551

Secretary
Ken Sandusky/
Lane County Solid Waste
125 E. 8th
Eugene 97401
687-4119

Markets
John Matthews/
Garten Foundation
P.O. Box 12187
1425 McGilchrist SE
Salem 97302
581-4473

Education
Kathy Cancilla/
PRROS
P.O. Box 66398
Portland 97266
760-8945

Legislation
John Drew/
Far West Fibers
P.O. Box 503
Beaverton 97075
643-9944

Special Projects
Angela Brooks/
Publishers Paper
4000 Kruse Way Place
Lake Oswego 97034
635-9711

The following summarizes the concerns of a discussion group convened by the Association of Oregon Recyclers to address the issues of recycling yard wastes in the Portland metropolitan area.

In 1984 about 141,000 cubic yards of yard waste were collected in the Portland area, 46 percent of which were processed. In 1985, an estimated 176,000 cubic yards were collected, with 50 percent of that material processed. Thus, a total of 153,000 cubic yards of yard debris were recycled in the past two years and an additional 164,000 cubic yards went into storage for lack of markets.

Metro estimates that 1,000,000 cubic yards, or 100,000 tons of yard debris is generated annually in the Portland metropolitan area. This represents 13 percent of municipal solid waste. Metro staff believe that 75 percent of the yard waste is capturable.

The discussion group strongly believes that the major problem with yard waste recycling is the lack of markets. Neither collection nor processing creates markets for the recovered material. This fact is borne out by the 1984-1985 figures and the comments of a processor. Currently small markets exist for use of the processed material as soil amendment, ground cover, and top soil. However, expanded and durable end users must be secured in order to make large-scale recovery of yard debris viable. Once markets exist to create a demand for the material, processors can justify the necessary investment ($500,000 to $750,000) and secure long-term operating permits.

Once adequate markets are developed, problems with collecting yard wastes in quantity or on a regular basis from citizens can be addressed. As with other recyclable materials, when strong markets exist, a collection system is developed.

P. O. Box 10051, Portland, OR 97210
(503) 227-1319

The discussion group believes that over the next 5 to 8 years viable markets for yard wastes can be developed, but a number of steps must be undertaken to reach that goal. The Oregon Department of Environmental Quality must aggressively pursue the following actions with the assistance of the Metropolitan Service District and others.

1. Develop vocabulary and definitions for woody and yard debris products. This listing should include: soil amendment, compost, mulch, fertilizer, fuel and others.

2. Develop criteria for specifications of woody and yard debris products. These criteria should suggest levels of nitrogen(N), phosphorus(P), potassium(K), and ranges for pH and salinity. Components of the completed products should also be listed, including leaf mold, manure, straw, sand, etc.

3. Develop an information program to encourage homeowners to use composted products around shrubs or for ground cover.

4. Develop a program so <u>all</u> city, county and state parks and highway jobs include a percent of composted yard debris in their specifications for revegetation.

5. Develop a system for collection and delivery of yard debris to processing centers that will not burden existing systems.

6. Develop reliable markets.

Once viable markets for the quantity of materials that could be collected are demonstrated, then the Department of Environmental Quality could consider listing yard wastes as a principle recyclable material under the Recycling Opportunity Act.

Association of Oregon Recyclers

March 4, 1986

Hearings Officer
Oregon Department of Environmental Quality
Hazardous and Solid Waste Division
PO Box 1760
Portland, OR 97207

Dear Hearings Officer:

The Association of Oregon Recyclers (AOR), a non-profit trade group made up of 150 firms, individuals and local governments involved in waste recycling, represents many of those Oregonians who may have to implement new programs in yard debris recycling. As an organization, we wish to offer several comments for the record regarding pending Department rules.

GENERAL OVERVIEW

AOR is dedicated to reducing waste volumes through recycling. Yard debris is a significant portion of municipal wastes in the Portland region. The Department, Metro and others are to be commended for seeking methods to capture and reuse this resource, rather than landfilling the material. AOR is eager to help in these efforts.

SPECIFIC COMMENTS

Unfortunately, adding yard debris to the list of materials required in the Metro region under the Oregon Recycling Opportunity Act is not a worthwhile strategy at this time. There are at least three problems with the Department's proposal:

1. The public will be confused. Senate Bill 405 was designed to increase the recovery of traditional recyclable materials, such as bottles, cans, and newspaper. Public surveys show a high awareness about the recycling of these materials. But there is little awareness of yard waste recycling, as it is not lumped together in the public's mind with those other items. Adding yard debris to the SB 405 list

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227-1319

will only hurt citizen perception of the overall program.

2. Yard waste recycling requires a totally separate system. Yard debris cannot be handled by the existing, multi-material recycling collection network. It requires a different collection and processing system, one which must adapt to significant seasonal fluctuations in volume. The design and implementation of such a system is a sizable venture probably exceeding in complexity the previous local government requirements under SB 405. The implicit assumption by the Department that recycling will simply occur merely by adding yard debris to the SB 405 list is incorrect because yard debris recycling is not similar to these other efforts.

3. Serious yard waste collection and marketing problem exist. There is little evidence that Oregonians will separate and prepare yard waste in a recyclable form. Too, with only a few exceptions such as West Linn and Gladstone, there are little data available on citywide collection systems. The waste hauling and yard maintenance industries cannot be expected to gear up as fast as the Department expects. More importantly, yard waste is not "recyclable" in terms of Oregon law. Simply put, there is insufficient capacity for the existing processing industry to absorb new volumes. In fact, one major processor has a sizable backlog, indicating a soft market. The gradual growth in yard waste processing in recent years shows the promise at hand. An overly ambitious program that is not tied to supply and demand may destroy the existing market.

RECOMMENDATION

Yard debris should not be listed as a SB 405 material. On the other hand, the Department, Metro and local cities and private industry should continue to put effort into yard waste recycling. AOR is pleased to assist.

Sincerely,

John G. Drew

John Drew
Legislative Chairman

FAR WEST FIBERS, INC.

January 20, 1986

Mr. Mike Downs
Solid Waste Division
Department of Environmental Quality
811 S.E. 6th Avenue
Portland, OR 97204

Dear Mike:

Subject: Rule Change to Identify Yard Debris as a Principal Recyclable Material.

Far West Fibers operates two recycled paper baling plants in the Portland Metropolitan area. During 1986 we received, processed and shipped approximately 40,000 tons of wastepaper to Oregon paper mills. We also purchased an additional 9,000 tons of Old Newspapers locally which we shipped directly to nearby paper mills (i.e. from school, scout and chruch paper drives). We operate a recyclable material drop-off center at our Beaverton facility where we accept paper, metals, glass and oil. Far West Fibers strongly supports the recycling ethic and encourages the growth of recycling in our state.

However, we take exception to the Department's position on this issue. Yard Debris as described by the D.E.Q. is certainly not qualified to be considered in the same category as recycled paper, glass and metals. There are not significant, reliable and developed markets in the West that are capable of purchasing and processing the volume of Yard Debris described under your plan. Therefore, we would like to recommend that the list of principal recyclables not be amended to include Yard Debris.

Sincerely yours,

John G. Drew
Owner/Manager

cc: Bill Bree

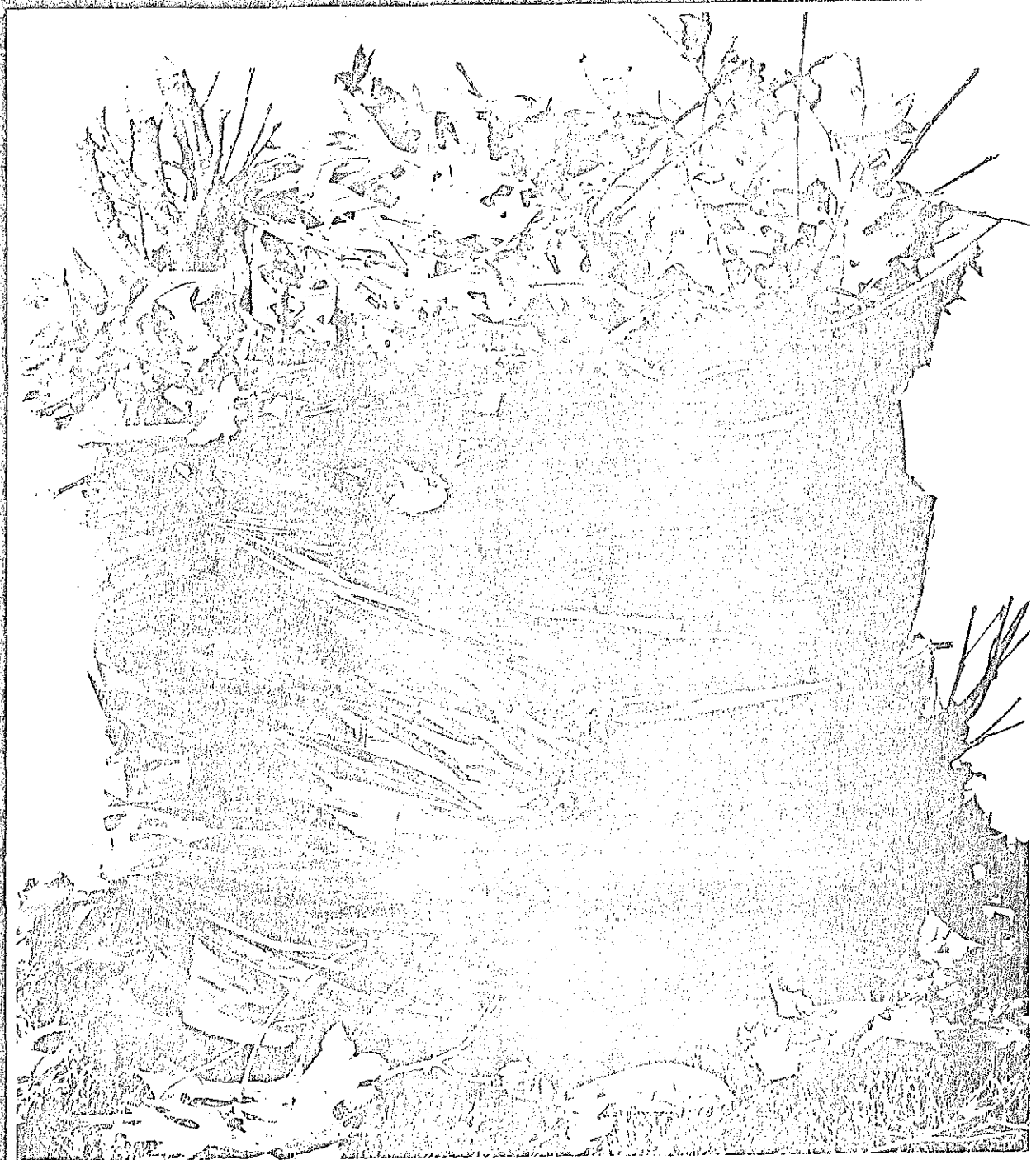
JGD/ces

10750 S.W. Denny Rd. • P.O. Box 503 • Beaverton, Oregon 97075 • (503) 643-9944

Metro News

Metropolitan Sewer District

Fall 1987



Interest growing in ways to solve yard debris dilemma

"Our biggest waste problem is right in your own backyard" – that's the message Metro's emphasizing during Recycling Awareness Week Oct. 3-10. Bus ads and advertisements in community newspapers will spread the word.

Yard debris makes up 10.5 percent of the waste entering the landfill. Portland area residents produce more than 1.2 million cubic yards of recyclable yard debris each year.

The good news is that interest is growing in composting or alternate ways of keeping yard debris out of the landfill. Ways that also provide an answer to backyard burning.

Composting is one good way to deal with yard debris and return nutrients to the soil. Leafy material can be composted at home and used as a soil amendment, mulch or top dressing.

Woody branches can be ground into small chips with mechanical chippers or by a chipping service. Chippings can be spread as ground cover or composted into mulch.

Other alternatives include taking the yard debris to commercial yard debris collection centers.

Some cities are beginning to establish drop centers and some haulers provide pick-up service. The yard debris is chipped and composted and, in some cases, sold back to consumers for use in gardens or yards.

For the do-it-yourselfer, Metro offers a free booklet, "The Art of Composting."

For a copy of the booklet or the answers to all your questions about how to deal with yard debris, call Metro's Recycling Information Center at 224-5555 or write to Metro, 2000 SW First Ave., Portland 97201-5398.

Some people will go to any lengths to keep yard debris out of the landfill. Unloading this craft are Forrest Soth (center, with cap), Beaverton City Council; and Rod Wilson, Brian Johnson, Dave Tonges and Don Johnson of West Beaverton Sanitary Service.

