

12/9/1988

OREGON

ENVIRONMENTAL QUALITY

COMMISSION MEETING

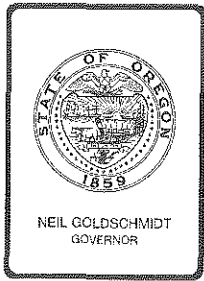
MATERIALS



State of Oregon  
Department of  
Environmental  
Quality

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## *Environmental Quality Commission*

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

### ENVIRONMENTAL QUALITY COMMISSION MEETING

December 9, 1988

Clackamas Community College  
Environmental Learning Center  
19600 South Molalla  
Oregon City, Oregon

The Commission will meet at DEQ at 7:30 am and will visit McFarlands Yard Debris Recycling Operation, Solid Waste Transfer Station at Oregon City, and Clackamas Community College Environmental Learning Center prior to the start of the meeting at 10:30 am.

#### 10:30 am CONSENT ITEMS

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

- A. Minutes of the November 4, 1988 EQC Meeting.
- B. Monthly Activity Report for September and October 1988.
- C. Civil Penalties Settlement Agreements--None
- D. Tax Credits for Approval.

#### 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

- E. Request for Authorization to Hold a Public Meeting on Rule Amendments to Delegate Air Quality Plan Approval and Denial Authority to the Director.

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.

- F. Proposed Adoption of Eugene-Springfield CO redesignation and Adoption of Maintenance Plan as a Revision to the State Implementation Plan, OAR 340-20-047.
- G. Request by the City of Halsey for Exceptions to OAR 340-41-026(2) (and EQC Policy Requiring Growth and Development be Accommodated within Existing Loads).
- H. Request by the City of Adair Village for Exceptions to OAR 340-41-026(2) (and EQC Policy Requiring Growth and Development be Accommodated within Existing Loads).
- I. Informational Report: Review of Metro Solid Waste Reduction Program.
- J. Informational Report: Mid-Multnomah County Sewage Project Bonds
- K. Informational Report: 1989-91 Budget Status

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 10:30 a.m. to avoid missing an item of interest.

The next Commission meeting will be Friday January 20, 1989. There will be a short work session prior to this meeting at 2:30 pm Thursday January 19.

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.

OREGON ENVIRONMENTAL QUALITY COMMISSION MEETING

WORK SESSION

December 8, 1988

Conference Room 4

Department of Environmental Quality

811 SW Sixth Avenue

Portland

**Note:** The purpose of the work session is to provide an opportunity for informal discussion of the following items. The Commission will not be making decisions at the work session.

- 2:30 pm Discussion of Medford Air Quality Issues (Wood stoves, Monitoring, etc.)
- 3:15 pm Status of Education Efforts
- 3:45 pm Water Quality Program-Background Discussion
- 4:30 pm Staff Report Format

# DRAFT

Minutes  
EQC Retreat  
October 20-21, 1988  
Flying M Ranch

Participants at the retreat included the following:

Commission Members:

Chairman Bill Hutchison  
Genevieve Sage  
Bill Wessinger  
Wally Brill  
Emery Castle

Department Staff:

Fred Hansen  
John Loewy  
Mike Downs  
Stephanie Hallock  
Tom Bispham  
Al Hose  
Harold Sawyer  
Nick Nikkila  
Monica Russell  
Dick Nichols  
Carolyn Young

Others present during portions of the retreat include:

Tom Donaca, Associated Oregon Industries  
Tom Horn  
Ed Whitelaw, Professor of Economics, University of Oregon,  
and President ECO Northwest  
Robert Ball  
Roger Swenson, Unified Sewerage Agency  
Debie Garner, Unified Sewerage Agency  
Andy Carron, National Council for Air and Stream Improvement  
Scott Ashcom  
Dick Reiten, Economic Development Department  
Becky Kreag, Water Resources Department  
Bruce Andrews, Department of Agriculture  
Jim Brown, Department of Forestry  
Jim Ross, Department of Land Conservation and Development  
Rollie Rousseau, Department of Fish and Wildlife  
Ward Armstrong, Oregon Forest Industries Council  
Doug Morrison, Northwest Pulp and Paper Association  
John Charles, Oregon Environmental Council  
Ray Wilkison, Oregon Forest Industries Council  
Don Arkel, Lane Regional Air Pollution Authority  
Marty Douglas, Lane Regional Air Pollution Authority

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Joel Ario, Oregon State Public Interest Research Group  
Dave Cracke, Oregon State Public Interest Research Group  
Quincy Sugarman, Oregon State Public Interest Research Group

### Review of the August 22-23 Retreat

The retreat began with a discussion of followup actions from the August 22-23, 1988 retreat that was held at Silver Falls State Park Conference Center. A summary of followup actions had been provided in advance to serve as a basis for this discussion.

The commission wondered if it would be possible to have a draft policy on delegated programs brought back earlier than the staff targeted 3/2/89 work session. Fred Hansen indicated that Mike Downs, the designated lead for this item, was extremely busy with the SB 122 Site Inventory at present. Further, the department does not expect any program delegation issues to arise before the targeted discussion in March 1989.

With respect to the Interagency Coordination item, the staff indicated that a draft would be available in December, with a work session discussion scheduled for January 19, 1989.

There was some discussion regarding the adequacy of definition of beneficial uses of water. The initial part of further discussions on antidegradation will focus on beneficial uses and their role in establishment of water quality standards and an antidegradation policy.

The Commission expressed a desire to accelerate the followup on land use if possible to avoid missing an opportunity to assure that land use decisions adequately prevent environmental quality problems.

The Commission agreed that discussions taking place during the scheduled work sessions should not be duplicated in the regular meeting the next day. There should be more time at the work sessions for informal general briefings on the background and status of topics that are not on the next day's agenda.

A schedule of potential agenda items for future meetings through July 1989, was distributed to the participants. The intent is to update such a schedule after every meeting to assist in planning meeting locations and work session topics. Discussion of this schedule was deferred to later in the retreat.

The Department advised that significant work has been done on a draft rule to establish an enforcement policy. This rule will be on the agenda for the November 4, 1988, EQC meeting for hearing authorization. In connection with this discussion, there was mention of the Department's legislative concept to establish a lab certification program to assure accuracy of data generated at various laboratories and reported to DEQ as a part of compliance requirements. Tom Donaca requested that the Department build a reciprocity process into their concept so that a lab providing data to more than one state does not have to go through independent certification processes in each state.

Carolyn Young will report at the December 8, 1988, work session on the status of ongoing education efforts.

Discussions were adjourned for lunch.

#### A Quality Environment -- Oregon's Greatest Natural Resource

Following lunch, Fred Hansen introduced Ed Whitelaw, Professor of Economics at the University of Oregon, and President of ECO Northwest, a consulting firm. Mr. Whitelaw presented his views on factors which affect the general economy and economic trends, and the relationship to environmental quality.

Significant points made by Mr. Whitelaw and that resulted from the discussion which followed are as follows:

- A graph of total employment in Oregon shows an overall long term trend of growth, with short term fluctuations around the trend line. Policies of government can affect the slope of the long term trend line, but can do relatively little to influence the short term fluctuations. A diverse economy tends to reduce the magnitude or severity of short term fluctuations.
- We want to find instruments or tools that can help increase the slope of the long term economic trend line. We don't know exactly what influences the line, but a few factors have been identified that seem to have some influence on economic growth. Among these are proximity to the pacific for overseas trade, situated within the huge west coast economy, extensive educational system, public works, research universities, vast forest and agricultural resources, strong populist tradition, and quality of life.
- Old economic theory held that people followed jobs. Today, the theory is that jobs follow households. Therefore, to limit the severity of cycles, you need a workforce that is

intelligent, skilled, and happy. Quality of life is a key factor.

- Failure to invest in public works adversely affects long term productivity. Poor roads, sewers, etc. drive up the cost per unit of output for small businesses particularly. Oregon has reduced its per capita investment in public works by 1/3 since 1980. Funds that should go to maintain existing facilities are being used to fund facilities for new development, with the result that we are losing ground. We are growing, and should be spending more just to keep up.
- Oregon's plus in quality of life is the outdoor environment. (It isn't theater, museums, etc.) The real quality of life is important, but the "perception" of the quality of life is more important -- if you want to encourage growth. The perception is difficult to create, easy to destroy.
- A person's total income consists of monetary income and non-monetary income. Quality of life is a "fringe benefit" that is part of the non monetary income. This factor is difficult to quantify. However, it can in part explain the differences in salary level for similar work in different parts of the country.
- We must be careful to not inadvertently destroy our economy and economic stability by undermining the quality of life that is a very real, although not well quantified, portion of the economy.
- We can exploit our natural resources to produce jobs, at least in the short run, but that may not be consistent with a desired trend for long term growth.
- Other states can boast an agricultural or forest based economy, an educated workforce, etc. Oregon's uniqueness is in its "quality of life". We must begin to consider the full range of environmental tradeoffs in our decision making.

#### Environmental Quality and Economic Development

Following some questions, Dick Reiten, Director of the Economic Development Department joined Mr. Whitelaw at the table to continue the discussion of the relationship between economic development and environmental quality.

Mr. Reiten stressed that Oregon's environment and quality of life is unquestionably its major selling point. He also noted that



land use planning was one of the best things the state had done to support economic development. He further noted that 75% of the jobs outside the metropolitan area are tied to wood products. This presents a real problem to government to assist communities in the transition to a wood products industry that is less labor dependent and facing reductions in supply of logs. Maintaining quality of life in these communities is difficult. There is a real need to develop secondary wood products -- to add value to the product, not just cut more trees.

Mr. Reiten further noted that the working relationship between DEQ and Economic Development was very good, a true partnership.

In the general discussion which followed, these points were made:

- Only one county chose secondary wood products as its primary regional economic strategy. Most chose tourism.
- It is inevitable that some communities in this state will die out. We need to face it and advise residents not to spend their savings waiting for the industry that will not locate there.
- Growing environmental quality perceptions relating to garbage, hazardous waste, nerve gas, radioactive contamination at Hanford, etc. can cost us our environmental edge on economic advantage. We need to get in better control in this area.
- Many of Oregon's immigrants are retired. They place a stress on the medical system, public works, etc. but are not seeking jobs.
- There needs to be better communication between industry and the legislature regarding real problems industry is facing.
- We need to do a better job of communicating the true costs and benefits that result from the decisions we make or don't make. Too often, decision makers do not perceive they are sharing in benefits in the same way they are sharing in the costs.

Chairman Hutchison thanked Mr. Whitelaw and Mr. Reiten for their excellent presentations and discussion.

#### Water Management in Oregon

Following a brief recess, the panel on Water Management in Oregon was assembled. Each panel member made a brief presentation

highlighting potential future conflicts in water management and opportunities for minimizing or mitigating these conflicts through better coordination. Panel Members and significant points of their presentation are as follows:

Becky Kreaq, Administrator, <sup>Ms. Kreaq</sup> Resource Management, Department of Water Resources. ~~Becky~~ briefly discussed the proposed multi-agency Oregon Water Management Program for 89-91 which identifies 12 issues and 90 tasks relating to those issues. DEQ has a lead agency or coordinating agency role in 2/3 of the tasks. This stresses the realization that neither DEQ nor the Water Resources Department can do it's job without assistance from others. Coordination is good at the department level and is improving. A challenge in front of everyone is to improve the coordination at the Commission level.

Bruce Andrews, Deputy Director, Department of Agriculture. Agriculture in Oregon is changing. It must change to survive because markets are changing. 85% of Oregon products are marketed outside the state. To strengthen our agriculture economy, we must add value to the products before export from the state, rather than ship raw product. This means a greater demand for water -- for processing as well as for irrigation. Ag is pivotal in the discussion of groundwater. While groundwater quality in Oregon is good compared to other states, we need to find ways to protect it without striking fear and foreboding in the hearts of agriculture. We must overcome the perception that government is trying to put the farmer out of business. Poverty is no friend of the environment. Industry must be healthy to protect the environment. Agencies have different perspectives on the issue, and we understand that. But, as professionals, we can work together.

Jim Brown, State Forester, Department of Forestry. Industry is looking to public lands for its primary timber supply for the next 30 years because private lands have been harvested and are in a regrowth phase. Supply will decrease because of a drop in timber supply on U.S. Forest Service land due to the forest planning process. Some inevitable tension will occur between agencies because of differences in mission and professional differences of opinion. Non-point sources, TMDL's, and cumulative impacts are concerns that are developing because of the lack of solid information. Better information is needed to progress from abstract value statements to real understanding of costs and benefits.

Jim Ross, Director, Department of Land Conservation and Development. LCDC has a grade of B or B- in planning overall, but the grade is an F when it comes to water. Groundwater and wetlands are the prime examples. Groundwater was virtually unaddressed in the plans, and now conflicts are becoming apparent with rural residential development relying on the local groundwater supply being targeted into areas now deemed critical groundwater areas. In the case of wetlands, all agencies participated, and we thought a good job was done. Now, inventory information is better, and earlier commitments made by federal agencies are not being honored.

The periodic review process affords an opportunity to address new state programs and new data and information. We must notify local governments of new data and programs as the first step. If we don't have adequate information on groundwater quantity and quality, we must find a way to get it -- otherwise we lose a primary opportunity to prevent problems through good planning.

Rollie Rousseau, Deputy Director, Department of Fish and Wildlife. Fish and Wildlife has no authority to manage water. They are an advocate for fish and wildlife needs as it relates to water. There has been a long working relationship with DEQ, particularly with respect to development and adoption of water quality standards. All agencies have been good at adopting new rules and regulatory programs. But, all have not been so good in the compliance assurance side. The public is demanding better evidence of compliance. Perhaps we need to look to other mechanisms to leverage available resources in this area -- such as contracting with the state police or other agencies with an existing field force for compliance activities.

Fred Hansen, Director, Department of Environmental Quality. In the past, we have focused on point sources, and achieved major environmental improvements. We have reached a point of diminishing returns in this area. We must now turn our substantial efforts to non-point sources or area wide sources -- both urban and rural. Land use designations and regulations are a key. We need new strategies to deal with these issues and the tradeoffs related to these issues. We must focus on getting the data needed to support the difficult decisions that will force changes on an unconvinced population. Coordination has always been good at the Department level. It is better at the Director level, and beginning to bloom at the Commission level.

A general discussion period followed the presentations. Significant points raised are as follows:

- Everyone (citizen, farmer, fisherman, camper, etc.) has been impacting the liveability and environment without realizing and paying the true costs. We need to figure better ways to communicate costs, modify behavior, and get a better chance for success in dealing with the issues.
- We must deal with the perception of lost value of property due to regulation. The Constitution does not guarantee that you can use your land for the highest value. Regulation is to protect society as a whole. "Taking" does not occur until regulation prohibits all reasonable use and reduces the value to essentially zero.
- Management of Oregon's natural resources (for broad benefit of the public) is funded mostly from fees. 1.7% of the state general fund goes to management of natural resources. By contrast, 1% goes to fund the operation of the legislature.
- Oregon's system of boards and commissions produces some inefficiencies and drain on agency energy, but it continues to be the strength of the Oregon system. Care needs to be exercised to make sure that legislatively mandated advisory committees are not proliferated on top of the commissions.

Chairman Hutchison thanked the panel members for their presentations and participation in the discussions. The session was then adjourned for dinner.

DEQ in the 1990's: Lessons of History and Prospects for the Future

Following dinner, Chairman Hutchison introduced the speakers for the evening discussion on DEQ in the 1990's. Tom Donaca made the initial presentation followed by John Charles. General discussion followed.

Tom Donaca noted several lessons from history in his presentation and made the following points:

- DEQ serves the public in Oregon. Industry is a part of that public. Problems must be faced together.
- John Mosser, a former chairman of the Sanitary Authority established a tone that has been followed since: Penalties were the last resort; always available for use, but as a last resort. The reason: penalties bring attorneys into the

process. The debate on procedural issues that almost always follows delays consideration of technical issues which the attorneys don't understand anyway. Therefore, seek ways to focus on achieving the result -- on solving the problem. This tone has resulted in significant environmental results, with relatively few situations where penalties were necessary. Make sure you know what you are doing if you change this long pursued philosophy.

- Funding and position limitations exist. Federal funding is declining although demands are increasing. Oregon is in the top 10 states in the country in assessment of fees. Demands are increasing. The increasing demands do not carry with them a sense of cost, benefit, or who pays. Thus, it is necessary to prioritize allocation of limited resources.
- DEQ built its reputation on successes in the Air and Water Programs. These programs have no mentors in the legislative process today. They are still vital, although not new and sexy. They are at risk of being downgraded in favor of the newer programs. If this occurs, and these programs slip, you will lose credibility with the public.
- It takes a long time (4 to 5 years or more) for meaningful results from major legislation or rules to become apparent. This includes understanding the situation, hiring consultants, developing plans, constructing facilities, etc. This is compounded by staff turnover during the process.
- Interagency coordination is good between legislative sessions. But during the session, things happen too fast. Multiple committees, multiple agencies, multiple subcommittees of ways and means, together with the speed of events, makes effective coordination very difficult.

John Charles made the following points:

- Things that worked well for environmental control in the 70's and 80's will not work well from here on out. The shift from point source to non-point source emphasis guarantees this. Further tightening down on the industrial sector will not accomplish much for environmental quality. Effectiveness will be determined by how well we handle this shift in emphasis.
- DEQ needs to devote more resource to influencing key day to day land use decisions.

- Oregon Environmental Council believes environmental laws are not being adequately enforced. The historic approach of treating people fairly and nicely for the first violation and then turning up the screws with subsequent violations is not appropriate. The standards should be clearly set, then enforced. If the standard is not good or fair, it should be modified rather than using discretion to not enforce in the instance. This is increasingly important in the non-point source area where you may never catch a violator again. People have no respect for a program that allows violations.
- Most within DEQ believe the agency is there to implement legislative policy rather than be an advocate for the environment; others believe DEQ should be more of an advocate for environmental change. DEQ is effective in influencing legislation. The agency and the Commission should assume a more visible advocate role, including support for the initiative to ban smoking. The Commission should also articulate a position on what should be done about field burning and other significant issues. (Fred Hansen noted for the record that it is against state law for public employees to advocate or express opinion on ballot measures.)

Chairman Hutchison thanked the panel members for their presentations and participation in discussions. The session was then adjourned for the evening.

### Strategic Planning

Chairman Hutchison began the Friday Morning session on Strategic Planning with a question on the desirability of strategic planning. He noted the discussion the evening before on the need to prioritize limited resources, to know where we are in meeting federal requirements, and to not let the traditional air and water programs slip. He also noted that prevention of pollution perhaps has not played as important a role as it should in the future. He also stressed the need for the Commission to get a handle on the budget, and to improve the way policy is reflected in the budget. All of these items are an endorsement of the need for planning. He then opened the discussion on the desirability to pursue strategic planning.

Stephanie Hallock supported the need to do strategic planning. She noted that the first step is to develop a plan to do the planning. Staff investment of time in the process can be large, therefore they need to know where you are going.

Nick Nikkila noted that he had survived strategic planning in Missouri. Based on experience, he stressed the need to recognize

that a strategic plan is a living document that must be continually updated. Don't make format so stilted that it is difficult to express what you are going to do. The format can kill you if it is not flexible.

Chairman Hutchison questioned the appropriateness and value of public input in the process of developing a strategic plan. Nick Nikkila and Stephanie Hallock both indicated that public input was not a part of the processes they had experienced. All agreed that it is important to be aware of public perceptions and expectations, however. Tom Donaca noted that the public has lots of input to DEQ. He also noted that most programs are pre-mandated, leaving DEQ limited availability to shift funds to address other perceived priorities. Public input in the traditional sense therefore has limited impact.

Emery Castle commented on the process of strategic planning. Based on his involvement with both successes and failures, he identified two things to keep in mind: 1) the need to identify benefits to the department in the area of internal communication and how each individual's position fits in the larger picture; and 2) the need to recognize the benefits to the Commission in understanding and appreciating the interdependence of decisions (ie a decision in one area has implications on other areas). In short, decisions must not be isolated. He noted that a plan document does not give answers. A plan must be continuously evolving, therefore a document is not the answer -- but the process is. There is a need to identify ways to improve decision making. Finally, he suggested that subcommittees might be used to study issues in greater depth to better prepare for major decisions.

Bill Wessinger expressed great trepidation on going into strategic planning based on his experience. He didn't want another book to place on the shelf. He preferred a one page outline to aid in understanding the bigger picture and why we do things. He urged care in the investment of significant staff time in preparing a plan document when that staff time could perhaps be better spent on other things.

Chairman Hutchison noted the importance of keeping the process simple.

Harold Sawyer noted past department efforts on a program by program basis to develop a Mission Statement, Goals, Objectives, and Work Plans. These process were valuable in stimulating free and open discussion between the involved staff in a workshop setting. The greatest problem with this past process was that the individual program pieces were never brought together into a

single agency-wide picture. Basic assumptions underlying the planning were not challenged and tested. The process also tended to produce thick plan documents that were not very dynamic. He noted that what is needed now is a systematic approach for pulling the elements of the various programs into a single picture -- presented in brief form in no more than 4 pages.

Tom Bispham noted that without plan, day to day concerns prevail, and the future is forgotten. When everything is a priority, nothing is really a priority. He expressed the view that we are on the front end of wave of rejuvenation of the environmental movement. We therefore need to take advantage of present opportunity. We need to identify and do an excellent job on the critical few priority items. Bill Wessinger expressed agreement with these views.

Fred Hansen stressed that everyone agrees that the last thing we need is a strategic plan document. What we need is strategic thinking -- the process, the approach, the thinking, the vision of where we want to go, the marshalling of resources to get there. We are experiencing growth -- and we need to better integrate the growing organization. It is not the plan that is important, it is the planning; not the document, it is the thinking.

Chairman Hutchison summarized the consensus of the group that a dynamic strategic planning process does present an opportunity for the Department and Commission to do a better job.

The discussion then turned to the issue of how to launch the strategic planning process.

Fred Hansen recognized the time constraints on the Commission but stressed the need for the Commission to be involved in the process of developing a mission statement because these discussions are where the Commission and Department will get a shared vision.

Genevieve Sage noted that planning is not inventing something new to do. In reality, the strategic plan is already in writing in Oregon Law. The mission statement already exists. What is needed is to figure out the connecting lines for the various statutes, and to identify the holes.

Stephanie Hallock urged that experienced and knowledgeable outside help be employed to assist the Commission and Department initially. Chairman Hutchison concurred.

Emery Castle asked if the Department has half a dozen things that are major problems that a strategic plan will aid in solving. He suggested that before outside help is selected, we need to know



whether we want them to: 1) help us implement a strategic planning activity, or 2) help us improve on half a dozen areas where we are not very comfortable and believe a systematic approach would be of benefit. Emery noted that the Department seems to be doing a good job, but would expect the Department to see areas for improvement.

Tom Bispham stressed that the process must tell us the high priorities, but must also tell staff which things we are not going to do. Chairman Hutchison agreed that we can't put out all the fires, but we should be driving the process, not be driven by it.