West Linn aggressive in keeping yard debris out of region's landfills

What makes a successful recycling program?

According to Ed Druback, recycling coordinator for the city of West Linn, success depends on three elements: city commitment, highly motivated residents and an aggressive promotional campaign.

"We don't rely on just one method to get the word out," he said. "We want to get the word into the home in as many ways as possible. The person who opens the water bill is not necessarily the one who takes care of recycling," he said.

The how-to of recycling is featured on bill inserts, direct mail flyers, can stickers, in-school programs, door hangers, cable TV, slide shows and displays.

The goal of a citizen task force formed in 1982 is to reduce the city's solid waste by 50 percent. In June 1983 the committee made 15 recommendations which it felt could meet the goal if aggressively pursued. The recommendations fell into four categories: implementing programs, education and promotion, funding and supervision.

West Linn also has developed an aggressive yard debris program to deal with the Department of Environmental Quality burning ban and to keep the material out of the landfill.

The program is three-fold:

- Home composting is the most economical solution to disposal. Four how-to seminars taught by the staff of the Environmental Learning Center at Clackamas Community College are held yearly.
- The hauler in the city provides on-call collection of source-separated yard debris for a charge that is less than if the yard debris were disposed of as garbage.
- The city operates its own collection and composting site. The site, actually the parking lot of a local park, is open Saturdays. For a nominal charge, residents can deposit their yard debris. Woody material is chipped and mixed with non-woody yard debris to be composted. The compost is sold to residents or is used by the city in parks and public works projects. City departments also use the site for the disposal of yard debris.

In 1986 the community's 13,000 residents contributed 10,000 cubic yards of debris to the compost program, more than double that of 1985. Druback expects 12,000 to 15,000 cubic yards this year.

The city will soon have a new site on Willamette Falls Drive that will accept all recyclables, in addition to yard debris. And, with an eye always on recycling, the city is reusing fence, pipe and buildings from a sewage treatment plant being torn down.

Beaverton, hauler join forces for monthly yard debris drop-off

On the other side of the region, the city of Beaverton and West Beaverton Sanitary Service have joined forces to offer a monthly drop-off location for yard debris.

It's the outgrowth of the city's annual "Clean Sweep Week" and a desire of the city's recycling task force to have a regular drop-off place for yard debris, according to Forrest Soth. Soth, a member of the Beaverton City Council, heads the task force.

On the first Saturday of the month, residents can take yard debris to the parking lot in back of the old City Hall at Southwest Hall Boulevard and Fifth Street. The yard debris is loaded into garbage trucks and hauled to a local processing center.

Participation has averaged 130 vehicles since the service started in March 1987.

One of the goals of the task force was that the service be self-supporting. "We're not doing too bad; we're breaking even," said Dave Tonges of West Beaverton Sanitary.

"The service does a great deal for the city, the community and the hauler," said Soth. "It's a good example of the kind of thing that can be done with yard debris."

Don Johnson and Rod Wilson unload trailer at Beaverton's monthly yard debris drop-off.

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October 7, 1987

Fred Hansen
Director, Department of Environmental Quality
811 S.W. 6th Avenue
Portland, Or. 97204

mcd 4:15 KP

Re: City of Klamath Falls' Application for Section 401 Certification

Dear Fred:

This letter presents an overview of where we are with respect to the City's Section 401 application in advance of the EQC meeting on October 9, 1987. In addition, this letter will respond to some of the points raised in your September 28, 1987 memorandum to EQC with regard to Agenda Item J for the October 9, 1987 EQC meeting. We will be responding to your memorandum further in a separate letter to EQC.

In our view, your memorandum demonstrates an unfortunate lack of fairness and objectivity in dealing with the issues presented. This attitude continues what now appears to be a pattern of arbitrary administrative action and a persistent failure to deal in an evenhanded fashion with the City's Section 401 application.

We are particularly concerned with your recommendations on pages 5-6 of your memorandum that the Commission should adopt the Attorney General's Model Rules solely for the purpose of the Salt Caves contested case hearing, that it should treat NEDC's self-styled "cross-appeal" as a petition for party status and that it should allow NEDC to raise issues outside the scope of the City's appeal. All of this legal maneuvering amounts to nothing short of a Departmental determination that NEDC should be able to appeal an order by DEQ proposing to deny Section 401 certification.

The Department's position in this regard is a complete reversal of the its previous position, consistently expressed during the rulemaking proceeding leading to adoption of the Commission's procedural rules, that non-applicants for Section 401 certificates do not and should not have a right of appeal. Your memorandum seeks to obfuscate this result, but it is undeniable that the Department's memorandum proposes to give NEDC every procedural right it sought in its "cross-appeal." We strongly protest this 180 degree swing in positions by the Department.

Moreover, the chain of reasoning utilized in the Department's memorandum that leads to this NEDC right of appeal is disingenuous. In the first place, NEDC did not ask that it be granted party status in the City's appeal; it sought its own cross-appeal. Thus, the Department would grant an NEDC petition that it did not even file. Moreover, there is no existing procedure for NEDC to seek party status in the City's appeal even if it had wanted to do so. As the Department's memorandum points out, the Commission has not adopted the Model Rules under which authority you would grant NEDC party status, and not even NEDC has asked that the EQC do so. For our part, we will oppose your attempt to have those rules adopted.

Furthermore, appeals of Section 401 orders (which under OAR 340-48-035 can be filed only by applicants) must be filed within 20 days of such order. Even if the Department could somehow "reinterpret" OAR 340-48-035 to authorize NEDC's appeal, such appeal was filed out of time.

It should also be pointed out that even if the Commission had already adopted the Model Rules, an NEDC petition for party status would still not be authorized under OAR 137-03-005 of those rules. Such petitions can be filed only after public notice of the contested case hearing. Such notice, of course, has not yet been issued.

Finally, the Department's memorandum states that a hearings officer would have the discretion to consider issues not raised by the applicant because he "would be under an independent duty under ORS 183.415" and uncited caselaw "to develop a full and fair record." The memorandum then, without explanation, transforms ORS 183.415 into a grant of authority for a hearings officer to consider issues not raised on appeal. Surely you must recognize the distinction between developing a full and fair record on the issues raised and developing a record on issues not raised. Nothing in ORS 183.415 or case law allows a hearings officer to go beyond the issues raised on appeal.

We are also mystified by the ease with which the Department simply reads its own regulation, OAR 340-11-120(4), out of existence because it interferes with the Department's purpose. Such section states that evidence shall not be taken on

issues not raised in an appeal except for good cause shown. Of course, NEDC, not having filed a petition for party status (which petition would be premature and at this point unauthorized) but instead having filed an unauthorized and untimely cross-appeal, has not even attempted to make this good cause showing. Indeed, none of the procedural maneuvers the Department proposes was suggested by NEDC, perhaps because NEDC concluded that they were not a proper method of achieving NEDC's goal of a cross-appeal.

The Department's willingness to bend its rules to accomodate NEDC's position and, indeed, to go beyond what NEDC even asks for, is in stark contrast with its rigid approach to the City's desire to have EQC examine the minimum flow issue. The Department blandly claims that the Commission may only consider certification decisions in the context of contested case proceedings. We do not read OAR 340-48-035 in such a cramped fashion. The provision in such section for a contested case hearing is a right given to the applicant in a situation where DEQ has proposed to deny a Section 401 application. Nothing in that section requires the applicant to avail itself of such a right, particularly if it is able, as the City is, to identify an issue that can easily be resolved without a full contested case hearing. The Department's misreading of this section would seem to stem from its erroneous belief that certification denial decisions are made by the Director. We are at a loss to understand how OAR 340-48-035 can be read in any fashion other than that the Director may only propose a denial and the Commission, after hearing, shall make the final decision.

The basic unfairness in the Department's approach on these procedural issues merely continues the Department's unfair approach to the City's application heretofore. For instance, your September 28, 1987 memorandum, on page 2, leaves the impression that the Department would have considered the City's August 14, 1987 proposal to release additional flows had there been more time to do so. In fact, the City's proposal was made as soon as the City discovered that the Department had concluded there might be temperature problems in the diversion reach. If the Department did not have enough time to consider the City's proposal, it is because the Department delayed for so long in beginning substantively to review the City's application. This delay occurred despite repeated admonitions by the City that the Department should begin its work. It can be seen in retrospect that the Department's own delay prevented it from working with the City in identifying the flows that would solve any temperature concerns.

Further evidence of the Department's unfairness in this proceeding is the Department's inability to develop a consistent definition of the temperature standard which was used to justify the proposed denial of the City's application. The Department has long been aware that its temperature standard cannot logically be applied to hydro projects. Yet it was not until

June 26, 1987 that the Department informed the City how that standard would be applied to this project. By letter of that date Richard J. Nichols, Administrator, Water Quality Division, wrote Bill Miller, the City's Project Manager, that the standard would be applied based on computer modeling results, as follows:

> . . . please determine for us what minimum flow in the diversion reach would be necessary to keep the temperature in compliance with the standard; i.e., no measurable increase over temperature levels without the project, assuming "measurable" to be 1°F, within the accuracy of the model.

Yet when the Department's proposed denial was issued, the standard for defining "measurable" increases had been changed from 1°F to .25°F. No explanation has ever been received explaining this arbitrary reformulation of the standard. The Department's flip-flop on the temperature standard is now mirrored in the Department's flip-flop in its procedural rules, where, on the eve of the contested case hearing, the Department would substitute one set of procedural rules for another and would reverse its longstanding position with respect to disallowance of non-applicant appeals.

We raise the foregoing issues because of our disappointment at the Department's unwillingness to work meaningfully with the City to identify the flow that would solve the perceived temperature problem. We think that all parties are aware that such problems can be solved. For our part, as you know, the City's technical representatives met with your staff on September 9, 1987 and agreed on an acceptable methodology for measuring the effect of various summertime flows on temperature in the diversion reach. We have now performed those studies and have identified flows that we would be prepared to release to solve the perceived temperature problem. These flows would be released from 6 a.m. to 6 p.m. at the following levels: May: 395 cfs; June: 385 cfs; July: 355 cfs; August: 350 cfs; September: 350 cfs. At all other times 350 cfs would be released.

This release regime is based on the following:

1. At the September 9 meeting, your staff stated that they interpreted the temperature standard as being based on maximum daily temperature, i.e., the standard is violated if a project would cause increases in maximum daily temperatures during periods when such temperatures equal or exceed 58°F. As is obvious, maximum daily temperatures occur only during a portion of the day. Therefore, any increased flow which the Department believes is necessary to prevent increases in maximum daily temperatures should be required only during such portion of the day.

For this reason we propose that the higher level of flow be restricted to the hours of 6 a.m. to 6 p.m. This twelve hour period far exceeds the period of the day when the maximum daily temperature occurs and provides substantially more than adequate protection that the project will not cause increases in such maximum daily temperature. We have attached a discussion written by Dennis Ford and Ken Carlson which develops this point further.

2. The proposed flows as listed above are derived from computer modeling studies that are based on the methodologies developed in the September 9 meeting with your staff. Using these flows, the model predicts no temperature increases greater than 1°F, which is well within the accuracy limit of the model approach. We are aware that the staff report accompanying your proposed denial of certification stated that DEQ interprets the standard as requiring that the computer model predict temperature increases not exceeding .25°F. We believe that such interpretation is arbitrary and unreasonable.

The accuracy limit of the computer model approach is 1°C. In other words, if the model predicts a temperature increase or reduction of 1°C, it cannot be concluded that a measurable temperature change will occur. Because of this accuracy limit, the City initially proposed a constant minimum flow of 350 cfs, at which flow temperature increases, except in very rare instances, were not predicted to exceed the 1°C accuracy limit. It was our conclusion when we filed the Section 401 application, and it continues to be our conclusion, that the project will not cause measurable temperature increases at flows of 350 cfs, given model accuracy.

As stated, we are now willing to provide DEQ with an extra margin of safety by providing higher minimum flows. At the proposed increased flow levels, the model demonstrates that maximum temperature increases will not exceed 1°F. Such 1°F, of course, is well within the model's accuracy limit.

We chose 1°F as the standard to meet not only because it provides a wide margin of safety. We chose 1°F because we were told by DEQ that 1°F would be the standard. As noted above, Administrator Nichols informed the City that the standard would define "measurable" as 1°F, within model accuracy.

We believe that DEQ's reformulation of the standard in the staff report accompanying the proposed denial of our application to require no computer-predicted changes in excess of .25°F is both improper and scientifically unsupportable. We feel very strongly about this, having just spent the last three weeks running and re-running the model to determine what flows might be necessary to cause the model to predict temperature changes of less than .25°F. The thermal model approach simply is not capable of accurately predicting temperature changes that small.