Chairman Hutchison summarized the consensus that we don't need a perfect plan; rather we need to get a fundamental plan launched. We need to improve as we go. We don't need a public opinion sample; we don't need to spend \$100,000; we don't need to overwork staff. The Department needs to hire an outside expert for a short period of time to facilitate the initial process and train staff to continue the process. The consultant should advise the Department on the sequence of steps to be pursued. The goal should be to have a strategic plan (described in 4 pages maximum) done by next September or October.

The group then proceeded to start the preliminary thought process by identifying issues of concern as follows:

What are mandatory requirements of EPA that each program must meet; what resources are required to meet them.

We don't have ability (in practical terms) to say no.

How do we relate to people who affect us -- EPA, the governor, the legislature, the regulated community, the public, etc.

We don't deal very well with various interest groups.

We need to do a better job of translating policy through the organization.

We need to develop priorities.

We need to better integrate efforts.

We need to be able to articulate to others what we are doing and why in order to develop better understanding.

We need to strengthen the policy formulation process and the (partnership between the Department and the Commission.

We need to recognize that our audience is different today -- many individuals rather than a relatively small number of sources: (exhaust emissions, wood stoves, back yard burning, recycling, etc.)

We need more flexibility in funding resources -- current inflexibility limits our ability to make effective decisions.

We need to enhance the agency's adaptive capacity. A plan should help us with personnel decisions, qualifications, position caps, retention, training, effective use of resources, provide staff with necessary tools to do effective job, etc.

We are not gathering data we need to make decisions.

Do we need an economist on staff to begin to better deal with cost and economic impact issues.

Is division of responsibility between EQC/DEQ correct. How much flexibility do we have in this area. Perhaps some decisions should be made by the Department rather than spending resources preparing information for the Commission.

The Commission needs to be able to delegate to the Department without apprehension.

In concluding the discussion on Strategic Planning, Bill Wessinger indicated he would be glad to set in on the process (as the Department works with a consultant) in an ex officio capacity to learn.

#### Future EQC Agenda Topics

The Commission supported the idea of a rolling calendar of potential future Commission agenda topics. They also noted the staff efforts to modify the format of agenda item staff reports agreed to review the issue after the November 4 meeting.

The Commission agreed that it may be appropriate to meet in Salem during the upcoming legislative session. They also agreed that it was desirable to meet in other locations of the state when issues or agenda topics would make meeting at such locations productive.

#### Public Input

During the time scheduled for public input, the Commission heard from the following:

Ray Wilkison, representing the Oregon Forest Industries Council, spoke on air quality and water quality issues. He stressed the need to continue prescribed burning as an efficient forest management tool to maximize production on a shrinking acreage available for intensive forest management. He was concerned that forest prescribed burning would be linked to field burning in probable discussions during the next legislative session.

With respect to water quality, Mr. Wilkison stated that his organization was puzzled by the recent decision of the EQC on load allocations in the Tualatin Basin and does not believe the decision properly relates to the non-point source program of the Federal Clean Water Act.

Don Arkel, representing Lane Regional Air Pollution Authority, noted the evolution of air quality programs from major source concerns to non traditional area sources such as vehicles, wood stoves, etc. He stressed the need for better tools to deal with these non-traditional sources including more nurturing of local initiatives, seed funding for innovative projects, and a clear policy requiring polluters to pay the full cost of disposal (through excise taxes on commodities). He also noted the conflict between Oregon's reputation for a high quality environment, and the adverse impact of field and slash burning on that reputation. He supported biomass production of energy at remote sites to eliminate the need for slash burning. He questioned the necessity for field burning.

Joel Ario, representing Oregon State Public Interest Research Group, spoke on superfund related issues. He noted that the length of time required for cleanup of identified sites is a concern to their organization. He urged more emphasis on pollution prevention and toxics, and supported the creation of a toxics use reduction institute at a university in the state. He also noted that the Department needs authority to force toxics use reduction goals where voluntary programs are not successful.

Chairman Hutchison thanked the participants and the retreat/workshop was adjourned following lunch.

Approved \_\_\_\_\_  
Approved with Corrections \_\_\_\_\_  
Corrections made \_\_\_\_\_

MINUTES ARE NOT FINAL UNTIL APPROVED BY THE EOC

ENVIRONMENTAL QUALITY COMMISSION

Minutes of the One Hundred Ninety-First Meeting  
November 4, 1988

Department of Environmental Quality  
Conference Room 4  
811 SW Sixth Avenue  
Portland, Oregon 97204

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Commission Members Present:

Bill Hutchison  
Wallace Brill  
Emery Castle  
Genevieve Pisarski Sage  
William Wessinger

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 SW 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

Peter Dalke, budget manager for the Management Services Division, gave an overview of the status of the department's budget. His major point was that the base budget reductions plus absorption of the 4% cost of living increase will leave the department with a base budget \$800,000 less than current levels.

William Young, Director of the Water Resources Department, spoke about the Water Resources Department and programs which relate directly to the Environmental Quality Commission and the department. Ground water was the first area of joint interest. The Water Resources Department is responsible for water well construction standards, for disputes among water users, characterization of aquifers, and toxic matters (landfills, etc.).

It also has a role in the proposed new Ground Water Protection Act. The second area of joint interest is planning and includes basin plans, minimum stream flows, and rules for instream water rights. Other joint interest activities include the Strategic Water Management Group, Governor's Watershed Enhancement Board, and other interagency roles which focus on the Federal Energy Commission and hydro-electric projects. The permitting system governing the Water Resources Department involves the final area of joint interest. The applicable doctrine is "first in time is first in right". There is no distinction based on relative value of users; shortages are not shared.

#### FORMAL MEETING

##### **CONSENT ITEMS:**

Agenda Item A: Minutes of the September 9, 1988, EQC Meeting, August 12, 1988, Emergency Meeting Minutes, and August Retreat Notes.

**ACTION:** It was moved by Commissioner Wessinger, seconded by Commissioner Castle, and passed unanimously to approve the minutes and notes as submitted. Commissioner Brill abstained on the August 12 minutes because he did not participate in the meeting.

Agenda Item B : Monthly Activity Report for August 1988.

**Action:** It was moved by Commissioner Sage, seconded by Commissioner Castle, and passed unanimously to approve the monthly activity report for August 1988.

Agenda Item C: Civil Penalty Settlement Agreements

There were no civil penalty settlement proposals presented for Commission action.

Agenda Item D: Tax Credits for Approval

**Director's recommendation:** It is recommended that the Commission issue tax credit certificates for pollution control facilities listed in the report; that the Commission revoke Certificate #1902 issued to Columbia-Willamette Leasing (Ogden-Martin) and reissue to Pacific Corporation; and that the Commission extend, for a period of 180 days, Willamette Industries Final Tax Credit filing deadline.

**Action:** It was moved by Commissioner Brill, seconded by Commissioner Wessinger, and passed unanimously to approve the director's recommendation.

#### PUBLIC FORUM

There were no participants in the public forum.

#### HEARING AUTHORIZATIONS

**Agenda Item E:** Request for Authorization to Conduct a Public Hearing on Proposed Environmental Cleanup Rules Regarding Delisting of Facilities Listed on the Inventory and Establishing a Process to Modify Information Regarding Facilities Listed on the Inventory, OAR Chapter 340, Division 122.

In 1987 the Legislature enacted a provision in the Oregon Superfund Law to determine the extent and nature of hazardous substance releases throughout the state. A portion of that statute requires the department to develop and compile an inventory of confirmed releases of hazardous substances.

While the statute provided a detailed process for adding sites to the inventory, it did not provide a mechanism for removing sites from the list or modifying information about the sites. To that end the department proposed that the Commission authorize the department to take testimony at a public hearing on the proposed rules. These rules provide a procedure and criteria for delisting facilities from the inventory and for modifying information contained in the inventory.

**Director's recommendation:** It is recommended that the Commission authorize a public hearing to take testimony on the proposed rules to provide a procedure and criteria for delisting facilities from the Inventory and modifying information contained in the Inventory.

**ACTION:** It was moved by Commissioner Wessinger, seconded by Commissioner Sage, and passed unanimously to approve the director's recommendation.

**Agenda Item F:** Request for Authorization to Conduct a Public Hearing on Revisions of Oregon Administrative Rule Chapter 340, Division 12, Civil Penalties, and Revision to the Clean Air Act State Implementation Plan (SIP).

The Commission has directed the department to incorporate its enforcement policy into its rules. The rules should include a classification of violations and a civil penalty assessment procedure. The proposed rules provide penalty predictability to

the regulated community while retaining a level of flexibility in the department's enforcement discretion. This item is a request for authorization to conduct a hearing to take testimony on the proposed rules.

Michael Huston noted that the factors cited within the rule are part of existing practice, therefore the rule strengthens the ability of the department to defend its actions.

Richard Bach of Stoel, Rives, Boley, Jones, and Grey told the Commission that he generally supported the proposed rules. However, he was concerned with the department's decision to incorporate the proposed rules into the Clean Air Act State Implementation Plan. Mr. Bach stated that rules should not be incorporated into the SIP unless required by law because such an incorporation would give the EPA the authority to enforce the proposed rules. Mr. Bach was concerned that the department's enforcement discretion would be adversely affected.

Commissioner Wessinger shared Mr. Bach's concern that the proposed rules would limit the department's discretion and asked if such rules were necessary.

Tom Bispham, Regional Operations Division Administrator, replied that the proposed rules retained the discretion to decide when and how to enforce. At the same time, the proposed rules would provide the regulated community with a clear understanding of the enforcement process and how penalties are calculated. Mr. Bispham also stated that the proposal would enhance statewide consistency and give staff clear direction as to when and how to pursue enforcement.

**Director's recommendation:** It is recommended that the Commission authorize a public hearing to take testimony on the proposed revision to the civil penalty rules, OAR Chapter 340, Division 12, and proposed revisions to the SIP.

**ACTION:** It was moved by Commissioner Castle, seconded by Commissioner Sage, and passed unanimously to approve the director's recommendation.

**Agenda Item G:** Request for Authorization to Conduct Public Hearings on Proposed Rules, OAR 340-160-005 through OAR 340-150-150 and OAR 340-150-067, for "Registration and Licensing Requirements for Underground Storage Tanks Service Providers" and Modifications to Existing Rules, OAR 340-150-010 through 340-150-150 and 340-012-067, for "Requirements Under Which Regulated Substances May be Placed Into Underground Storage Tanks."

Approximately 22,000 regulated underground storage tanks have been identified in Oregon. Up to 25 percent may be leaking, threatening public safety and the environment. The 1987 Oregon Legislature authorized the Commission to adopt rules for a comprehensive underground storage tank program. The Commission adopted interim rules in January 1988. New rules are required to reduce leaks caused by persons who service USTs and to insure that petroleum products and hazardous materials are not placed into USTs that do not have a permit. Agenda Item G is a request to authorize a public hearing on the proposed rules.

**Director's Recommendation:** It is recommended that the Commission authorize public hearings to take testimony on the proposed underground storage tank rules as presented in Attachments A and B, OAR 340-160-005 through OAR 340-160-150, OAR 340-15--101(12), and 340-150-150.

**ACTION:** It was moved by Commissioner Brill, seconded by Commissioner Wessinger, and passed unanimously to approve the director's recommendation.

**Agenda Item H:** Request for Authorization to Conduct a Public Hearing on New Industrial Rules for PM<sub>10</sub> Emission Control in the Medford-Ashland AQMA and Grants Pass and Klamath Falls Urban Growth Areas (Amendment of OAR 340, Divisions 20 and 30).