We enclose our modeling results from the last three weeks which support the flow releases needed to prevent measurable diversion reach temperature increases. For your information, we also include in our model results the release flows required to prevent measurable increases, assuming measurable as .25°F for less. We remain ready, as we always have been, to negotiate the flow issue and to modify our proposal if necessary reasonably to gain DEQ's approval.

We propose that you consider this letter a request that the Department reconsider its proposed denial of the City's Section 401 application based on our offer of higher flows. As you know, we asked for such reconsideration in our August 20, 1987 meeting with you. We frankly cannot tell from your September 28, 1987 memorandum whether you have foreclosed this option. As we discussed at the meeting, the City has no problem with the Department providing for public notice and comment on our proposal for higher flows. This should take care of your concern that the Department receive public input.

We believe that if you proceed with this reconsideration, we can avoid the time, expense and disruption of a contested case hearing. Otherwise, we do intend vigorously to assert our rights in such hearing and, if necessary, beyond the hearing.

Sincerely,

Peter Glaser

Enclosures

cc: Hon. George Flitcraft
Bill Miller
Kurt Burkholder, Esq.

SALT CAVES HYDROELECTRIC PROJECT
SUPPLEMENTAL TECHNICAL REPORT
ON DIVERSION REACH WATER TEMPERATURES

INTRODUCTION

On August 25, 1986, the City of Klamath Falls (City) submitted an application to the Oregon Department of Environmental Quality (DEQ) for certification of the Salt Caves Hydroelectric Project under Section 401 of the Clean Water Act. On August 19, 1987, DEQ posposed a denial to the City's 401 application based on a single water quality issue, i.e., summertime maximum daily temperature increases in the project diversion reach. However, DEQ also indicated that this lone remaining water quality issue could be effectively eliminated by a summertime daily stream flow release through the diversion reach which is higher than the 350 cfs proposed by the City. Subsequently, on September 9, 1987, a meeting was held between DEQ staff and the City's representatives to determine what further analyses were necessary to establish appropriate flow releases in the diversion reach to maintain summertime temperature compliance. An explanation of the City's additional analyses and the results of these analyses are the subject of this report.

BACKGROUND

The City's application for 401 certification (submitted August 25, 1986) contained extensive data, information, and analysis on both the existing water quality character of the Klamath Canyon and the probable effects on water quality of the proposed Salt Caves Project. Included in the application was extensive documentation of computer simulations conducted by the City to predict the effects of the proposed project on water temperatures. Based on the thermal modeling, the City concluded that the project would not cause any measurable increase in water temperatures, assuming measurable as the modeling accuracy of approximately 1°C (1.8°F).

The City concluded that, in general, the project would not cause violation of the state water quality standards for the Klamath River Basin

(i.e., OAR 340-41-965). Specifically, with respect to temperature, however, the City concluded that the state standard as written (i.e., OAR 340-41-965(2)(b)(A)) was intended for, and only applicable to, point source thermal discharges and was not applicable to diversion hydroelectric projects. The City repeatedly requested clarification from DEQ on the application of the temperature standard to the proposed project and, in the meantime, the City based their analysis of the project's potential water temperature effects on the underlying intent of the standard, i.e., protection of rainbow trout. On that basis, the City concluded that rainbow trout thermal requirements would be maintained and protected, and that the project would therefore not cause a violation of the intent of the temperature standard. With the exception of temperature, DEQ has agreed with the City that the project will comply with state standards. Even with respect to temperature, DEQ has agreed the project will comply in the impoundment and in the river downstream of the powerhouse.

DEQ has since informed the City that the temperature standard should be interpreted as allowing no "measurable" increase in water temperature when comparing simulated temperatures for with- and without-project scenarios. Conclusions as to whether or not the Salt Caves Project will cause a violation of the DEQ temperature standard in the diversion reach, as well as a determination of flow releases necessary to provide and maintain temperature compliance, are highly dependent on what is assumed as a "measurable" difference. As previously stated, the City assumed measurable as the accuracy of the thermal modeling of approximately 1°C (1.8°F). DEQ's definition of measurable was stated as "1°F, within the accuracy of the model" in a letter dated June 26, 1987. However, in the DEQ staff report of August 17, 1987, DEQ stated that "the wording of the standard itself implies that something less than 0.5°F is measurable... In interpreting model results, DEQ has typically assumed that a calculated temperature increase of less than 0.25°F would not be measurable in the stream." Because of the disparity and inconsistency of what constitutes a "measurable" increase, results are presented herein based on three assumptions for a "measurable" temperature difference, i.e., 1°C (1.8°F) as established by the City, 0.56°C (1.0°F) as first cited by DEQ, and 0.14°C (0.25°F) as subsequently cited by DEQ.

GENERAL ANALYTICAL APPROACH

During the September 9 meeting between DEQ staff and the City's representatives, the approach to analyzing flows required to maintain temperature compliance in the diversion reach was discussed. The following components were suggested and tentatively agreed to:

- Computer simulations based on the equilibrium temperature concept.
- Calculation of equilibrium temperature based on dew point temperature and short wave solar radiation.
- Depth of flow and travel time based on previous assumptions, or refinement from more recent instream flow transect data.
- For input temperature to the model, use KR2.5 thermograph data whenever possible.
- To account for the decrease in maximum daily temperatures in the proposed diversion pool, use a difference between with- and without-project input temperatures based on the maximum daily temperature and the volume-weighted temperature at KR2.5, respectively.
- Perform simulations based on typical maximum climatological conditions for a given time interval, e.g., month, two-week, when naturally occurring temperatures exceed 58°F (14.4°C).
- During each time interval, determine a flow in the diversion reach which results in no "measurable" increase.

TEMPERATURE MODEL

Based on discussions with DEQ personnel, the equilibrium temperature approach was selected to model water temperatures in the diversion reach. With this approach, the change in temperature is given by:

$$\frac{dT}{dt} = \frac{k}{\rho C_p h} (E-T)$$

where T = water temperature, C
K = heat exchange coefficient, $W/m^2/C$
ρ = density of water, 1000 Kg/m^3
C_p = heat capacity of water, 4186 J/kg/C
h = water depth, m
E = equilibrium temperature

Following Edinger et al. 1984, the equilibrium temperature can be approximated by

$$E = T_d + Hs/K$$

where T_d = dew point temperature, ^oC
H_s = short wave solar radiation, W/m^2

and the heat exchanges coefficient can be approximated by

$$K = 4.5 + 0.05T + Bf(W) + 0.47\ f(W)$$

where

$$f(W) = 9.2 + 0.46W^2$$
$$B = 0.35 + 0.015T_m + 0.0012\ T_m^2$$

For this application, the temperature equation was discretized into

$$\Delta T = \frac{K}{Cph} (E-T)\ \Delta t$$

where

$\Delta t = L/V$

L = length, m

V = average velocity, m/s

and coded into a microcomputer spreadsheet.

INPUT DATA

The equilibrium temperature model requires both physical characteristics of the diversion reach and meteorological data. As in the previous modeling studies, the length of the diversion reach (without and with) the proposed reservoir were assumed to be 11,600 m and 13,800 m respectively. Power function relationships were developed for d, V, and W (width) as a function of flow using instream flow study transect data collected by BEAK and VTN. BEAK collected transect data at 12 locations at three flow regimes: 363, 846, and 1530 cfs. These data were weighted by habitat to represent the upper 7,200 m of the diversion reach. VTN collected transect data at six locations at three flow regimes: 320, 778, and 1139 cfs. These data were also weighted by habitat to represent the lower 6,600 m of the diversion reach. The following equations for V, d, and W were developed:

$$V = 0.025\ Q^{0.49}$$
$$d = 0.085\ Q^{0.35}$$
$$W = 13.4\ Q^{0.16}$$

for Q in cfs.

Meteorological data were obtained from the National Weather Service station at Klamath Falls. Short wave radiation was computed using the algorithms in STRATFY, the one dimensional reservoir model used to simulate temperatures in the proposed reservoir.

MODEL CALIBRATION

The model calibration was checked using data from 6 and 7 August 1986 when the flow was approximately 1500 cfs and 13 and 14 July 1987 when the

flow was approximately 510 cfs. The input meteorological data were based on an average of the five-hour period 11:00 to 16:00 hours. Upstream temperatures were selected from the data collected at station KR2.5 at a time determined by subtracting the travel time from the time of maximum temperature at KR4. The spreadsheets for these simulations are included in Appendix A and the results are summarized in the following table:

	6 Aug. 86	7 Aug. 86	13 Jul. 87	14 Jul. 87
Predicted	22.1	21.6	19.9	20.1
Observed	21.8	21.5	20.4	20.7

In this calibration, no coefficients were adjusted and the predictions are within 0.6°C of measured values and, therefore, the calibration was considered excellent considering model assumptions and data limitations.

The model calibration was also verified using the maximum monthly meteorological conditions described in the next section and maximum daily temperatures at KR2.5. The results for the four calibration days are also included in Appendix A and summarized hereafter:

	6 Aug. 86	7 Aug. 86	13 Jul. 87	14 Jul. 87
Predicted	21.8	21.8	20.5	20.8
Observed	21.8	21.5	20.4	20.7

These results clearly show the maximum monthly approach is capable of accurately predicting downstream temperatures at both low (i.e., 500 cfs) and high (i.e., 1500 cfs) flows.

In addition, the period of shutdown at the J. C. Boyle powerhouse during July 1987 was also simulated. These results are shown in Figure 1 and Appendix B, and again support the accuracy of the maximum monthly approach. This two-week period was characterized by widely varying meteorological conditions. Maximum daily air temperatures ranged from 47 to 97°F, sky cover varied from 0 to 100 percent, and mean daily wind speed varied from 4.4 knots to 13.8 knots. The ability of the model to predict maximum downstream temperatures under these varying meteorological conditions clearly establishes the approach.

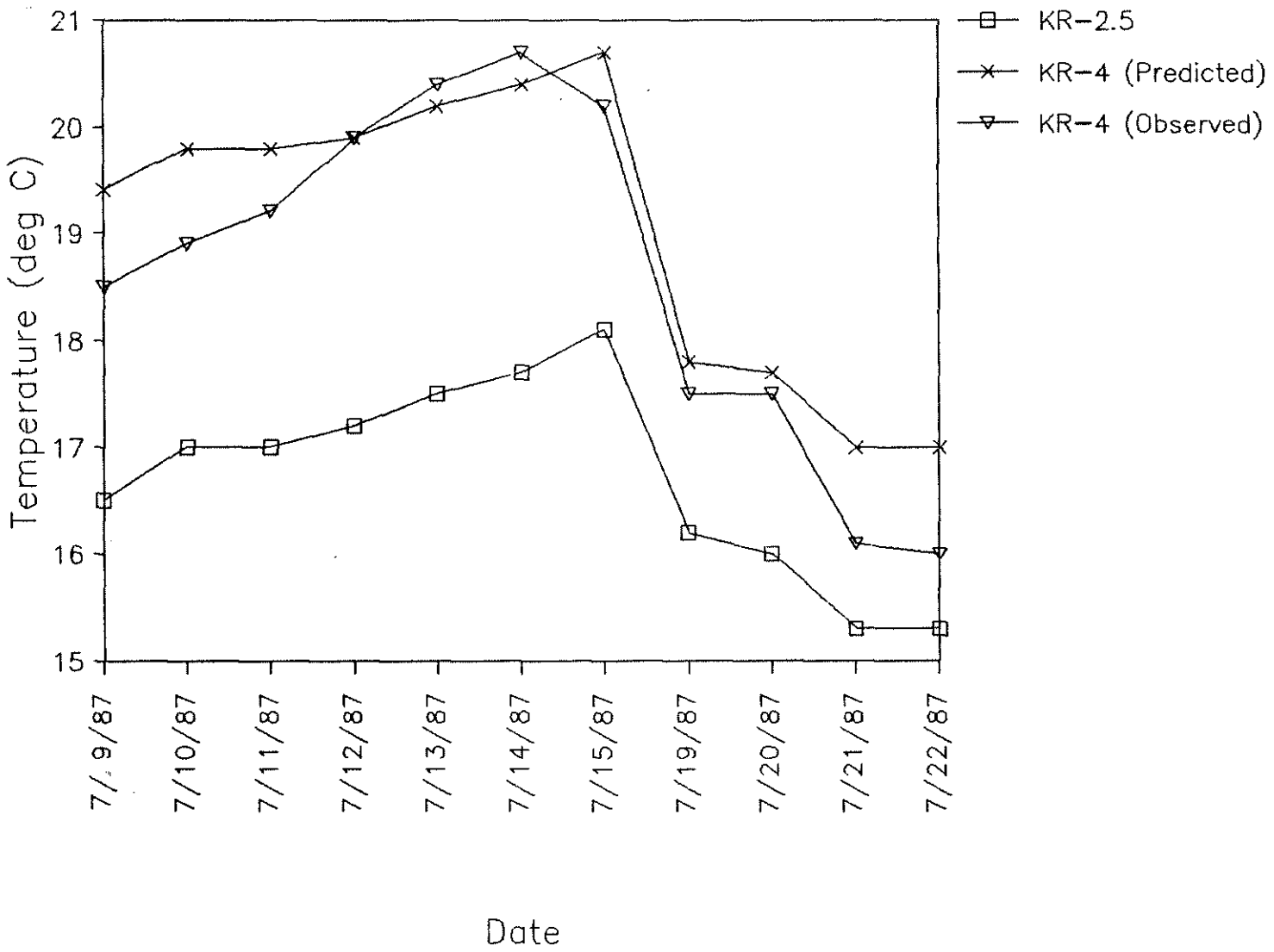

Figure 1. Comparison of observed and predicted maximum daily water temperatures for the constant flow period of July 1987.

MONTHLY MINIMUM FLOWS

Monthly minimum flows were determined for the period May through September. Maximum monthly meteorological conditions were determined from historical records at Klamath Falls. Maximum monthly dew point temperatures were computed from maximum monthly air temperatures and humidities for the period 1939-68. Wind speeds were, therefore, selected to be mean monthly values for the period 1939-68. Monthly maximum solar radiation values were determined from the algorithm in STRATFY for clear days at mid-month. The values were selected to represent conditions averaged over a five-hour midday period.

Upstream temperatures were selected to be maximum daily temperatures observed at KR2.5. These are the same temperatures used with the maximum monthly meteorological data to verify the model. Per discussions with DEQ personnel reservoir release temperatures were considered to be the volume-weighted daily average temperatures based on data from KR2.5. When the difference between the maximum daily temperature and the volume-weighted average temperature at KR2.5 exceeded 2.0°C (i.e., June, July), a difference of no more than 1.5°C was assumed between with- and without project input temperatures to be conservative. Maximum monthly meterological conditions and water temperatures used as input to the model are summarized in Table 1.

The minimum flows required to prevent "measurable" temperature increases in the diversion reach at the powerhouse are summarized in Table 2. The predictions are consistent with the City's previous modeling studies because a minimum flow of approximately 350 cfs will prevent "measurable" temperature increases, within the model error of 1°C as previously presented. Based on DEQ interpretation (letter dated June 26, 1987), the City now proposes to release the minimum flows necessary to prevent measurable temperature increases within 0.56°C (1.0°F).

DIURNAL OPERATION

The focus of DEQ's concern with respect to potential temperature increases in the diversion reach is based on maximum daytime temperatures,

Table 1. Maximum monthly meterological conditions and input temperatures used as input to the diversion reach thermal model for the simulation period May - September.

	M	J	J	A	S
Dew point temperature, °C	5.0	7.8	7.2	7.2	7.2
Wind speed, m/s	2.7	2.6	2.2	2.0	2.0
Solar radiation, W/m^2	534	587	560	507	420
Upstr. Water Temp, C[a]					
-without project	18.0	19.5	20.0	21.0	20.0
-with project	17.0	18.0	18.5	20.0	19.0

[a] Without-project input temperatures estimated based on maximum daily temperature at station KR2.5. With-project input temperatures (i.e., reservoir release) estimated based on volume-weighted daily average temperature at station KR2.5 with some upward adjustment to be conservative. Actual volume-weighted average temperature at KR2.5 are as follows:

	M	J	J	A	S
Volume-wt. Ave. Temp, C	17.0	17.5	17.9	19.5	18.7

Table 2. Monthly flows required to maintain compliance at the end of the diversion reach based on different assumptions as to what constitutes a "measurable" temperature difference.

Month	Required Discharge (cfs) for Assumption		
	0.14°C[a]	0.56°C[b]	1.0°C[c]
May	495	395	320
June	460	385	325
July	425	355	300
August	455	350	290
September	370	280	220

[a]Assumption for measurable temperature difference as established by DEQ on June 26, 1987, i.e., 0.25°F.

[b]Assumption for measurable temperature difference as established by DEQ on August 17, 1987. i.e., 1°F.

[c]Assumption for measurable temperature difference as established by the City based on model accuracy.

particularly during summer, and the potential effect of such increases on rainbow trout. Therefore, the City also proposes that the minimum flows specified in Table 2 apply only to a 12-hour daytime period from 6:00 a.m. to 6:00 p.m. For the nighttime period, a minimum flow of 350 cfs, as previously proposed, would be maintained. The justification for lower nighttime releases is that, after 6:00 p.m., maximum daily water temperatures have been achieved and cooling of the river water is occurring. The sun is setting and air temperatures are decreasing. Based on water temperatures measured at station KR4 and KR2.5, for example, this cooling continues until approximately 8:00 a.m. when the water begins to warm (Figure 2). The two-hour buffer from 6:00 a.m. to 8:00 a.m. is proposed as a safety factor. During the night, water temperatures at a minimum flow of 350 cfs will actually achieve lower minimum temperatures than the higher minimum flows (as proposed for the daytime) would achieve.

IMPLICATIONS TO RAINBOW TROUT

The three minimum flow release schedules presented in Table 2 have been developed by simulating flow levels that will result in no "measurable" increase in maximum water temperature in the Salt Caves diversion reach. The obvious differences in the three flow release schedules is the result of the different assumptions of what constitutes a "measurable" change in maximum temperature. As previously discussed, the term "measurable" has been defined on different occasions as 1°C (City of Klamath Falls 401 Permit Application, August 25, 1986), 1°F (DEQ letter of June 26, 1987) and 0.25°F (DEQ staff report of 17 August 1987). Although the City believes that 1°C is the appropriate definition of measurable, it is willing to accept a compromise position of 1°F, which is consistent with DEQ's letter of June 26, 1987. DEQ has expressed concern in their staff report of August 17, 1987 that water temperature conditions during the summer months are presently suboptimal for rainbow trout and recommended the more restrictive 0.25°F be used based on this concern. Since a substantial increase in the diversion reach release flow is required to provide assurance that the 0.25°F definition of measurable is adhered to, it is important to examine the effects of such difference in predicted maximum temperatures on the rainbow trout population. As will be shown below there is no biological basis for use of the more stringent 0.25°F definition of measurable.

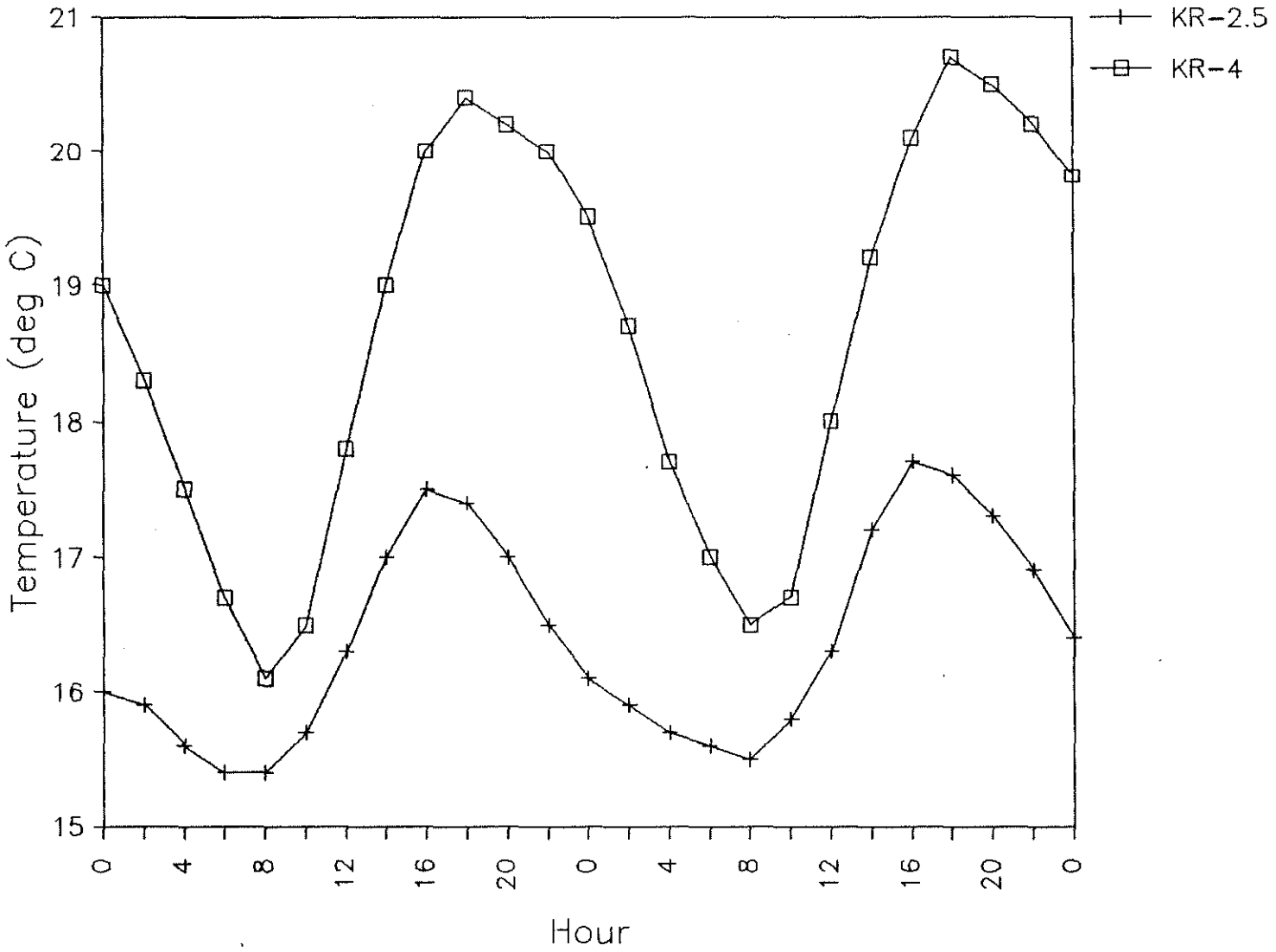

Figure 2. Example of diel trend of water temperatures, July 13-14, 1987.

DEQ's position for the stringent 0.25°F definition of measurable is based, in part, on the assumption that spawning habitat is present in the Salt Caves diversion reach and that spawning and incubation temperature conditions must be protected (See p. 32, DEQ Staff Report of August 17, 1987). DEQ based their conclusion that spawning occurs in the diversion reach on information provided by ODF&W. That information stated that rainbow trout occupy the Keno to California border zone of the Klamath River and that some of the trout likely spawn in the same zone. It is true that trout spawn in this broadly defined zone of the Klamath River. However, there is no evidence that they spawn in the proposed diversion reach. Evidence of spawning has been observed upstream of the Salt Caves diversion reach in pockets of gravel in the J.C. Boyle diversion reach. However, detailed habitat surveys indicated that the Salt Caves diversion reach does not contain suitable substrate for spawning and electro-fishing results confirm those observations (See License Application Exhibit E, Section 3.1). The more appropriate temperature criteria for the Salt Caves diversion reach should be those criteria established for growth and migration of the juvenile and adult life stages, not spawning and incubation.

The DEQ staff report (August 17, 1987) defined the temperature criteria for growth and migration as a maximum not-to-be exceeded temperature of 68°F (20°C). They cited the Federal Water Pollution Control Administration as the source of this criterion. However, DEQ failed to mention that the 68°F value represents a maximum weekly mean temperature rather than a short-term maximum. The Salt Caves project is being evaluated on the basis of maximum daily temperatures (short-term maxima); therefore, the 68°F value is not appropriate. The Natural Academy of Sciences/Natural Academy of Engineering (1974) recommends a short-term maximum of 75°F (24°C) for protection of rainbow trout populations. This recommendation is based on a formula which includes a 2°C safety factor. The water temperature modeling results, using the 1°F allowance for measurement error, demonstrated that the project will not result in maximum temperatures as high as 75°F (24°C) even during the hottest part of the summer. Since the predicted maximum temperatures are well below the threshold that would be expected to result in mortality to rainbow trout, there does not appear to be any justification for use of DEQ's more restrictive definition (i.e., 0.25°F) for a measurable temperature difference.