A combination of new control requirements and strategies must be adopted to meet new standards for PM<sub>10</sub> in the Medford-Ashland, Grants Pass, and Klamath Falls areas.

Industrial control rules have been drafted to : (1) require more effective controls for plywood veneer driers and large wood-fired boilers in the Medford-Ashland and Grants Pass areas; (2) increase the particulate emission offset ratio to 1.3 pounds of reduction in existing emissions for every one pound of new emissions in the Medford-Ashland area; (3) require additional source-testing and continuous emissions monitoring in the Medford-Ashland and Grants Pass areas; and (4) reduce the significant emission rate for new or modified industrial sources to five tons per year (from 15 tons per year) in the Klamath Falls area.

This item requests authorization to conduct public hearings on the new industrial rules.

Joe Weller, of the American Lung Association, stated that he felt these rules are short-sighted and that industry concerns were addressed but that the input from the Coalition to Improve Air Quality was not considered; especially the concerns expressed by



Dr. Palzer regarding the testing of veneer and boiler emissions. Mr. Weller stated that the package dealing with PM<sub>10</sub> should be comprehensive not piece meal.

John Charles, with the Oregon Environmental Council, said he shared Mr. Weller's concerns. He felt it was important to emphasize the fact that every item in the proposal could be changed in response to hearing testimony. He also said the rules need to be both workable and enforceable.

Garrett Andrew, of Boise Cascade Corporation, felt that non-industry controls should be addressed at the same time as industry controls.

Merlyn Hough, with the Air Quality Division, reviewed the problems with industry vs residential control of emissions. Because the residential portion of control is unpopular and we lack authority to stop woodstove use except under severe setting of public health threat, attempting to move both strategies ahead at the same time is not practical. The residential portion could hold up the industry portion and with on-going industrial development, the department felt it would be reasonable for industry to know what their goals and/or limitations are.

Edward Butchino, of BWR Associates Inc., expressed concern about the methodology of testing stating that there is no way to measure or compare test results of emissions.

Mr. Hough stated that the uncertainty of testing methods was not significant enough to stop the hearings on standards. He also discussed the problems with soil and road dust, stating that generally these particles are larger than the PM<sub>10</sub> standard and therefore pose less of a health threat. The similarity between "fingerprints" of veneer and woodstove emissions was discussed and Mr. Hough stated that these fingerprints can be distinguished. Finally, he noted that the department has met with many groups and individuals in the area to discuss options and alternatives for the various components of the control strategies. Comments and input has been used in developing this proposal

Fred Hansen summarized the issues before the Commission as follows:

- 1) There is controversy in the community regarding methods for meeting the PM<sub>10</sub> standard, and there will continue to be controversy.
- 2) DEQ has discussed the issues in the area in many forums -- non-industry as well as industry -- and will continue to do so.

- 3) There will always be a need for more data.
- 4) There is a need to move ahead with something at this time to give industry an opportunity to do better planning.
- 5) This is only a request for authorization to proceed to hearing. Final adoption will occur at a later date.

The Commission recognized concerns about proceeding to hearing on industrial control requirements before the residential control strategy was fully developed. There was consensus that the proposed hearing should go ahead, that the proposal can and will change if needed, and that final adoption should not occur until residential controls are also identified.

In response to concerns expressed from Commissioners Castle and Hutchison, the December work session of the EQC will include specific discussion on source testing and monitoring the Dr. Palzer issue, and the status of woodheating control strategies.

**Director's recommendation:** It is recommended that the Commission authorize public hearings to take testimony on the proposed amendments to Specific Air Pollution Control Rules for the Medford-Ashland Air Quality Maintenance Area, OAR 340, Division 30, and the definition of Significant Emission Rate for the Klamath Falls area, OAR 340-20-225(22).

**ACTION:** It was moved by Commissioner Castle, seconded by Commissioner Wessinger, and unanimously passed to approve the director's recommendation.

#### ACTION ITEMS

**Agenda Item I:** Request for Adoption of Proposed Cleanup Rules for Leaking Petroleum Underground Storage Tank Systems, OAR 340-122-201 to 340-122-260 and Amendments to OAR 340-122-010 and 340-122-030.

The proposed rules were developed in order to specify the level of protection of public health, safety, welfare, and the environment and the degree of cleanup necessary to achieve this protection. One significant issue which surfaced during public comment on these proposed rules concerned mandatory reporting requirements for home heating oil USTs. These systems are currently exempt from the reporting requirements in the UST statutes. The department modified the scope of the proposed rules in order to eliminate the mandatory reporting and initial abatement

requirements. The department does retain the authority for cleanup of releases from these systems at its discretion.

A technical attachment to Agenda Item I was submitted to clarify the original intent and applicability of the petroleum UST cleanup rules and is made a part of this meetings record.

**Director's recommendation:** It is recommended that the Commission approve the proposed cleanup rules for leaking petroleum underground storage tank systems, OAR 340-122-201 to 340-122-260 and amendments to OAR 340-122-010 and 340-122-030.

**ACTION:** It was moved by Commissioner Wessinger, seconded by Commissioner Brill, and passed unanimously to approve the director's recommendation as amended by the technical handout.

**Agenda Item J:** This item was removed from the agenda.

**Agenda Item K:** Proposed Approval of Changes in LRAPA Title 43, "Emissions Standards for Hazardous Air Pollutants" and LRAPA Title 34, "Air Contaminant Discharge Permits" (Asbestos Regulations).

After the department held hearing on the proposed changes to LRAPA rules, the LRAPA Board of Directors adopted new asbestos regulations and requested that the Commission approve the revision to Title 43 and adopt the revision to Title 34 as a revision to the State Implementation Plan. LRAPA requested approval of the changes because they are not a part of the SIP but contain standards that under ORS 468.535(2) must be approved by the Commission prior to LRAPA enforcement. LRAPA requested adoption of the Title 34 changes because it is a part of the SIP and changes to the SIP must be adopted by the Commission as administrative rules.

**Director's recommendation:** It is recommended that the Commission approve the amendments to LRAPA Title 43 and adopt the amendments to LRAPA Title 34 as a revision to the SIP.

**Action:** It was moved by Commissioner Brill, seconded by Commissioner Castle, and passed unanimously to approve the director's recommendation.

**Agenda Item L:** Proposed Adoption of LRAPA PM<sub>10</sub> Amendments, Including Changes to Title 14, 31, 38, 51, and the Oakridge PM<sub>10</sub> Group II Committal SIP, as a Revision to the State Implementation Plan, OAR 340-20-047.

After holding hearings, the LRAPA Board of Directors adopted the PM<sub>10</sub> amendments and Group II committal SIP. LRAPA requested that the Commission adopt LRAPA's new PM<sub>10</sub> rules as a revision to the SIP. LRAPA has requested adoption of its new PM<sub>10</sub> rules because they are a part of the SIP (OAR 340-20-047) and changes to the SIP must be adopted by the Commission as administrative rules.

**Director's recommendation:** It is recommended that the Commission adopt the new LRAPA PM<sub>10</sub> regulations as an amendment to the SIP.

**Action:** It was moved by Commissioner Castle, seconded by Commissioner Sage, and passed unanimously to approve the director's recommendation.

**Agenda Item M:** Informational Report: Report to the Legislature on Management of Solid Waste in Oregon.

Director Hansen informed the Commission that House Bill 2619, passed by the 1987 Legislature requires a report on solid waste capacity be submitted to the Legislature by December 15, 1988. The Department is providing this informational report to the Commission prior to the submission to the Legislature.

Chairman Hutchison asked if the report emphasizes enough the problems of special waste and impending federal regulations. Solid Waste Manager Steve Greenwood responded that the report was intended to highlight these problems, although the scope of the report required by the Legislature was actually more limited issue of capacity. Thus the report concluded that a disposal capacity crisis was not found to exist, but goes on to identify the other concerns. Chairman Hutchison requested that the scope of the report be expanded to increase emphasis on the other issues.

John Charles, of the Oregon Environmental Council, suggested that the department provide certain interested parties a chance to comment on the report, and that these comments be included in the report submitted to the Legislature. He noted that his organization would have some comments to make on the recycling portion of the report.

Steve Greenwood responded that while he was not opposed to providing an opportunity to comment, this report would be seen in the context of two other reports specifically on waste reduction that the department will be submitting to this Legislature.

In response to Commission comments, Director Hansen noted that the department would look to revise the report to ensure it adequately reflected the department's concern for special wastes, groundwater

protection, and the impact of new federal regulations and would circulate the report and attach a summary of comments received.

Agenda Item N: Proposed Adoption of New Administrative rules for the Waste Tire Program. OAR 340-62: Reimbursement for Use and Cleanup of Waste Tires.

The 1987 Legislature passed a Waste Tire Bill (HB 2022) which requires regulation of waste tires and imposes a \$1 fee on new replacement tires to create a Waste Tire Recycling Account. The account is to be used for a reimbursement program to stimulate the market for recycling of waste tires and to provide cleanup funds for some tire piles. The department has worked with a task force of affected parties to develop administrative rules for the Waste Tire Program. Public hearings were held in LaGrande, Bend, Medford, and Portland on a draft rule governing use of the Waste Tire Recycling Account.

**Director's recommendation:** It is recommended that the Commission adopt the proposed new rule governing use of the Waste Tire Recycling account for reimbursements to persons using waste tires, and a cleanup of tire piles in OAR Chapter 340, Division 62.

Deanna Mueller-Crispin, Waste Tire Program Coordinator, noted that the goal of the legislation was to enhance the market of tires. The rule clarifies what constitutes the use of waste tires. Deanna then discussed a chart provided for the Commission which identified typical steps in the processes for use of waste tires and the step at which reimbursement would be provided under the proposed rules.

Pierre Renaud, of Northwest Tire Disposal Services Inc., stated the reimbursement should be given priority as opposed to cleanup because the reimbursement will cause the cleanup to happen.

Mark Hope, of Waste Recovery, Inc., objected to the proposed definition of "end user" saying that it did not address the point where value is added in processing the waste tire. He was concerned that this definition excludes some processors from getting the reimbursement, but gives it to other processors. Mr. Hope recommended language that would give the reimbursement to the "first purchaser" of tire-derived products. He felt this would truly reimburse the "market".

Chairman Hutchison asked counsel whether the Commission had to give a reimbursement to every person who used waste tires or chips (if a single tire passes through more than one set of hands).

Michael Huston, DEQ legal counsel, responded that it lay within the Commission's authority to determine "appropriate uses eligible

for reimbursement" and to decide that certain uses (e.g. chipping tires but not recovering their energy value) could be excluded from the reimbursement.

Fred Hansen noted that the Department proposal is based on two key assumptions: (1) you only pay once for a tire, and (2) payment is made when the tire is turned into a non-tire product that is put to use.

Franz Rotter, spoke of the advantages of pyrolysis. He said that giving the reimbursement to the purchaser of pyrolysis products would also help pyrolysis producers. He stated that reimbursement could legitimately go to the pyrolysis producers as well since the finished product eliminates the waste tire. He felt the pyrolysis producer, who spends money to convert the tire to a non-tire product, should get the reimbursement, rather than the purchaser of the pyrolysis product.

Bill Briggs, representing Fuel Processors, agreed with Mr. Rotter that reimbursement should go to the pyrolysis processor.

Commissioner Castle expressed the view that the earlier the reimbursement enters into the process, the more impact it will have. He therefore favored reimbursement at the earliest possible point in the process where the legal requirements of the statute are met. This further has the benefit of simplifying the administration of the program.