The focus of DEQ's concern for elevated water temperatures is the potential for sublethal effects on trout due to temperatures which exceed optimal conditions for rearing and migration. DEQ cites impairment of spawning and egg incubation, impaired feeding, decreased growth rates, reduced resistance to disease and parasites, increased sensitivity to toxics, interference with migration, reduced ability to compete with more temperature resistent species, and increased vulnerability to predation. Aside from the fact that a number of these generic concerns (i.e. spawning, incubation, and sensitivity to toxics) are not applicable to the Salt Caves diversion reach, it should be noted that demonstration of sublethal effects of temperature on rainbow trout has generally only been possible under strictly controlled laboratory conditions. Nearly all studies of sublethal effects have been designed with at least 1°C increments in temperature between test conditions. DEQ's requirement for 0.25°F (0.14°C) difference between predicted and actual maximum temperature measurements would appear to be an unnecessarily conservative requirement. We have found no evidence in the scientific literature that supports the conclusion that such small differences in daily maximum temperatures are detrimental to rainbow trout in the temperature range predicted for the Salt Caves diversion reach.

It should also be noted that BEAK previously submitted to DEQ a detailed report titled "Supplemental Information on Rainbow Trout Temperature Requirements and Water Temperatures in the Proposed Salt Caves Diversion Reach" that reviewed the literature regarding temperature effects on rainbow trout. That review similarly showed that the predicted temperature changes in the diversion reach will not jeopardize the wild rainbow trout population.

Literature Cited

Edinger, J.E., D.K. Brady, and J.C. Geyer. 1984. Heat Exchange and Transport in the Environment. Electric Power Research Institute (EPRI) Rept. No. 14. November 1974.

National Academy of Sciences, National Academy of Engineering. 1974. Water Quality Criteria, 1972. U.S. Printing Office, Washington D.C.

APPENDIX A

Salt Caves Temperature Analysis
Sep 17,1987

CONDITION	7AUG86 WITH	7AUG86 WITHOUT	6AUG87 WITH	6AUG87 WITHOUT
INPUT VARIABLES				
Dew Point (Td - deg C)	8.55	8.55	8.56	8.56
Solar Radiation (Hs -W/M**2)	555.00	555.00	564.00	564.00
Wind Speed (W - M/S)	1.10	1.10	2.00	2.00
Upstr Water Temp (Ts - deg C)	19.50	20.50	20.00	21.00
Reach Length (L - M)	11600.00	13800.00	11600.00	13800.00
Manning's n (n)	0.16	0.16	0.16	0.16
Discharge (Q - M**3/S)	500.00	1500.00	500.00	1500.00
Slope (S)	0.01	0.01	0.01	0.01
HEAT EXCHANGE PARAMETERS				
Tm (Ts + Td)/2	14.03	14.53	14.28	14.78
B (0.35+.015Tm+.0012Tm**2)	0.80	0.82	0.81	0.83
Heat Exchange (K)	17.83	18.12	19.62	19.94
Equilibrium Temp (E)	39.68	39.18	37.31	36.84
COMPUTED OUTPUT PARAMETERS				
Width of /channel (w - meters)	36.29	43.26	36.29	43.26
Depth of Flow (y)	0.75	1.10	0.75	1.10
Velocity (V)	0.53	0.90	0.53	0.90
Travel Time (t - hrs)	6.13	4.26	6.13	4.26
Heat Exchange (K - W/m**2/C	17.83	18.12	19.62	19.94
Equilibrium Temp (E)	39.68	39.18	37.31	36.84
Temp Increase (DELTA T - Deg C)	2.54	1.13	2.39	1.05
Downstream Temp (T - Deg C)	22.04	21.63	22.39	22.05
Measured temperature (Deg C)		21.50		21.80

Salt Caves Temperature Analysis
Sep 17,1987

CONDITION	7AUG86 WITH	7AUG86 WITHOUT	6AUG87 WITH	6AUG87 WITHOUT
INPUT VARIABLES				
Dew Point (Td - deg C)	7.20	7.20	7.20	7.20
Solar Radiation (Hs -W/M**2)	507.00	507.00	507.00	507.00
Wind Speed (W - M/S)	2.00	2.00	2.00	2.00
Upstr Water Temp (Ts - deg C)	19.50	21.00	20.00	21.00
Reach Length (L - M)	11600.00	13800.00	11600.00	13800.00
Manning's n (n)	0.16	0.16	0.16	0.16
Discharge (Q - M**3/S)	500.00	1500.00	500.00	1500.00
Slope (S)	0.01	0.01	0.01	0.01
HEAT EXCHANGE PARAMETERS				
Tm (Ts + Td)/2	13.35	14.10	13.60	14.10
B (0.35+.015Tm+.0012Tm**2)	0.76	0.80	0.78	0.80
Heat Exchange (K)	19.10	19.57	19.26	19.57
Equilibrium Temp (E)	33.74	33.10	33.53	33.10
COMPUTED OUTPUT PARAMETERS				
Width of /channel (w - meters)	36.29	43.26	36.29	43.26
Depth of Flow (y)	0.75	1.10	0.75	1.10
Velocity (V)	0.53	0.90	0.53	0.90
Travel Time (t - hrs)	6.13	4.26	6.13	4.26
Heat Exchange (K - W/m**2/C	19.10	19.57	19.26	19.57
Equilibrium Temp (E)	33.74	33.10	33.53	33.10
Temp Increase (DELTA T - Deg C)	1.92	0.79	1.84	0.79
Downstream Temp (T - Deg C)	21.42	21.79	21.84	21.79
Measured temperature (Deg C)		21.50		21.80

Salt Caves Temperature Analysis
Sep 17,1987

CONDITION	13JUL87 WITH	13JUL87 WITHOUT	14JUL87 WITH	14JUL87 WITHOUT
INPUT VARIABLES				
Dew Point (Td - deg C)	7.2	7.2	7.2	7.2
Solar Radiation (Hs -W/M**2)	560	560	560	560
Wind Speed (W - M/S)	2.2	2.2	2.2	2.2
Upstr Water Temp (Ts - deg C)	16	17.5	16.5	17.8
Reach Length (L - M)	11600	13800	11600	13800
Manning's n (n)	0.16	0.16	0.16	0.16
Discharge (Q - M**3/S)	500	512	500	510
Slope (S)	0.00996	0.00996	0.00996	0.00996
HEAT EXCHANGE PARAMETERS				
Tm (Ts + Td)/2	11.6	12.35	11.85	12.5
B (0.35+.015Tm+.0012Tm**2)	0.685472	0.718277	0.696257	0.725
Heat Exchange (K)	18.50288	18.95272	18.65111	19.04454
Equilibrium Temp (E)	37.46555	36.74719	37.22500	36.60474
COMPUTED OUTPUT PARAMETERS				
Width of /channel (w - meters)	36.21929	36.35699	36.21929	36.33423
Depth of Flow (y)	0.748270	0.754507	0.748270	0.753474
Velocity (V)	0.525333	0.531474	0.525333	0.530456
Travel Time (t - hrs)	6.133666	7.212640	6.133666	7.226486
Heat Exchange (K - W/m**2/C	18.50288	18.95272	18.65111	19.04454
Equilibrium Temp (E)	37.46555	36.74719	37.22500	36.60474
Temp Increase (DELTA T - Deg C)	2.799925	2.998978	2.724988	2.953928
Downstream Temp (T - Deg C)	18.79992	20.49897	19.22498	20.75392
Measured Temperature (Deg C)		20.4		20.7

Salt Caves Temperature Analysis
Sep 17,1987

CONDITION	13JUL87 WITH	13JUL87 WITHOUT	14JUL87 WITH	14JUL87 WITHOUT
INPUT VARIABLES				
Dew Point (Td - deg C)	9.7	9.7	10.1	10.1
Solar Radiation (Hs -W/M**2)	605	605	587	587
Wind Speed (W - M/S)	3.8	3.8	3.4	3.4
Upstr Water Temp (Ts - deg C)	15.3	16.3	15.5	16.5
Reach Length (L - M)	11600	13800	11600	13800
Manning's n (n)	0.16	0.16	0.16	0.16
Discharge (Q - M**3/S)	500	512	500	510
Slope (S)	0.00996	0.00996	0.00996	0.00996
HEAT EXCHANGE PARAMETERS				
Tm (Ts + Td)/2	12.5	13	12.8	13.3
B (0.35+.015Tm+.0012Tm**2)	0.725	0.7478	0.738608	0.761768
Heat Exchange (K)	24.19666	24.60787	22.82108	23.20731
Equilibrium Temp (E)	34.70344	34.28562	35.82182	35.39374
COMPUTED OUTPUT PARAMETERS				
Width of /channel (w - meters)	36.21929	36.35699	36.21929	36.33423
Depth of Flow (y)	0.748270	0.754507	0.748270	0.753474
Velocity (V)	0.525333	0.531474	0.525333	0.530456
Travel Time (t - hrs)	6.133666	7.212640	6.133666	7.226486
Heat Exchange (K - W/m**2/C	24.19666	24.60787	22.82108	23.20731
Equilibrium Temp (E)	34.70344	34.28562	35.82182	35.39374
Temp Increase (DELTA T - Deg C)	3.309781	3.638595	3.269369	3.616637
Downstream Temp (T - Deg C)	18.60978	19.93859	18.76936	20.11663
Measured Temperature (Deg C)		20.4		20.7

APPENDIX B

sctmp
SALT CAVES TEMPERATURE ANALYSIS
Predicted vs. Observed Temperatures based on July 1987 Data at Sites KR-2.5 and KR-4

CONDITION	INPUT	JULY 09	JULY 10	JULY 11	JULY 12	JULY 13	JULY 14	JULY 15	JULY 19	JULY 20	JULY 21	JULY 22
INPUT VARIABLES												
Dew Point (Td-deg C)	*	7.20	7.20	7.20	7.20	7.20	7.20	7.20	7.20	7.20	7.20	7.20
Solar Radiation (Hs -W/M**2)	*	560.00	560.00	560.00	560.00	560.00	560.00	560.00	560.00	560.00	560.00	560.00
Wind Speed (W - M/S)	*	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20
Upstr Water Temp (Ts - deg C)	*	16.50	17.00	17.00	17.20	17.50	17.80	18.00	16.20	16.00	15.30	15.30
Reach Length (L-M)	*	13,800.00	13,800.00	13,800.00	13,800.00	13,800.00	13,800.00	13,800.00	13,800.00	13,800.00	13,800.00	13,800.00
Manning's n (n)	*	.16	.16	.16	.16	.16	.16	.16	.16	.16	.16	.16
Discharge (Q - ft**3/s)	*	550.00	550.00	550.00	550.00	515.00	510.00	550.00	1,100.00	1,100.00	1,100.00	1,100.00
Slope (S)	*	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01
HEAT EXCHANGE PARAMETERS												
Tm (Ta+Td)/2		11.85	12.10	12.10	12.20	12.35	12.50	12.60	11.70	11.60	11.25	11.25
B (0.35+.015Tm+.0012Tm**2)		.70	.71	.71	.71	.72	.73	.73	.69	.69	.67	.67
Heat Exchange (K)		18.65	18.80	18.80	18.86	18.95	19.04	19.11	18.56	18.50	18.30	18.30
Equilibrium Temp (E)		37.23	36.99	36.99	36.89	36.75	36.60	36.51	37.37	37.47	37.80	37.80
COMPUTED OUTPUT PARAMETERS												
Width of channel (w - meters)		36.78	36.78	36.78	36.78	36.39	36.33	36.78	41.09	41.09	41.09	41.09
Depth of Flow (y)		.77	.77	.77	.77	.76	.75	.77	.99	.99	.99	.99
Velocity (V)		.55	.55	.55	.55	.53	.53	.55	.77	.77	.77	.77
Travel Time (t - hours)		6.96	6.96	6.96	6.96	7.19	7.23	6.96	4.96	4.96	4.96	4.96
Heat Exchange (K - W/m**2/C)		18.65	18.80	18.80	18.86	18.95	19.04	19.11	18.56	18.50	18.30	18.30
Equilibrium Temp (E)		37.23	36.99	36.99	36.89	36.75	36.60	36.51	37.37	37.47	37.80	37.80
Temp Increase (DELTA T -Deg C)		2.99	2.91	2.91	2.88	2.98	2.95	2.74	1.70	1.72	1.78	1.78
Downstream Temp (T - deg C)		19.49	19.91	19.91	20.08	20.48	20.75	20.74	17.90	17.72	17.08	17.08
Measured Temp (deg C)		18.50	18.90	19.20	19.90	20.40	20.70	*20.20	17.50	17.50	16.10	16.00

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October 7, 1987

Fred Hansen
Director, Department of Environmental
Quality
811 S.W. 6th Avenue
Portland, Or. 97204

Re: City of Klamath Falls' Application for
Section 401 Certification

Dear Fred:

Enclosed are 5 copies of a letter to the Environmental Quality Commissioners which we would appreciate your transmitting to the Commissioners. We are attempting to deliver these letters personally, but have supplied you with copies in case we are not successful. Thank you.