Fred Hansen indicated the department agreed, but had focused on the point where the tire clearly becomes used as another product as the point where the legal requirements of the statute are clearly met. The legislature had debated various options, including research and development, and rejected all in favor of actual use. He also noted that the reimbursement point for the pyrolysis process was a close call that was extensively discussed by the department. The department finally concluded that a more consistent interpretation would result by modifying the proposal that went to hearing, although it could be decided either way (current Director's recommendation, or wording that went to hearing).

Chairman Hutchison asked about the possibility of reimbursing the tire chipper rather than the end user of the chips. Fred Hansen noted there was concern that tires could be chipped or otherwise processed and still end up back in the waste stream if the emphasis was not placed on actual use. Commissioner Castle indicated he was willing to accept that, but still felt the pyrolysis producer should be eligible for reimbursement.

Director Hansen summarized the options available to the Commission as follows:

- a. Adopt the Director's Recommendation (pyrolysis producer is not eligible for reimbursement).
- b. Modify the Director's Recommendation to make the pyrolysis producer eligible for reimbursement (return to the draft rule language that went to hearing).
- c. Defer action and direct the department to develop a revised proposal for later consideration by the Commission.

Commissioner Wessinger expressed support for the Director's recommendation and moved approval. The motion died for lack of a second.

**Action:** Following further discussion, it was moved by Commissioner Wessinger, seconded by Commissioner Sage and passed by majority to adopt the rules with the original draft language which defined the pyrolysis processor as an "end user" and therefore made the processor eligible for reimbursement. Commissioners Brill and Hutchison cast "no" votes.

**Agenda Item O:** Request for Adoption of a Temporary Rule Amending OAR 340, Division 61 to Prohibit the Disposal in Solid Waste Disposal Facilities of Hazardous Waste Originating Out of State.

Federal regulations define which wastes are hazardous nationwide. However, each state may opt to classify additional wastes as hazardous. Thus a waste managed as hazardous at state option in one state may be managed as solid waste in a neighboring state. The unintended result of this allowed state flexibility can be interstate transport of waste to avoid legitimate regulatory requirements.

Although the adoption of temporary rules does not require a public comment period, the department sent the agenda item to 45 interested parties including members of both the solid waste and hazardous waste advisory committees. The department received three responses, two in support of the temporary rule and one asking for exemption for the Federal Reserve Bank of San Francisco for shredded currency and food coupons. These letters are made a part of this meeting's record.

**Director's recommendation:** It is recommended that the Commission adopt a 180 day temporary rule amending OAR 340-61-060 to prohibit wastes which are hazardous under the law of the state of origin

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from being managed at solid waste disposal sites when transported into Oregon.

It is also recommended that the Commission authorize the department to proceed to permanent rulemaking.


**Action:** It was moved by Commissioner Sage, seconded by Commissioner Castle, and passed unanimously to approve the director's recommendation.

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11/16/18  
mlr



MEMORANDUM

SUBJECT: Clarification to Minutes 11/4/88 EQC  
TO: Commissioners, Division Administrators  
FROM: Monica   
DATE: December 2, 1988

Attached is page 12 of the minutes for the November 4 EQC meeting. The first page shows the change that was made. The bold underlined section indicates the wording which was added, the bracket [-----] was deleted. The second page is the final version.

Director Hansen summarized the options available to the Commission as follows:

- a. Adopt the Director's Recommendation (pyrolysis producer is not eligible for reimbursement).
- b. Modify the Director's Recommendation to make the pyrolysis producer eligible for reimbursement (return to the draft rule language that went to hearing).
- c. Defer action and direct the department to develop a revised proposal for later consideration by the Commission.

Commissioner Wessinger expressed support for the Director's recommendation and moved approval. The motion died for lack of a second.

**Action:** Following further discussion, it was moved by Commissioner Wessinger, seconded by Commissioner Sage and passed by majority to adopt the rules as proposed in the Director's Recommendation except on page 2 where the Commission chose to delete the definition of "similar materials". This change results in ~~{the rules with the original draft language which defined}~~ the pyrolysis processor being defined as an "end user" and therefore made the processor eligible for reimbursement. Commissioners Brill and Hutchison cast "no" votes.

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Although the adoption of temporary rules does not require a public comment period, the department sent the agenda item to 45 interested parties including members of both the solid waste and hazardous waste advisory committees. The department received three responses, two in support of the temporary rule and one asking for exemption for the Federal Reserve Bank of San Francisco for shredded currency and food coupons. These letters are made a part of this meeting's record.

Director Hansen summarized the options available to the Commission as follows:

- a. Adopt the Director's Recommendation (pyrolysis producer is not eligible for reimbursement).
- b. Modify the Director's Recommendation to make the pyrolysis producer eligible for reimbursement (return to the draft rule language that went to hearing).
- c. Defer action and direct the department to develop a revised proposal for later consideration by the Commission.

Commissioner Wessinger expressed support for the Director's recommendation and moved approval. The motion died for lack of a second.

**Action:** Following further discussion, it was moved by Commissioner Wessinger, seconded by Commissioner Sage and passed by majority to adopt the rules as proposed in the Director's Recommendation except on page 2 where the Commission chose to delete the definition of "similar materials". This change results in the pyrolysis processor being defined as an "end user" and therefore made the processor eligible for reimbursement. Commissioners Brill and Hutchison cast "no" votes.

**Agenda Item O:** Request for Adoption of a Temporary Rule Amending OAR 340, Division 61 to Prohibit the Disposal in Solid Waste Disposal Facilities of Hazardous Waste Originating Out of State.

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Approved \_\_\_\_\_  
Approved with Corrections \_\_\_\_\_  
Corrections made \_\_\_\_\_

MINUTES ARE NOT FINAL UNTIL APPROVED BY THE EQC

ENVIRONMENTAL QUALITY COMMISSION

Minutes of the One Hundred Ninety-Second Meeting  
December 9, 1988

Clackamas Community College  
Environmental Learning Center  
19600 South Molalla  
Oregon City, Oregon

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Commission Members Present:

Bill Hutchison, Chairman  
Emery Castle, Vice Chairman  
Wallace Brill  
Genevieve Pisarski Sage  
William Wessinger

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 SW 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.

FORMAL MEETING

CONSENT ITEMS:

Agenda Item A: Minutes of the November 4, 1988 EQC Meeting, and Minutes of the October 20-21 Retreat at the Flying M Ranch.

The minutes of the November 4, 1988 EQC Meeting and the October 20-21, 1988 Retreat were circulated to the Commission in advance of the meeting. A proposed amendment to the wording of the action taken on Agenda Item N on page 12 of the November 4, 1988 minutes was also circulated.

**ACTION:** It was MOVED by Commissioner Castle, seconded by Commissioner Sage, and unanimously passed to approve the November 4, 1988 EQC meeting minutes as amended and the October 20-21, 1988 retreat minutes.

**Agenda Item B :** Monthly Activity Report for September and October 1988.

**Action:** It was MOVED by Commissioner Wessinger, seconded by Commissioner Castle, and unanimously passed to approve the Activity Reports for September and October 1988.

**Agenda Item C:** Civil Penalty Settlement Agreements.

There were no civil penalty settlement proposals presented for Commission action.

**Agenda Item D:** Tax Credits for Approval

**Director's Recommendation:** It is recommended that the Commission issued tax credits certificates for pollution control facilities listed in the report.

**Action:** It was MOVED by Commissioner Wessinger, seconded by Commissioner Castle, and unanimously passed to approve the tax credits for the listed reports.

Chairman Hutchison abstained from voting on Tax Credit Application T2305 because the applicant is a client of his law firm.

**PUBLIC FORUM**

No one appeared at the public forum.

**HEARING AUTHORIZATIONS**

**Agenda Item E:** Request for Authorization to Conduct a Public Hearing Concerning Proposed Rules for Delegation of Air Quality Construction Approval to the Department.

Statutory provision enacted in 1985 authorizes the Commission to delegate its authority to enter an order either approving construction or prohibiting construction of new air contaminant

sources based on review of plans and specifications. Current rules adopted by the EQC prior to 1985 authorize the Director to approve plans (issue notice that construction may proceed), but require the Commission to issue orders prohibiting construction (disapproval of plans). At the August 1988, EQC retreat, the Department was directed to develop the rules necessary to fully delegate to the authority to take action on Air Quality plans and specifications to the Department. This agenda item proposes the rule amendment necessary to accomplish this purpose.

**Director's Recommendation:** It is recommended that the Commission authorize a public hearing to consider rule revisions that would delegate to the director authority for both air quality construction plan approval and issuance of orders prohibiting construction.

Chairman Hutchison asked how often plans had been disapproved in the past. Director Hansen replied that there had been very few, if any which had been denied. Tom Bispham, Regional Operations Manager, stated that the reason few had been denied is because the department staff works with the source to resolve differences and get plans revised so that approval can be granted. Generally, the source wants to get on with construction and is interested in revising proposals as necessary to demonstrate compliance with applicable statutes and rules in order to obtain approval. Chairman Hutchison questioned the need to include "denial" authority in its delegation of authority to the Department since denials were so rare and would constitute a major action. He felt more comfortable with an alternative to the Director's Recommendation that would stick with existing rules and have orders prohibiting construction brought to the Commission.

Commissioner Sage asked what the intent of reserving plan approval to the Commission was. Director Hansen replied that most statutory authority rests with the Commission, but that much of it which requires plan review and approval/disapproval has been delegated to the director. This specific item was one which was discussed during the August retreat as being one which could be delegated. Director Hansen further indicated that because denial was a rare event, and would likely be a major issue that would end up before the Commission on appeal, an alternative that has denial actions brought before the Commission as suggested by the Chairman would also be appropriate.

Commissioner Wessinger expressed the view that approval or denial of construction plans and specifications was not a policy matter.

**Action:** It was MOVED by Commissioner Wessinger, seconded by Commissioner Sage, and passed by majority to approve the

Director's Recommendation to conduct a hearing on the rule amendments. Chairman Hutchison cast a no vote.

ACTION ITEMS

**Agenda Item F:** Proposed Adoption of LRAPA Eugene-Springfield Carbon Monoxide (CO) Attainment Redesignation and Adoption of Maintenance Plan as a Revision to the State Implementation Plan, OAR 340-20-047.

Data show that the Eugene-Springfield area, once in non-attainment for Carbon Monoxide (CO) has met applicable criteria for attaining the federal CO standard. CO non-attainment in the Eugene-Springfield area was primarily related to traffic circulation. Attainment was achieved by changing traffic flow. An inspection and maintenance program was not required.

The Lane Regional Air Pollution Authority (LRAPA) Board of Directors has approved a joint request by LRAPA and the Lane Council of Governments to redesignate the Eugene-Springfield area as in attainment for CO, and replace the existing State Implementation Plan (SIP) CO Control Strategy with a Maintenance Plan. This proposed CO redesignation and maintenance plan has been reviewed by department staff who found it to be at least as stringent as and consistent with corresponding state regulations. The US Environmental Protection Agency has tentatively approved the redesignation.

**Director's Recommendation:** It is recommended that the Commission adopt the maintenance plan as a revision to the SIP as proposed.

Don Arkell, Director of Lane Regional Air Pollution Authority, stated that redesignation plan was a positive event. The process of solving the Eugene-Springfield attainment problem involved other agencies' cooperative efforts in the development of strategies to maintain CO standards. In response to a question from Chairman Hutchison, Mr. Arkell stated that the primary components of the plan were both direct and indirect considerations. Indirectly an examination of the effect of development on traffic patterns is triggered. More directly there is an annual review between the City of Eugene, the Department of Transportation, and LRAPA to change the plan to accommodate or mitigate growth. The plan addresses developers who have been denied development opportunities because their schemes compounded air quality problems as well as those who do not want development to occur.

**Action:** It was MOVED by Commissioner Castle, seconded by Commissioner Brill, and unanimously passed to approve the Director's Recommendation.

**Agenda Item G: Request for Exceptions to OAR 340-41-026(2) (An EQC Policy Requiring Growth and Development Be Accommodated Within Existing Permitted Loads) by the City of Halsey, Oregon.**

Oregon regulations require that wastewater point source dischargers improve the level of treatment as growth occurs, so that total wasteloads to state waters do not increase. This anti-degradation policy allows for exceptions to be made by the Commission.

The City of Halsey proposes to expand the sewage treatment facilities. The expansion and upgrade are necessary to eliminate inadequate treatment facilities and to allow reserve capacity for expected population growth over the next twenty years.

All reasonable alternative methods and levels of treatment have been evaluated by Halsey as a part of their facilities planning process. Environmental impacts and cost information were examined for each alternative. The cost for alternative treatment facilities capable of meeting existing load limits exceeds EPA construction grant guidelines for what is defined as affordable.

The expected impact of increased wasteloads on existing water quality, the potential for violating water quality standards, and the impact on the beneficial uses of the receiving waters have been evaluated. The department determined that the requested wasteload increases could be granted without violating water quality standards or impairing beneficial uses.

An amendment to Agenda Item G was submitted to the Commission and becomes a part of this meeting's record. The amendment provided the Commission with the hearings officer's report and summary and evaluation of public comment received on the city's request for increases in mass discharge limitations. As a result of the hearing, the Director's Recommendation has been revised to reflect a lower limit for suspended solids.

**Director's Recommendation:** The director recommends that the amendment be appended to the staff report of Agenda Item G. Furthermore, the director recommends that the increased BOD<sub>5</sub> loading be approved as requested, but that the increased total suspended solids loading be approved for 115 pounds per day instead of 164 pounds per day as requested.



Commissioner Sage asked why the increase in limits to accommodate future growth is needed now; what is the net environmental benefit of the improved facility. Dick Nichols, Water Quality Division Administrator, replied that permit limits have traditionally been established based on the design capacity of the treatment facilities. The net environmental gain of the proposed improved and expanded facilities is the elimination of current violations and a decrease in the periods of discharge during low flow. In addition, the city can afford and effectively operate the proposed new facilities. The loading will increase but a conservative analysis by the Department indicates that beneficial uses will not be affected and water quality standards will not be violated.

Bob Baumgartner, Water Quality Engineer, stated that his analysis of the situation indicated that the proposed increase in allowable mass discharge loading would not cause or exacerbate any water quality problems in the river. His analysis was based on worst case assumptions that included a considerable factor of safety.

Chairman Hutchison asked if the proposed allowable increase in discharge to Muddy Creek would have an impact on the Willamette River. Bob Baumgartner responded that at the flow conditions involved, standards are being achieved and it is unlikely that the increased discharge will cause any detriment to the river or any other sources. Chairman Hutchison noted that he believes the policy to require that expansion be accommodated by increased treatment such that stream loading is not increased is a desirable policy, and that any proposed exceptions should be subjected to very careful scrutiny.

**Action:** It was MOVED by Commissioner Castle, seconded by Commissioner Brill, and passed unanimously to approve the Director's Recommendation as amended.

**Agenda Item H:** Request for Exception to OAR 340-41-026(2) (An EQC Policy Requiring Growth and Development be Accommodated Within Existing Permitted Loads) by the City of Adair Village, Oregon.

The City of Adair Village is proposing to expand its existing sewage treatment facilities. This expansion and upgrade is necessary to eliminate inadequate treatment facilities and to allow reserve capacity for expected population growth over the next twenty years.

The expected impact of increased wasteloads on existing water quality, the potential for violating water quality standards, and the impact on the beneficial uses of the receiving stream were

evaluated. The department determined that the requested wasteload increase could be granted without violating water quality standards or impairing beneficial uses.

The cost of constructing, operating, and maintaining the new treatment facilities were determined for each alternative treatment method. The costs for the treatment facilities capable of meeting existing load limits were prohibitively high, and far exceed EPA construction grants guidelines for "affordable" treatment works.

An amendment to Agenda Item H was submitted to the Commission and becomes a part of this meeting's record. This amendment also provides the Commission with the hearings officer's report and summary and evaluation of public comment received on the city's request for increases in mass discharge limitations.

**Director's Recommendation:** The Director recommends that the amendment be appended to the staff report of Agenda Item H. No public comment was received objecting to the proposed increase. The director recommends the Commission grant the requested wasteload increase for the City of Adair Village.

Fred Hansen noted that this item was very similar to the previous agenda item relating to the City of Halsey.

Jim Ableman, Mayor of Adair Village, was asked by Commissioner Hutchison if there were any land use implications in the requested proposal. He stated that the area of the lagoon could be farm land and therefore requires a conditional use permit. Of more importance, however, were economic considerations. The City of Adair Village is only 500 people and because of its size, costs of improvements to each resident are much higher than for larger cities. The proposed new treatment plant will cost residents about \$50 per month compared to figures in the staff report of \$8.65 for Portland and \$11.00 for Salem. He supports advanced treatment and wishes the City could afford it. However, the cost practically limits the kinds of improvements the city can make to its sewage system. Mr. Ableman also stated that the proposed plan will initially increase monthly discharges, but that on an annual basis, discharges will be decreased.

**Action:** It was MOVED by Commissioner Wessinger, seconded by Commissioner Brill, and passed unanimously to approve the Director's Recommendation as amended.

INFORMATIONAL REPORTS

Agenda Item I: Review of Metro Solid Waste Reduction Program.

The Department reported to the Commission on September 9, 1988 that Metro had not adequately implemented major portions of their waste reduction program. The Commission then authorized a hearing, which was held October 12, 1988, to determine the best course of action.

The Department believes that the best course of action is to negotiate a stipulated order, with penalties, covering activities in eight key elements of the Metro Waste Reduction Program. This order is scheduled to be adopted at the January 20, 1989 Commission meeting. Some important items to be in the order include salvage of lumber and reusable building materials and yard debris recycling at disposal sites, technical assistance in multifamily and commercial recycling, pilot recycling container projects, a pilot waste auditing and consulting service, and a recycled material procurement program.

Bob Martin, Metro Solid Waste Manager, reviewed the status of the Metro plan. He stated that Metro has been allocated a specific amount of capacity at the Arlington landfill and ideally that they would avoid using that capacity by encouraging reduction of the waste stream via recycling and waste reduction.

Mr. Martin said that his review of the Metro plan indicated that the necessary resources to carry out the plan were initially underestimated and that the money was never allocated during the budget process. Outside influences also affected the implementation of the plan and were never addressed to get the plan back on schedule.

Mr. Martin stated that his intention was to work with DEQ to develop a compliance order by consent. His major concern was that he might not be able to run the issues through his committees and board of directors prior to the January 20 Commission meeting.

Jeanne Roy, of Recycling Advocates expressed concern that there would be any more delay in getting Metro's plan implemented--she stated that the process of review had already delayed implementation by a year. Ms. Roy also stated that none of the essentials of the waste reduction plan should be changed. Metro could be allowed to change strategy and time lines, but not the action elements and goals of the original plan.

Ms. Roy felt that allowing yard debris programs to begin by September 1, 1989 was too much of a delay and preferred to see an

implementation date of July 1, 1989. She was concerned about a "loophole" in the program which while it required communities to submit plans by February 1, 1989, it did not set a timeline for Metro to submit plans if they were assuming responsibility for those communities. Ms. Roy stated that the best incentive for reducing waste for trash haulers is to give credit for recycling. She expressed the need to include scrap paper and plastics in the "additional materials" definitions especially with regard to multi-family dwellings. Ms. Roy also indicated that the money allocated to markets assistance was not enough and that local markets should be encouraged so that people did not begin recycling programs only to have them stopped once again for lack of funding.

Ms. Roy finally asked what will happen to the points of non-agreement between DEQ and Metro when they review the plan and establish the compliance order.

Michael Huston, DEQ legal counsel, stated that the statutory authority is there for the Commission to order implementation of the Waste Reduction Plan. Further, the Commission could seek a court directive to enforce the plan. Civil penalties could not be levied until an order was entered and subsequently violated.

Commissioner Wessinger recommended that the Commission direct the Department to negotiate a stipulated order.

Director Hansen recapped the sense of the Commission's direction as follows:

- The Department should proceed with negotiation of a stipulated order with intent that such negotiations be complete and presented to the Commission at their January meeting.
- It is absolutely critical that the order contain tight timelines.
- The stipulated order must contain stipulated penalties for non-compliance.
- The Department is not to back off too much just to get a stipulated agreement. The Commission is willing to order implementation of part or all of the existing Waste Reduction Plan if necessary.

By consensus, the Commission agreed and instructed the department to proceed on that basis.

At Commissioner Castle's suggestion, the Commission agreed that this item will be on the agenda for the Commission in January, even if negotiations are not fully completed by then.

The meeting was then recessed for lunch.

Following the lunch break, Senator Bill Kennemer briefly spoke to the Commission about a bill he is interested in introducing at the upcoming legislative session. He stated that although Oregon was a pioneer with the bottle bill, its effectiveness had decreased somewhat in the wake of other solid waste problems. In order to address these problems at the source, he is proposing a bill which would initiate a packaging tax; the intent being to provide incentives for packaging which would reduce the amount of packaging materials entering the waste stream.

**Agenda Item J: Mid-Multnomah County Sewer Financing.**

On April 25, 1986 the Commission entered an order requiring the implementation of a plan to provide sewer services for a portion of Mid Multnomah County. The plans calls for the Department of Environmental Quality to assist with financing outside of incorporated areas using Pollution Control Bond Fund proceeds.

The cities of Gresham and Portland and DEQ are drafting a memorandum of understanding about the structure of financing for the area. The Department seeks to assure that all loans will be repaid in full by recipients, and that the risk of default is appropriately shared by the Cities and DEQ. Further, the intent is to assure the lowest reasonable cost to residents outside the city. The first bond sale will be small, but the agreements reached initially will set the stage for subsequent bond sales.

The department will return to the Commission with additional information and seek Commission approval prior to proceeding to the first bond sale on the matter.

By consensus, the Commission accepted the Department's report in this matter.

**Agenda Item K: Governor's Recommended Budget.**

The agency budget request has been reviewed by the Governor and a final Governor's recommended budget decided upon.

The Governor's recommended budget will include an increase of \$38.3 million dollars and 83 new positions (the equivalent of 49.9 full time positions) for the 1989-91 biennium for DEQ. The bulk of the increase will be in programs to prevent damage to the environment in groundwater, solid waste management and recycling, hazardous waste reduction, spill response, hazardous waste site assessment and asbestos abatement management. There are also major increases in environmental cleanup dollars and state match for revolving loan fund financing for local sewer projects.

The Commission accepted the report from the Department.

### Other Business

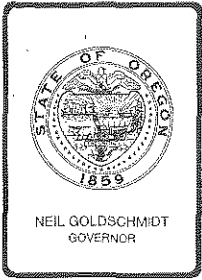
Sarah Vickerman, Regional Program Director for Defenders of Wildlife, Russell Hoeflich, Director of the Oregon Nature Conservancy, and Jerry Herrmann, representing Clackamas Community College Environmental Learning Center told the Commission about a bill various conservation organizations are sponsoring establish a dedicated trust fund to finance land acquisition for wildlife conservation, outdoor recreation, interpretation and environmental education; to provide an economic incentive for establishment of effective recycling systems; and to limit the use of materials causing adverse impacts to the environment.