Sincerely,

Peter Glaser

PG:blw
Enclosure
cc: Kurt Burkholder, Esq.

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October 7, 1987

Environmental Quality Commission
811 S.W. 6th Avenue
Portland, Oregon 97204

Re: City of Klamath Falls' Application for Section 401 Certification

Dear Commissioners:

This letter provides the position of the City of Klamath Falls to you with respect to Agenda Item J for the October 9, 1987 EQC meeting. As you know, DEQ has proposed to deny the City's Section 401 application, and the City has requested that EQC review that decision and that a contested case hearing be held.

The City requested that the Salt Caves Project be placed on the EQC agenda because of two concerns the City has with respect to DEQ's handling of the City's application for Section 401 certification. These concerns are in the area of cooperation and fairness.

Our concern with respect to cooperation is that the City and DEQ ought to be able to work together to eliminate the single concern DEQ had that led it to deny the City's Section 401 application. But DEQ refuses to further consider the City's

Section 401 application and demands that the City either undertake an expensive, time-consuming contested case hearing or file a new application. The City requests that the Commission direct issuance of the Section 401 certificate subject to a condition that DEQ's concern be eliminated. Alternatively, the City requests that the Commission direct DEQ to further consider the City's application, to work with the City to solve DEQ's problem and, in doing so, to utilize the interpretation of its temperature standard provided to the City by its Administrator of Water Quality.

Our concern with respect to fairness is that DEQ is not observing the basic maxim that administrative action should be carried out on a level playing field. Instead, DEQ has shifted the rules by which it has judged the City's application. The latest manifestation of these actions is in DEQ's proposal to the Commission, on the eve of a contested case hearing in this proceeding, to change the rules under which the hearing will be held. The Commission should reject these efforts.

We discuss these points further below. The specific relief the City asks for is set forth at the end of this letter under "Conclusions".

I. COOPERATION

The City's concern with a lack of cooperation on DEQ's part arises in the context of DEQ's basic finding, in its proposed denial of certification, that the project "cannot be

constructed and operated" in compliance with the applicable water quality standards. See Staff Report accompanying proposed denial at 75.

In fact, the project can be constructed and operated in compliance with the applicable water quality standards. The Staff Report accompanying the proposed denial found that the project met seventeen of the Department's eighteen water quality standards. The standard not met was temperature, and the perceived temperature problem occurred only in the lower portion of the diversion reach. The Department found that there would be no temperature problems in the diversion pool, in the upper portion of the diversion reach or downstream of the proposed powerhouse. And as to the lower portion of the diversion reach, the DEQ Staff Report sent a clear signal that the project could meet the Department's temperature standard if the project were operated to provide additional flows in the diversion reach. In further meetings with Department Staff, it has been very clear that additional flows will solve the problem. Thus, the only real issue separating DEQ and the City is the level at which these flows will be set and the procedure that will be used to determine these flows.

The City attempted to resolve this issue in a cooperative fashion prior to the Department's issuance of its proposed denial. After the City's consultants became aware that the Department believed that the project would violate the temperature standard, the City proposed that the Department issue a Section 401 certificate with a condition requiring that the City

provide such flows as would be necessary to solve DEQ's temperature concerns.

In its proposed denial of Section 401 certification, the Department stated that it did not have time to consider the City's proposal because it was submitted at the end of the one-year statutory period in which the City's application must be acted on. The City is extremely distressed that timing prevented consideration of its proposal. The City submitted its proposal immediately after learning that the Department intended to reject the City's position on temperature. The timing problem was created by the fact that the Department delayed substantive consideration of the City's application until late in the one year period, not beginning substantive work until mid-June 1987 despite the filling of the application in August 1986. This delay occurred despite repeated admonitions by the City that DEQ should begin its work. In retrospect it can be seen that the Department's delay prevented it from cooperating with the City in identifying the proper flow within the one year.

Following the proposed denial of the Section 401 application, the City again attempted to resolve the flow issue in a cooperative fashion. The City's consultants met with the Department's staff and agreed on modeling studies that would be appropriate to utilize in determining the impact of summertime flows in the diversion reach on temperature. The City has now performed those studies, and in the attached letter has informed the Department that it is willing to increase flows by certain amounts in order to meet the temperature standard. The City's

letter also states that it is willing to negotiate the flows further. The City requests, based on the studies conducted, that the Department reconsider its denial of the Section 401 application.

The City's problem at this point is that the Department evidently does not wish to cooperate in further negotiations. The Department's position apparently is that it will no longer consider the City's original application. It insists that the City either pursue a costly, time-consuming contested case hearing or file a new application for Section 401 certification. Under either option, according to the Department, all issues, even those not related to temperature, would be reopened.

This is a particularly unhelpful attitude by the Department given the alternative of further discussion which could quickly resolve the flow issue. It also contradicts a statement in Mr. Hansen's August 19, 1987 letter to Mr. Miller, explaining the proposed denial decision. Mr. Hansen stated in that letter that DEQ would have considered the City's increased flow proposal "prior to our making a final determination on your application" had the Federal Energy Regulatory Commission agreed to a request by the Department to extend the one-year deadline. Mr. Hansen's concern prior to DEQ's proposed denial of certification, thus, was not that a new flow proposal by the City would require a new application or a contested case hearing. It was simply whether there was enough time to consider the proposal in the one-year period.

This timing issue has now disappeared; there is no time bar to the Department continuing to work with the City on identifying the acceptable flow. Given cooperation, this matter should be resolvable without the delay and expense that would be entailed in a new application or a contested case hearing.

At this point, there are two alternative methods that we propose to resolve this situation.

First, we request that the Commission direct issuance of the Section 401 certificate subject to a condition that the Department's temperature concern be solved through negotiations between the Department and City. As noted, the Department has already signalled that the temperature issue can be solved, and the City is willing to work with the Department to achieve that goal. The Salt Caves Project, thus, can be constructed and operated in compliance with the applicable water quality standards, and there is no point in further delaying issuance of the certificate.

Alternatively, if the Commission is not willing to direct issuance of the Section 401 certificate at this time, we request that the Department be directed to reconsider its proposed denial of the City's application and to work with the City in identifying the proper minimum flow releases. As noted, in our attached letter to DEQ we request that such reconsideration be undertaken, and we provide new modeling results that could provide the basis for such reconsideration. We are hopeful that given such reconsideration this matter could

be finally resolved expeditiously and with a minimum of further staff time for DEQ and expense to the City.

Our attached letter to DEQ also indicates that the City, after working out an acceptable flow with the Department, would be willing to have the Department submit that proposal for public notice and comment. Thus, concerns related to public participation would be addressed. In short, there is no justification for making the City start all over with a new application, as the Department insists, or proceeding to a contested case hearing. We urge the Commission to order the Department to cooperate with the City in determining the appropriate flow and in reconsidering its denial of the Section 401 application.

Two further points should be made on the subject of cooperation.

First, as discussed below and in the attached letter, the City is greatly disturbed at the Department's failure to apply a consistent interpretation of the temperature standard to this project. The Department failed to define the standard for most of the one-year period; not until the City received a letter from Richard J. Nichols, Administrator, Water Quality Division, on June 26, 1987, was the City informed what the standard would be. But when the Department proposed to deny the City's application, the Department's interpretation of the standard had been changed.

At this point, a consistent interpretation of the temperature standard is needed. We propose, in DEQ's reconsi-

deration of the City's application, if such is ordered, that the interpretation stated by Administrator Nichols should be controlling. Such interpretation would be appropriate since it was the first interpretation articulated by the Department. Such interpretation would also be a compromise between the City's interpretation of the standard and the interpretation utilized by the Department in proposing to deny the City's application. As noted, the temperature standard is discussed further below and in the attached letter.

Second, the Department's letter suggests that EQC cannot consider the City's concerns at this time prior to a contested case hearing. We are not sure we understand the Department's point. At this time, we are appealing one issue of the many issues on which we believe the Department erred in proposing to deny a Section 401 application. This issue does not require a full contested case hearing for resolution, and there is no point in delaying decision on this issue pending a contested case hearing on the other issues.

Nor, as we explain in our attached letter, is such a contested case hearing legally required. The provision in the Commission's rules for a contested case hearing in the event of a proposed denial of certification is a right given to disappointed applicants. Surely such applicants are not required to exercise that right if an appeal issue can be brought to the Commission without the need for a contested case hearing. The City's primary concern at this point is cooperation from the Department in the identification of the appropriate flows, and on this issue

we do not, at this point, need a contested case hearing. We earnestly solicit EQC's assistance in attaining this goal.

II. FAIRNESS

Our concern with fairness relates to the Department's failure to prescribe and stick by rules by which the Project would be judged. As stated, DEQ ruled that the Project met all eighteen of its water quality standards except for its temperature standard. But the temperature standard has never been adequately defined by DEQ. The standard reads as follows:

> (b) Temperature:
>
> (A) Salmonid fish (trout) producing waters: No measurable increases shall be allowed outside of the assigned mixing zone, as measured relative to a control point immediately upstream from a discharge when stream temperatures are 58°F. or greater; or more than 0.5°F. increase due to a single-source discharge when receiving water temperatures are 57.5°F. or less; or more than 2°F. increase due to all sources combined when stream temperatures are 56°F. or less . . .

As can be seen, there is simply no logical way to apply this standard to hydro projects. The standard was designed for point source discharges. It is possible to determine temperature impacts of such discharges by measuring water temperature upstream and downstream of the point source mixing zone. Hydro projects do not have mixing zones, however.

The Department has never attempted to articulate a temperature standard that can be tied to the above-quoted language. In fact, as noted, DEQ made no effort to notify the City of the standard against which temperature impacts of the project would be measured until June 26, 1987, about ten months

after the City filed its Section 401 application and two months before the statutory deadline for final action on that application. On that date, Administrator Nichols, in a letter to the City's Project Manager, William Miller, stated that temperature impacts of the project would be measured by computer model results. He stated that the model results would be reviewed according to the following standard:

> . . . please determine for us what minimum flow in the diversion reach would be necessary to keep the temperature in compliance with the standard, i.e., no measurable increases over temperature levels without the project assuming "measurable" to be 1°F, within the accuracy of the model.

In point of fact, the accuracy limit of the water quality model is 1°C. The City designed the project operation in its original Section 401 application, including the proposed minimum flow in the diversion reach of 350 cfs, so as to ensure that the computer model, except in very rare circumstances, never predicted temperature increases beyond the 1°C model error.

This difference with DEQ over model error aside, when DEQ issued its proposed denial on August 19, 1987, it had reformulated its temperature standard from that set forth in Administrator Nichols' letter. Just two months after the City had been informed that "no measurable increase" meant no increases greater than 1°F within the accuracy limit of the model, DEQ declared that "no measurable increase" meant no increases grater than .25°F.

This initial inability to define a temperature standard and then the reformulation of the standard in the middle of the

process is patently unfair to the City. It is an axiom of administrative law that an applicant for a license is entitled to "even treatment by rule of law and reasonable confidence that he has received such treatment." Sun Ray Drive-In Dairy v. Oregon Liquor Control Commission, 16 Or. App. 63, 517 P.2d 289, 293 (Or. Ct. App. 1973). This maxim has been ignored by the Department in judging the temperature impacts of the Salt Caves Project.

Even worse, it now appears that the Department proposes to ignore this maxim in the context of setting the rules for a contested case hearing in this proceeding. As the Commission is aware, NEDC has filed what it styles a "cross-appeal" of DEQ's proposed denial of certification. As the Commission also knows, during the rulemaking process that led to adoption of the Commission's Section 401 procedural rules, NEDC requested that a rule be adopted allowing non-applicants to appeal Section 401 decisions. At DEQ's urging, the Commission rejected NEDC's request. There is currently nothing in the Commission's rules, as NEDC's "cross-appeal" recognizes, that authorizes the filing or hearing of such appeal.