The proposal would have the State sell Revenue Bonds to establish the trust fund. The bonds would be repaid from several sources including (1) an increase in the surcharge on tipping fees at landfills statewide, (2) a 1% surcharge on disposable goods and products packaged in disposable containers to be collected at the wholesale distributor level, and (3) a \$2 surcharge on vehicle batteries.

She reviewed some of the contingencies for authorized expenditures from the fund and stated that the proposal should help to facilitate and stabilize recycling. Chairman Hutchison thanked the group for their presentation.

Chairman Hutchison requested that a new agenda item be provided on future agenda's for Commission member reports. The item would specifically include a report from Commissioner Sage regarding the Governor's Watershed Enhancement Board, and from the Chairman regarding the Pacific Northwest Hazardous Waste Advisory Council.

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



## Department of Environmental Quality

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

### REQUEST FOR COMMISSION ACTION

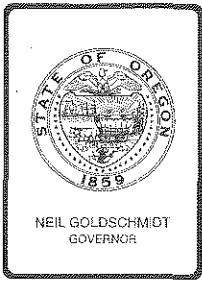
To: Environmental Quality Commission

From: Director

Subject: Agenda Item B, December 9, 1988, EQC Meeting. September and October, 1988 Activity Reports

The report provides information to the Commission on the status of DEQ activities. In addition, the report contains a listing of plans and specifications for construction of air contaminant sources which by statute require Commission approval. Other plans and specifications reviewed by the Department do not require Commission approval.

FH:x  
MX22



## 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 No. B, December 9, 1988, EQC Meeting

September and October 1988 Activity Report

### Discussion

Attached are September and October 1988 Program Activity Reports.

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

Water Quality, and Hazardous 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 plans 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.

*Mike Hansen*  
for  
Fred Hansen

MX23



DEPARTMENT OF ENVIRONMENTAL QUALITY

Monthly Activity Report

September/October 1988

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DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Air, Water and Solid Waste Divisions  
(Reporting Unit)

September 1988  
(Month and Year)

SUMMARY OF PLAN ACTIONS

	Plans Received		Plans Approved		Plans Disapproved		Plans Pending
	Month	FY	Month	FY	Month	FY	
<u>Air</u>							
Direct Sources	5	19	16	31	0	0	10
Small Gasoline Storage Tanks Vapor Controls							
Total	5	19	16	31	0	0	10
 <u>Water</u>							
Municipal	16	47	27	53	0	0	24
Industrial	10	24	8	22	0	0	6
Total	26	71	35	75	0	0	30
 <u>Solid Waste</u>							
Gen. Refuse	2	8	-	6	-	2	31
Demolition	-	1	-	-	-	-	2
Industrial	2	3	-	3	-	1	13
Sludge	-	-	-	-	-	-	2
Total	4	12	0	9	0	3	48
 <u>GRAND TOTAL</u>							
	35	102	51	115	0	3	88

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Air Quality Division  
(Reporting Unit)

September 1988  
(Month and Year)

PLAN ACTIONS COMPLETED

* County	* Name of Source/Project * /Site and Type of Same	* Date of * Action	* Action	*
Benton	Evanite Fiber Corporation	08/18/88	Completed-Approved	*
Clackamas	Omark Industries, Inc.	09/27/88	Completed-Approved	*
Crook	Clear Pine Mouldings Inc.	08/24/88	Completed-Approved	*
Douglas	Keller Lumber Co.	08/22/88	Completed-Approved	*
Douglas	Herbert Lumber Company	09/15/88	Completed-Approved	*
Douglas	Gregory Forest Products	09/15/88	Completed-Approved	*
Jackson	Pacific Wood Fibers	08/29/88	Completed-Approved	*
Klamath	Crater Lake Lumber Co.	08/15/88	Completed-Approved	*
Lane	Bohemia Particleboard	08/16/88	Completed-Approved	*
Linn	Duraflake Co.	08/17/88	Completed-Approved	*
Linn	Teledyne Wah Chang Albany	08/16/88	Completed-Approved	*
Marion	Siltec Epitaxial Corp.	08/15/88	Completed-Approved	*
Multnomah	Wacker Siltronic Corp	08/25/88	Completed-Approved	*
Pork	GBN Batteries Inc.	08/29/88	Completed-Approved	*
Union	North Powder Lumber Co.	09/13/88	Completed-Approved	*
Washington	Times Litho, Inc.	08/29/88	Completed-Approved	*

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
02	2515 EVANITE FIBER CORPORATION	BENTON	05/09/88	COMPLETED-APRVD	08/18/88
03	2624 OMARK INDUSTRIES, INC.	CLACKAMAS	08/23/88	COMPLETED-APRVD	09/27/88
07	0001 CLEAR PINE MOULDINGS INC	CROOK	08/23/88	COMPLETED-APRVD	08/24/88
			08/23/88	COMPLETED-APRVD	08/24/88
			08/23/88	COMPLETED-APRVD	08/24/88
			08/23/88	COMPLETED-APRVD	08/24/88
10	0019 KELLER LUMBER CO.	DOUGLAS	08/12/88	COMPLETED-APRVD	08/22/88
10	0043 HERBERT LUMBER COMPANY	DOUGLAS	08/29/88	COMPLETED-APRVD	09/15/88
10	0045 GREGORY FOREST PRODUCTS	DOUGLAS	08/25/88	COMPLETED-APRVD	09/15/88
15	0124 PACIFIC WOOD FIBERS	JACKSON	08/15/88	COMPLETED-APRVD	08/29/88
18	0073 CRATER LAKE LUMBER CO.	KLAMATH	11/27/87	COMPLETED-APRVD	08/15/88
20	0529 BOHEMIA PARTICLEBOARD	LANE	08/03/88	COMPLETED-APRVD	08/16/88
22	0143 DURAFLAKE CO	LINN	04/22/88	COMPLETED-APRVD	08/17/88
			04/22/88	COMPLETED-APRVD	08/18/88
22	0547 TELEDYNE WAH CHANG ALBANY	LINN	05/09/88	COMPLETED-APRVD	08/16/88
			07/19/88	COMPLETED-APRVD	08/15/88
			08/19/88	COMPLETED-APRVD	08/25/88
24	8058 SILTEC EPITAXIAL CORP.	MARION	04/05/88	COMPLETED-APRVD	08/15/88
26	3002 WACKER SILTRONIC CORP	MULTNOMAH	07/18/88	COMPLETED-APRVD	08/25/88
			07/18/88	COMPLETED-APRVD	08/25/88
			07/18/88	COMPLETED-APRVD	08/25/88
27	8012 GNB BATTERIES INC	POLK	08/22/88	COMPLETED-APRVD	08/29/88
31	0036 NORTH POWDER LUMBER CO.	UNION	08/16/88	COMPLETED-APRVD	09/13/88
34	2744 TIMES LITHO, INC.	WASHINGTON	08/18/88	COMPLETED-APRVD	08/29/88

TOTAL NUMBER QUICK LOOK REPORT LINES

16

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Air Quality Division  
(Reporting Unit)

September 1988  
(Month and Year)

SUMMARY OF AIR PERMIT ACTIONS

	Permit Actions Received		Permit Actions Completed		Permit Actions Pending	Sources Under Permits	Sources Reqr'g Permits
	Month	FY	Month	FY			
<u>Direct Sources</u>							
New	4	7	2	8	11		
Existing	1	1	0	0	9		
Renewals	10	24	11	22	62		
Modifications	8	9	3	7	11		
Trfs./Name Chng.	<u>4</u>	<u>13</u>	<u>11</u>	<u>12</u>	<u>1</u>		
Total	27	54	27	49	94	1398	1422
<u>Indirect Sources</u>							
New	0	2	0	2	2		
Existing	0	0	0	0	0		
Renewals	0	0	0	0	0		
Modifications	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>		
Total	<u>0</u>	<u>2</u>	<u>0</u>	<u>2</u>	<u>2</u>	<u>288</u>	<u>290</u>
<u>GRAND TOTALS</u>	27	56	27	51	96	1686	1712

Number of  
Pending Permits

Comments

12	To be reviewed by Northwest Region
16	To be reviewed by Willamette Valley Region
8	To be reviewed by Southwest Region
4	To be reviewed by Central Region
6	To be reviewed by Eastern Region
19	To be reviewed by Program Operations Section
19	Awaiting Public Notice
<u>10</u>	Awaiting end of 30-day Public Notice Period
94	

MAR. 5  
AA5323 (10/88)

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.
02	7077 PHILOMATH FOREST PRODUCTS	BENTON	10/08/87	PERMIT ISSUED	08/31/88	RNW
03	2572 HANNA CAR WASH INTN'L	CLACKAMAS	09/06/88	PERMIT ISSUED	09/29/88	RNW
03	2674 PRECISION CASTPARTS CORP.	CLACKAMAS	12/18/84	PERMIT ISSUED	09/07/88	RNW
05	2367 LONE STAR NORTHWEST	COLUMBIA	08/15/88	PERMIT ISSUED	08/31/88	MOD
09	0064 CENTRAL OREGON PAVERS	DESCHUTES	04/11/88	PERMIT ISSUED	09/19/88	RNW
10	0027 FIBREBOARD CORPORATION	DOUGLAS	08/04/88	PERMIT ISSUED	08/31/88	MOD
10	0045 GREGORY FOREST PRODUCTS	DOUGLAS	09/06/88	PERMIT ISSUED	09/30/88	MOD
10	0116 UMPQUA SAND & GRAVEL CONC	DOUGLAS	09/12/88	PERMIT ISSUED	09/30/88	MOD
10	0123 BOHEMIA INC.	DOUGLAS	07/25/88	PERMIT ISSUED	08/25/88	MOD
10	0127 D & D AG LIME & ROCK CO.	DOUGLAS	08/04/88	PERMIT ISSUED	08/31/88	MOD
17	0046 DIAMOND CABINETS	JOSEPHINE	07/25/88	PERMIT ISSUED	08/25/88	MOD
24	5790 WILLAMETTE UNIVERSTY	MARION	06/20/88	PERMIT ISSUED	08/31/88	RNW
25	0026 PACIFIC GAS TRANSMISSION	MORROW	08/28/87	PERMIT ISSUED	09/19/88	NEW
26	1867 PRECISION CAST PARTS	MULTNOMAH	12/18/84	PERMIT ISSUED	09/07/88	RNW
26	2074 TIMBERLINE FOREST PRODUCT	MULTNOMAH	08/31/88	PERMIT ISSUED	09/30/88	MOD
26	2749 SULZER BINGHAM PUMPS INC.	MULTNOMAH	09/06/88	PERMIT ISSUED	09/30/88	MOD
26	2777 JAMES RIVER II, INC.	MULTNOMAH	08/02/88	PERMIT ISSUED	08/25/88	MOD
26	2832 PORTLAND STATE UNIVERSITY	MULTNOMAH	08/09/88	PERMIT ISSUED	08/31/88	RNW
26	3241 ANODIZING, INC.	MULTNOMAH	08/23/88	PERMIT ISSUED	09/29/88	MOD
29	0058 TILLAMOOK CO CREAMERY ASN	TILLAMOOK	08/01/88	PERMIT ISSUED	08/25/88	MOD
34	2060 DIAMOND CABINETS	WASHINGTON	07/25/88	PERMIT ISSUED	08/25/88	MOD
37	0200 KONEN ROCK SUPPLY	PORT.SOURCE	05/16/88	PERMIT ISSUED	09/19/88	RNW
37	0212 LONE STAR NORTHWEST	PORT.SOURCE	08/19/88	PERMIT ISSUED	09/19/88	RNW
37	0267 JEFFERSON COUNTY RD DEPT	PORT.SOURCE	08/08/88	PERMIT ISSUED	09/19/88	RNW
37	0312 K F JACOBSEN & CO INC.	PORT.SOURCE	07/26/88	PERMIT ISSUED	09/19/88	RNW
37	0371 HUMBERT EXCAVATING, INC.	PORT.SOURCE	09/01/88	PERMIT ISSUED	09/30/88	MOD
37	0394 MORSE BROS., INC.	PORT.SOURCE	06/24/88	PERMIT ISSUED	09/29/88	NEW

TOTAL NUMBER QUICK LOOK REPORT LINES

27

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Air Quality Division  
(Reporting Unit)

September 1988  
(Month and Year)

PERMIT ACTIONS COMPLETED

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

Indirect Sources

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Air Quality Division  
(Reporting Unit)

September 1988  
(Month and Year)

PERMIT TRANSFERS & NAME CHANGES

<u>Permit Number</u>	<u>Company Name</u>	<u>Type of Change</u>	<u>Status of Permit</u>
05-2367	Oregon City Leasing Co. dba Lone Star Northwest	Transfer	Issued
10-0027	Fibreboard Corporation	Name Change	Issued
10-0116	P. K. Guido, Inc. dba Umpqua Sand & Gravel Concrete Service of Roseburg	Transfer	Issued
10-0127	D & D Ag Lime & Rock Co.	Transfer	Issued
26-2074	Timberline Forest Products of Portland, Inc.	Transfer	Issued
26-2749	Sulzer Brigham Pumps Inc.	Transfer	Issued
26-2909	Hall-Buck Marine, Inc.	Transfer	Awaiting Issuance
36-8008	Conifer Plywood Co.	NC <sup>1</sup>	Being Drafted
37-0371	Humbert Excavating, Inc.	Transfer	Issued

<sup>1</sup>In conjunction with permit renewal.