But now, on the eve of the contested case hearing, DEQ proposes that the Commission modify its rules, in effect, to allow for such appeal. DEQ proposes that the Commission adopt the Attorney General's Model Rules solely for the Salt Caves contested case hearing, that it treat the NEDC "cross-appeal" as a petition for party status in the City's appeal under the Model Rules and that it allow NEDC to raise issues not included in the City's appeal. DEQ states that this maneuvering is not designed

to allow for an unauthorized NEDC appeal, but the effect of its proposal would be to grant NEDC every procedural right NEDC seeks in its "cross-appeal." This is particularly distressing insofar as DEQ would allow NEDC to raise issues totally unrelated to the City's appeal issues. NEDC, in fact, if given this right, would be prosecuting its own appeal.

In our attached letter to DEQ, we outline a number of reasons why this maneuvering by the Department would be contrary to law. But the major element of our concern is fairness. This Commission should not allow the rules to be changed in the middle of the game. In order to fulfill its obligation to be even-handed, this Commission must reject the Department's position and order that the contested case hearing will be governed by the rules in effect when the City filed its Section 401 application.

CONCLUSION

In conclusion, the City seeks an order from EQC, as follows:

(1) The Commission hereby directs issuance of a Section 401 certificate to the City of Klamath Falls subject to the condition that the Department and the City will negotiate in the next sixty days a resolution of the Department's temperature concern. Such negotiations will set an appropriate minimum flow based on computer modeling results showing that the project does not cause increases in maximum daily temperatures above 1°F, which is deemed representative of model error.

2. Alternatively, DEQ will reconsider its denial of Section 401 certification for the Salt Caves Project; it will

negotiate an appropriate minimum flow with the City in the next sixty days based on computer modeling analyses showing that the project does not cause "measurable" increases in maximum daily temperatures, assuming "measurable" as 1°F, as originally specified by Administrator Nichols as being within model error; a contested case hearing will be held in abeyance until that time; and following the resolution of the flow negotiations, provision will be made for appropriate public notice and comment.

(3) Recommendations 1, 3, 4 and 5 on pages 9-10 of the Director's October 9, 1987 memorandum on Agenda Item J are rejected.

Sincerely,

Peter Glaser

cc: Hon. George Flitcraft
William Miller
Fred Hansen
Kurt Burkholder, Esq.

129 Southshore Lane
Klamath Falls, Oregon
September 21, 1987

Environmental Quality Commission
c/o Department of Environmental Quality
811 SW Sixth Avenue
Portland, Oregon 97204

Gentlemen:

Enclosed please find a copy of a Herald and News August 30, 1987 publication entitled "Demos to challenge council session" and a partial listing of some citizens' concerns on the closed meeting held on Monday, August 24, 1987 to consider an appeal to the DEQ's August 19, 1987 decision on the Salt Caves Dam application.

The attorney for the Oregon Democratic Party has been out of town for some time and so has been unavailable for consultation and advice. The Secretary of State's office, the Ethics Commission, and the local Klamath County District Attorney have been contacted and notified of our concerns. We have been told that our remedy is a lawsuit in circuit court. This is a costly and time-consuming process that perhaps we cannot afford and that may be too late. A number of us feel that you should know that we consider the DEQ appeal is not only invalid but illegal. Perhaps you can, with this knowledge, challenge where we cannot. In any event, we will pursue this matter to the best of our ability and in the process may request legislation to better redress violations of the open meetings law.

Respectfully yours,

Anita Ward

Anita Ward

cc. to Judy Carnahan, Chair
Oregon Democratic Party

It was reported city was to appeal immediately after DEQ ruling w/o benefit of Council deliberation.

DEPARTMENT OF ENVIRONMENTAL QUALITY
State of Oregon
RECEIVED
SEP 23 1987
OFFICE OF THE DIRECTOR

Some citizens' concerns about the Monday, August 24, 1987 Emergency Executive Klamath Falls City Council Meeting:

1) It was advertised as an executive (closed) meeting before the City Council had a chance to vote for such. According to the Open Meetings Law, there has to be an open meeting first in order to vote for an executive meeting. Meetings to discuss pending litigation may be held in open session if group so decides. The effect was that the general public was actively discouraged from attending. The City Council to some extent had its options limited. Councilwoman O'Brien was under the impression that the group had to go into executive session. She had not been instructed by counsel previously that the group could meet in open session, and that it had to vote for executive.

2) Original notification of the Monday, August 24, 1987 Council Meeting was given to Council members on Friday, August 21, 1984 that the meeting was to be held at 4 P.M. that Monday. On Monday morning, council members were asked/informed that the meeting was to be escalated from 4 P.M. to 2:30 P.M., less than 24 hour notice--which constitutes an emergency. At the open session part, city attorney Jeff Ball was asked what the emergency was. He referred to the notice on Friday and did not seem to understand that the time change made an emergency. When pressed further and the law read/explained to him, he stated that the time change was to accomodate someone's lunch hour. A true emergency! We would contend there was no true emergency.

3) ~~Interested~~ *All* interested parties were not contacted by the city as to the meeting, ~~except for~~ *just* Council members and pro-dam supporters. The city relied on the media to inform one and all.

Carte Blanche
Ex parte Communication

4) Councilwoman Bertha Hultman was not in attendance at the City Council meeting. Mayor George Flitcraft said he had her proxy vote. There was no evidence of a written proxy. In fact, he represented he had phoned, *someone/* prior to her. *meeting,* No votes are allowed in an executive meeting. There was no evidence of a conference call or even of a call made to her during the meeting so she would have benefit of the discussion. Mayor Flitcraft said there was a proxy consensus, which is a contradiction in terms. A proxy is a vote, normally written. A voice or oral proxy? Mayor Flitcraft seems to confuse consensus with majority which is not the same. The Herald and News reported a 4 to 2 consensus. There are only 5 Council members *when all present*. The mayor can only vote in event of a tie, but legally there could be no vote in executive session. At best, there was a division of opinion, 2 to 2, not a majority, let alone a consensus. *A consensus is an agreement of people present.*

5) On the basis of the "informal" decision, which was not legally binding and would have to be ratified or legalized at the next regularly scheduled Council meeting on Tuesday, September 8, 1987, at 7:30 P.M., the city felt authorized to appeal the DEQ ruling *to* the Environmental Quality Com. The legal 20 days for appealing were to end by 5 P.M. on September 8, 1987. How legal is ratification after the fact and after filing deadlines?

6) When challenged on the legality of the "informal" decision, it was reported in the Herald and News that the city did not need the City Council to appeal. It could appeal administratively which it appeared to have done on Friday, September 4, 1987. Why go through the charade of seeming to seek the Council's consent and not truly obtain it through an open meeting which would have legalized the decision? There was sufficient time to call a special meeting between August 24, 1987 and September 8, 1987 *or go into open meeting from executive (the normal procedure) & vote on Aug 24th?*

7) Even though the decision was ratified by City Council on September 8, 1987, is it legal retroactively? Especially in the light of a possibility of a special meeting? Is the appeal legally valid? Is a proxy consensus operable?

8) It is not (entirely) clear what the legal grounds were for the city's appeal. Was it on administrative or unratified emergency executive Council grounds? Which authority prevails or which part of government has authority and consequently liability? Is the city management binding the City Council? Does the City Council have authority?

9) Has the Council ever used prox(ies) before? Why this August 24, 1987 meeting? Why wasn't a vote held immediately after the executive session (the usual normal procedure)?

Demos to challenge council session

By THOMAS HOTTMAN
H&N Staff Writer

Members of the Klamath County Democratic Central Committee in their regular meeting last week voted to ask the Oregon central committee to challenge a special Klamath Falls City Council meeting and the results of an unofficial vote taken during it.

The council meeting last Monday was called to determine if the council wanted city staff to appeal to the state Environmental Quality Commission a decision made by the Oregon Department of Environmental Quality denying a federally madated water quality permit for the city-proposed Salt Caves Dam.

The meeting began in open session, and two council members, Dave Maxwell and Patty O'Brien, voted to go into executive session, from which the public is excluded. Richard Pastega, Ward III council representative, chairman of the local Democratic organization, and a leading opponent of the hydroelectric project; wanted to keep the meeting open and Bill Adams did not vote.

During a report to the Democrats, Pastega questioned whether the meeting was properly advertised in accordance with state laws.

He also believes that the "consensus" vote taken during the meeting to request a hearing before the EQC is not valid. Maxwell and O'Brien supported the move, Pastega and Adams opposed it. A proxy vote from Bertha Hultman, who was on vacation and not at the meeting, broke the tie.

Although the vote is unofficial, city staff members now are proceeding toward an appeal to the EQC. Deadline for the appeal is Sept. 8 — the same day as the next regularly scheduled council meeting during which the question is predicted to be voted on formally.

In another matter, some of the the central committee members were critical of a draft proposal for a Klamath County regional economic development strategy but were glad to see that specific references to the Salt Caves Dam project had been removed.

The proposal prepared by Team Klamath members was considered last Tuesday. It will be presented in a modified form to a multi-county group Sept. 15 in Brookings. Team Klamath includes representatives of agencies involved in economic development, including OIT, Klamath County, the city of Klamath Falls, Klamath County Economic Development Association and Klamath County Chamber of Commerce.

The proposal centers on support for small business and is based on a series of meetings that began in February 1985 and other studies. Under the draft plan, the principal activity of the strategy would be expansion and recruitment of high-technology industrial businesses in specially targeted manufacturing sectors.

Lake, Jackson, Josephine and Curry counties are in the same region as Klamath for the strategy that will be submitted to Gov. Neil Goldschmidt as part of his Oregon Comeback plan.

Goldschmidt has asked that regions in the state develop regional economic development strategies by December 1990, which eliminates the proposed Salt Caves Dam as a short-range strategy. Dam project officials predict it could be on line in late 1993.

"Our economic development doesn't belong to a small group of 'in' people who mosity are supporters of the Salt Caves Dam," said Anita Ward, DCC vice chairman.

The dam proposal was "railroaded" into previous strategies, said Roger Hamilton, a member of the Klamath County Board of Commissioners and a dam opponent. He also considered the new economic plan not to be a mulit-county plan.

"Klamath County has to join in with other counties in the region to be effective" because multi-county plans are more likely to ge funded for implementation, he said. "We need to broaden our horizons."

Adoption of a regional plan will follow a lengthy process that includes public hearings and action by the commissioners.

Richard L. Pastega
428 South Ninth Street
Klamath Falls, Or. 97601
September 21, 1987

Commissioners
Environmental Quality Commission
811 S. W. Sixth Avenue
Portland, Oregon 97204

Dear Commissioners:

Enclosed is a letter from me to the District Attorney of Klamath County, Edwin Caleb. This letter outlines my objections to a possible illegal meeting held by the Common Council of the City of Klamath Falls at 2:30PM on August 24th, 1987.

The formal decision to appeal the DEQ's denial of the 401 water permit for the Salt Caves Dam Project was taken on September 8th, 1987, at a regular city council meeting. Nevertheless, the staff had already appealed this decision based on the possibly illegal emergency executive session held on August 24th, 1987.

Hopefully your commission will look into the city's basis for their appeal of the water permit denial.

Sincerely,

Richard L. Pastega

Richard L. Pastega

Richard L. Pastega
428 South Ninth Street
Klamath Falls, Or. 97601
September 10, 1987

Ed Caleb, District Attorney
Klamath County Court House
Main Street
Klamath Falls, Oregon 97601

Dear District Attorney Caleb:

During a meeting with Roxann Osborne concerning a possible illegal meeting of the Klamath Falls City Council on August 24, 1987, at 2:30PM, it was suggested that the complaints be written out for your information.

The following are the incidents as I experienced them:

1) The meeting was originally scheduled for 8PM on Monday August 24th. This was done by telephone. The City Recorder called me and asked if I could attend such a meeting, that it would deal with an appeal of the DEQ denial of the 401 permit for the Salt Caves Dam Project. She indicated that it would be an executive meeting. I asked for the ORS numbers. Ms. Fritz said she would call me back.

2) When Ms. Fritz called back she cited the ORS 192-660 (1) (8) and informed me that the city attorney said the council would decide if it was to be an open or closed session.

3) On the morning of the 24th of August the city recorder called to inform me the meeting had been changed to 2:30PM. And that the coundil would decide if the meeting was to be open or closed.

4) At 2:30Pm on August 24th, the Mayor called the meeting to order in the staff meeting room of the City Hall Annex. Four members of the city council were there. There were also a number of citizens in the room as well as members of the media. Several people were smoking when I went into the room. They continued smoking throughout the meeting. When questioned about this they replied that the meeting was to be an executive session and smoking was allowed in executive sessions.

5) Following the call to order the Mayor asked for a motion to go into executive session and cited ORS numbers. In the discussion before the vote I asked the city attorney why the need for an "emergency" meeting (one called with less than 24 hours notice). Mr. Ball replied that it was necessary to increase the attendance. The vote to go into executive session was by voice with two in favor, one opposed and one abstention. The citizens were asked to leave the room which they did. Media representatives were allowed to stay as were numerous staff members. The city attorney acknowledged that he had not notified "interested parties" as required by the open meetings law. He did notify the media.

6) The city attorney did not notify the council that an executive session was not manditory until the end of the meeting.

7) Items not dealing with pending litigation were discussed during the meeting.

8) When the Mayor asked if there was a concensus to have the staff appeal the DEQ denial to the EQC the result was a two to two division. At this point the Mayor said he had a proxy from Councilwoman Hultman who did not attend the meeting, and declared a concensus in favor of the appeal. The proxy was not written as far as I know.

Sincerely,

Richard L. Pastega

Richard L. Pastega

22 total

October 9, 1987 EQC Breakfast Meeting Invitation List

Mayor Bruce Devlin
City of Bend
PO Box 431
Bend, 97709

Larry Patterson
City Manager
PO Box 431
Bend, 97709

Mayor Bob Riggs
City of Redmond
455 S. 7th St.
Redmond, 97756

Bob McWilliams
City Manager
455 S. 7th St.
Redmond, 97756

Mayor Wallace L. Boe
City of Prineville
400 Third St
Prineville, 97754

Henry Hartley
City Administrator
400 Third St.
Prineville 97754

Mayor Rick Allen
City of Madras
416 Sixth St
Madras 97741

Bud Miller
City Administrator
416 Sixth St
Madras 97741

Mayor Linda Swearingen
City of Sisters
PO Box 39
Sisters, 97759

Becky Lu Brown
City Administrator
PO Box 39
Sisters, 97759

Judge Dick Hoppes — No - by letter 10-6
Courthouse
300 E. Third
Prineville 97754

Judge Herschel Read
Courthouse
657 C Street
Madras 97741

Commissioner Lois Prante
Courthouse
1164 NW Bond
Bend 97701

Commissioner Dick Maudlin
Courthouse
1164 NW Bond
Bend, 97701

Commissioner Tom Throop
Courthouse
1164 NW Bond
Bend, 97701

Representative Bill Bellamy
5269 SW Gem Lane
Culver 97734

Representative Bob Pickard
19190 Pinehurst Rd
Bend 97701

Dennis Carter
LaPine Special Sewer District
PO Box 2128
LaPine 97739

Senator Peter Brockman
70825 Indian Ford Rd.
Sisters, 97759

Mary Bartles
LaPine Special Sewer District
PO Box 2128
LaPine 97739

Ken Travis
LaPine Special Sewer District
PO Box 2128
LaPine 97739

Representative Wayne Fawbush
5000 O'Leary Rd
Hood River 97031

oute Slip

Date 10/2

Name	Division/Section	Initial	Date
a Payne / Fred Hansen			

equested		investigate		per conversation	
roval		justify		prepare reply	
ment		necessary action		return with more detail	
fer		initial and return		review and circulate	
your information		note and file		signature	

Final breakfast invitation mailing list.

M: Heaton

Phone No.

ores 51569

☐ See Other Side

Recycled Paper

October 1, 1987

Name
Title
Address
City/Zip

Dear

The Oregon Environmental Quality Commission, DEQ's policy board, will be holding one of its regularly scheduled meetings in Bend on Friday, October 9, 1987. They have scheduled an informal breakfast meeting to discuss items not on the regular agenda. We believe you may be interested in having breakfast with the Commission to bring issues of your concern directly to their attention or to learn more about Commission and DEQ activities in Central Oregon.

The breakfast meeting will be held at the following location and time:

Regina's Restaurant
415 NE 3rd Street
Bend
8:00 - 9:30 AM

The regular meeting will be held at the Bend School District Administration Building, 520 NW Wall, and will begin at 9:30 AM. This meeting will begin with a public forum agenda item that would also provide a time for you or any member of the public to address the Commission on any subject matter.

If you believe you will be able to attend the breakfast meeting, please call me or our secretary, Penny Merrill, at 388-6146 to ensure we have adequate space.

Sincerely,

John Hector
Regional Manager

cc: James Petersen, EQC Chairman
Fred Hansen, DEQ Director

October 9, 1987 EQC Breakfast Meeting Invitation List

Mayor Bruce Devlin
City of Bend
PO Box 431
Bend, 97709

Larry Patterson
City Manager
PO Box 431
Bend, 97709

Mayor Bob Riggs
City of Redmond
455 S. 7th St.
Redmond, 97756

Bob McWilliams
City Manager
455 S. 7th St.
Redmond, 97756

Mayor Wallace L. Boe
City of Prineville
400 Third St
Prineville, 97754

Henry Hartley
City Administrator
400 Third St.
Prineville 97754

Mayor Rick Allen
City of Madras
416 Sixth St
Madras 97741

Bud Miller
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416 Sixth St
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Mayor Linda Swearingen
City of Sisters
PO Box 39
Sisters, 97759

Becky Lu Brown
City Administrator
PO Box 39
Sisters, 97759

Judge Dick Hoppes
Courthouse
300 E. Third
Prineville 97754

Judge Herschel Read
Courthouse
657 C Street
Madras 97741

Commissioner Lois Prante
Courthouse
1164 NW Bond
Bend 97701

Commissioner Dick Maudlin
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5269 SW Gem Lane
Culver 97734

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19190 Pinehurst Rd
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LaPine 97739

Ken Travis
LaPine Special Sewer District
PO Box 2128
LaPine 97739

Representative Wayne Fawbush
5000 O'Leary Rd
Hood River 97031

DEPARTMENT OF ENVIRONMENTAL QUALITY MEMORANDUM

Central Region - Bend **DATE:** October 9, 1987

TO: Environmental Quality Commission

FROM: John Hector, Central Region Manager

SUBJECT: Manager's Report

BACKGROUND
The Department's Central Region covers nine counties in the central portion of the state. These counties are: Hood River, Wasco, Sherman, Jefferson, Crook, Deschutes, Klamath, Lake, and Harney Counties. The Central Region office is located in Bend and includes four technical staff and a secretary.

FINE PARTICULATE STANDARDS - PM10
In July 1987, EPA approved a new ambient air standard that will replace the current total particulate standard. This new standard will only control fine particulate that is 10 microns or less in size. This new standard is called the PM10 (10 micron particulate matter) standard.

In Oregon, EPA has determined that four geographical areas have a very high probability (95%) of exceeding the new PM10 limits and has placed them in its Group I (non-attainment) category. Designated Group I areas are Eugene-Springfield, Grants Pass, Medford-White City and Klamath Falls. These areas must submit an approved control plan to EPA by May 1, 1988. In order for the Department to meet this deadline, public hearings must be held in March and Commission approval of these hearings must be given in January. Thus the schedule to meet EPA's schedule is very tight and development of control strategies has begun in most Group I areas.

EPA has also established a Group II list of areas that it believes have a 20 to 95 percent chance of exceeding the new standards. These areas include Bend, Portland, La Grande, and Oakridge. Additional air monitoring is scheduled in these areas to determine their compliance status.

Group I non-attainment areas are required to develop and implement controls that project attainment in a three to five year period. Any Group II area found in non-attainment would also be placed on a schedule to submit its control strategy within nine months of designation.

Pelican City
In 1983 the Health Division designated Pelican City, an area north of Klamath Falls, a health hazard due to failing septic drain fields. Numerous delays have prevented connecting this area to the Klamath Falls sewage system, however it now appears that adequate local and other funding has been obtained and the Department has approved the engineering plans. Construction is scheduled to be completed in October 1988.

Bend
The City of Bend has extended its sewer north and south on Highway 97 to serve some of the larger commercial developments. In addition, a number of other large residential and some smaller commercial uses, located adjacent to these lines, should be connected to the sewer. Staff is working with the City to ensure that connections to these new lines are made on a reasonable time schedule. Priority will be given to those larger sources that are discharging without treatment into disposal wells (drill holes).

Disposal Wells
Staff is also evaluating the extensive use of disposal wells in Deschutes County for discharging storm waters. Many of these storm drains are in locations subject to spills of hazardous materials, such as on gasoline station parking lots and major highways. A major discharge of a hazardous material into a disposal well could have a serious impact on the regional groundwater quality. Existing rules require the owner or operator of storm water disposal wells to have available the means to temporarily plug or block the well in the event of an accident or spill. It appears however, that few disposal wells have this capability.

PARTICULATE FALLOUT
A continuing problem of wood-dust fallout near several large wood products facilities has resulted in the initiation of studies and requiring additional source controls. In Bend, the area near DAW (old Brooks Scanlon mill) and Willamette Industry's KorPine Division have experienced wood fallout for many years. DAW is now on a schedule that will phase-out the old Dutch oven boilers and improve its new boilers. This project should reduce the fallout of burned wood products. KorPine is concentrating its efforts on adding controls to various air moving systems that vent to atmosphere.

In the northeast portion of Bend, Bend Millwork Systems (Pozzi) is also a source of wood-dust fallout problems. New ownership of this company has agreed to initiate several major projects to reduce wood-dust emissions from its air moving equipment. These projects should reduce fallout near the facility.

In the north portion of Klamath Falls, the Jeld Wen complex is also a source of wood-dust fallout. This plant has added some new air control equipment, and a planned expansion of the plant will allow additional controls to be added to the new and existing sources of wood-dust.

DISCUSSION CENTRAL REGION AIR QUALITY ISSUES

BACKGROUND

Air quality in the Central Region is generally good. Air monitoring will be discontinued in The Dalles. Klamath Falls has been discovered to have a major wood smoke problem and Bend is being further evaluated for smoke and carbon monoxide problems. On July 1, 1987 EPA published a new national ambient air quality standard for particulate called PM10. The new standard focuses on small inhalable particles that are of greater health concern than larger particles. It replaces the old total suspended particulate (TSP) standard. The EPA had previously divided the state into three groups based on projected PM10 attainment status:

Group I areas do not meet the standards. Cities in that category include Klamath Falls in the Central Region as well as Medford, Grants Pass and Eugene. Federal law requires that these cities develop a State Implementation Plan (SIP) showing how the standard will be attained and maintained. Plans must be submitted by May 1, 1988. Group II areas may not meet the standard. Cities in this category include Bend in the Central Region, Oakridge, Portland and La Grande. A monitoring plan must be developed for these cities to determine whether or not they have a PM10 attainment problem. Again, the plans must be developed by May 1, 1988. If monitoring confirms PM10 nonattainment status control strategies will be due within nine months. Group III areas are considered to meet the PM10 standard. The remainder of Oregon is included as Group III areas.

KLAMATH FALLS PM10

Particulate monitoring conducted by the Department during the last three years has demonstrated that the residential area southeast of the central business district (CBD), and possibly the CBD itself, does not meet the new federal health standards for PM10. In fact, the south suburban area of Klamath Falls has the highest PM10 levels measured thus far in Oregon. As a result, Klamath Falls has been designated by EPA as a Group I PM10 area.

A recent public opinion survey indicates that most Klamath Falls residents consider woodstoves to be the major air pollution contributor. This is consistent with available monitoring and emission data. The high altitude and predominance of pine fuel may exacerbate the woodstove problem. Additional DEQ studies are expected to confirm the importance of woodheating as an air pollution source in Klamath Falls. Wood products industries may also contribute, to a lesser degree, to the problem. Local officials have questioned the sources and severity of the problem and have expressed concern about effects on economic development due to labeling as a PM10 problem area.

Group I designation requires that the Department develop a State Implementation Plan by May 1, 1988 that will bring the area into compliance with the standard within three years after EPA approves the SIP. City and County officials have begun the process of setting up an advisory committee to develop control strategies to be included in the SIP. Department staff will be available to the committee to provide

FYI

Tina -

This is the transcript before Hal + I made major editing changes

Carolyn

BEFORE THE ENVIRONMENTAL QUALITY COMMISSION

FOR THE STATE OF OREGON

In the Matter of the Establishment of a Solid Waste Disposal Site to Serve Clackamas, Multnomah and Washington Counties)

TRANSCRIPT OF PROCEEDINGS

Friday, October 2, 1987

EQC Board Members:

James Petersen - Chairman

Arno Denecke - Vice-Chairman

Sonia Buist - Member

Mary Bishop - Member

W[illegible]ace Brill - Member

MOORE & HENDERSON
PROFESSIONAL COURT REPORTERS
SUITE 2722 PACWEST CENTER
PORTLAND, OREGON 97204
(503) 226-3313