<sup>2</sup>In conjunction with permit modification.

MAR.5TC  
AD3481 (10/88)



DEPARTMENT OF ENVIRONMENTAL QUALITY  
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PLAN ACTIONS COMPLETED

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

MUNICIPAL WASTE SOURCES - 27

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Clackamas	Canby Redwood Interceptor Sewer (Revised)	10-3-88	Provisional Approval
Clatsop	Warrenton Premarq Area (E. Harbor St./N.E. Pacific Avenue)	10-3-88	Provisional Approval
Clatsop	Astoria Howard, Sheridan & Grant Williamsport Sewer L.I.D.	10-3-88	Provisional Approval
Jackson	Medford Meadow Wood Apartments	10-3-88	Provisional Approval
Jackson	BCVSA Bigham Road/Avenue "E" (Project 80-18)	10-3-88	Provisional Approval
Linn	Millersburg o Contract No. 7 o McKay Property Connection	10-3-88	Provisional Approval
Columbia	PGE-Trojan Facility New Sewage Treatment Plant	9-21-88	Provisional Approval
Douglas	Sutherlin SKP Parks of Oregon (RV Park)	9-28-88	Provisional Approval
Clatsop	Astoria S.E. Sheridan Street	9-22-88	Provisional Approval
Polk	Dallas S.W. Walnut Main Street to S.W. Levens Street	9-22-88	Provisional Approval
Douglas	Union Gap Sanitary Dist. Sewer District Sewage Collection System	9-21-88	Provisional Approval

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

MUNICIPAL WASTE SOURCES

Page 2 of 3

Douglas	Oakland Oakland Heights Subdivision	9-23-88	Provisional Approval
Lane	Lowell Wastewater Plant Improvements	9-16-88	Provisional Approval
Deschutes	Bend Bend Millworks Extension	9-23-88	Comments to Engineer
Lane	USFS Siuslaw Nat'l Forest Horsfall Campground On-Site System	9-19-88	Comments to Region for Permit Issuance
Yamhill	Newberg Allen Fruit Pretreatment System	9-21-88	Provisional Approval
Yamhill	Sheridan Outfall Sewer (Temporary Connections; Prison to Lagoon)	10-3-88	Provisional Approval
Josephine	Redwood SSSD Hansgen Haven Subdivision	9-21-88	Provisional Approval
Douglas	RUSA Loma Vista Pump Station	9-27-88	Comments to RUSA
Washington	USA - Gaston Force Main to Forest Grove	9-14-88	Provisional Approval
Jackson	Shady Cove Padover Sewer Extension (Chandra Lane)	10-4-88	Provisional Approval

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

MUNICIPAL WASTE SOURCES

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Clackamas	Estacada Phase II Sewer System Rehabilitation	9-26-88	Provisional Approval
Douglas	RUSA L and H Lumber Co.	9-21-88	Provisional Approval
Deschutes	Bend Aubrey Butte, Phase 8 Interim Pump Station	9-20-88	Provisional Approval
Clackamas	West Linn Willamette Falls Drive Sewer Replacement	9-30-88	Provisional Approval
Hood River	Mt. Hood Meadows Influent Sewer Relocation	9-12-88	Provisinal Approval

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Note: Provisional approvals include a standard requirement for the design engineer to inspect and to certify the construcion conforms to the approved plans. Provisional approval often requires design changes/additions, more stringent material testing standards, or more stringent performance acceptance criteria.

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* County	* Name of Source/Project * /Site and Type of Same	* Date of * Action	* Action	*
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INDUSTRIAL WASTE SOURCES - 8

Marion	John Rasmussen Manure Control Facility	9-9-88	Approved	
Tillamook	Dave Hogan Manure Control Facility	9-27-88	Approved	
Marion	Clement J. Ruef Manure Lagoon & Irrigation	9-20-88	Approved	
Tillamook	Robert Forster Manure Control Facility	9-27-88	Approved	
Clackamas	Willamette Egg Farms Automatic Overhead Sprinkler System	9-26-88	Approved	
Tillamook	Scott & John Esphin Manure Control Facility	9-26-88	Approved	
Yamhill	Irvin Hermans Manure Control Facility	9-8-88	Approved	
Washington	Wachlin Farms II Manure Control Facility	8-23-88	Approved	

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PLAN ACTIONS PENDING

* County	* Name of Source/Project	* Date	* Status	* Reviewer *
*	* /Site and Type of Same	* Received	*	*
*	*	*	*	*

MUNICIPAL WASTE SOURCES - 24

Page 1 of 2

Umatilla	Larry Greenwalt Shady Rest Mobile Home Court Bottomless Sand Filter	4-21-88	Review Completion Projected 10-31-88	JLV
Lincoln	Coyote Rock RV Park Site Sewers, New Drainfield	8-30-88	Review Completion Projected 10-31-88	JLV
Deschutes	Mt. Bachelor Ski Area Pine Martin Lodge	8-17-88	Review Completion Projected 10-31-88	JLV
Curry	Brookings Preliminary Plans for outfall	8-22-88	Review Completion Projected 10-31-88	KMV
Douglas	Yoncalla Chlorination Chamber	8-23-88	Review Completion Projected 10-31-88	JLV
Clackamas	Milwaukie Milwaukie Marketplace	9-9-88	Review Completion Projected 10-31-88	JLV
Clatsop	John Day Mobile Home Park On-Site Repair	9-10-88	Review Completion Projected 10-31-88	JLV
Curry	Harbor Sanitary District Glazebrook Subdivision	9-19-88	Review Completion Projected 10-31-88	JLV
Douglas	Green Sanitary District LeBlanc Subdivision	9-19-88	Review Completion Projected 10-31-88	DSM
Coos	North Bend Replace 18" and 24" with 30" sewer	9-19-88	Review Completion Projected 10-31-88	DSM
Tillamook	Oregon Dept. of Corrections South Fork Forest Camp Wastewater Facility	9-21-88	Review Completion Projected 10-31-88	JLV
Tillamook	Bay City Block 1 Central Addition	9-26-88	Review Completion Projected 10-31-88	JLV

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* County	* Name of Source/Project	* Date	* Status	* Reviewer
*	* /Site and Type of Same	* Received	*	*
*	*	*	*	*

MUNICIPAL WASTE SOURCES

Page 2 of 2

Baker	Idaho Power Company Copperfield Campground Reconstruction of On-Site System	8-25-88	Review Completion Projected 10-31-88	JLV
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- PROJECTS BELOW ARE "ON-HOLD" -

Columbia	Scappoose Sewage Treatment Plant Expansion	3-11-87	On Hold, Financing Incomplete	DSM
Deschutes	Romaine Village Recirculating Gravel Filter (Revised)	4-27-87	On Hold For Surety Bond	Not Assigned
Marion	Breitenbush Hot Springs On-Site System	5-27-86	On Hold, Uncertain Financing	JLV
Benton	North Albany County Service District Spring Hill-Crocker Creek Int.	1-21-87	On Hold, Project Inactive	Not Assigned
Curry	Whaleshead Beach Campground Gravel Recirculation Filter (Revised)	5-20-87	Holding for Field Inspection	JLV
Lincoln	Whalers Rest Sewers and Septic Tanks	3-23-88	Holding for New Drainfield Plans	JLV
Multnomah	Troutdale Frontage Road Sewage Pump Station Replacement	4-25-88	Bids Rejected, Being Redesigned	DSM
Curry	Brookings Brookings Meadows Subdivision	4-25-88	Holding for Revisions	DSM
Wallowa	Wallowa Lake Co. Service District STEP System Equipment/Materials	6-6-88	Holding for Equipment Submittals	DSM
Douglas	RUSA Loma Vista Phase II Pump Station		Holding For Design Revisions	DSM
Deschutes	Bend Bend Millwork Sewer and Pump Station		Awaiting Design Revisions	DSM

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PLAN ACTIONS PENDING

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

INDUSTRIAL WASTE SOURCES - 6

Yamhill	Allen Fruit Pretreatment Facility	11-24-87	Review Completion Projected 10-31-88
Polk	Willamette Industries Groundwater Protection & Monitoring System	7-22-88	Review Completion Projected 10-31-88
Marion	H. Hazenburg Dairy Manure Control Facility	8-16-88	Review Completion Projected 10-31-88
Multnomah	Boise Cascade Corporation Gas Chromatograph/mass Spectrometer	9-14-88	Review Completion Projected 10-31-88
Linn	F. Ruby Dairy Manure Control Facility	9-16-88	Review Completion Projected 10-31-88
Linn	Pacific Power & Light Co. Oil Spill Control Facility	9-23-88	Review Completion Projected 10-31-88

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Summary of Actions Taken  
On Water Permit Applications in SEP 88

4 OCT 88

Source Category & Permit Subtype	Number of Applications Filed						Number of Permits Issued						Applications Pending Permits Issuance (1)			Current Number of Active Permits			
	Month			Fiscal Year			Month			Fiscal Year			NPDES	WPCF	Gen	NPDES	WPCF	Gen	
	NPDES	WPCF	Gen	NPDES	WPCF	Gen	NPDES	WPCF	Gen	NPDES	WPCF	Gen							
Domestic																			
NEW		2	1		7	2	1			2	2	3	19	2					
RW		1		1	1							2	1						
RWO	5	2		11	6		1	1		3	6	71	35						
MW												2							
MWO	1			2	4		1	2		2	3	3	4						
Total	6	5	1	14	18	2	3	3		7	11	81	59	2	225	195	29		
Industrial																			
NEW		1	2	2	2	10			3		4	4	13	9					
RW	1			2								3							
RWO	1	4		4	8		6	2		8	3	18	26						
MW										1		3							
MWO	1			4	4	2	1			4	4		1	1					
Total	3	5	2	12	14	12	7	2	3	13	11	28	40	10	156	137	425		
Agricultural																			
NEW		2			2				7		28		2						
RW																			
RWO		1			2							1	3						
MW																			
MWO								1			1								
Total		3			4		1	7		1	28	1	5		2	8	630		
Grand Total	9	13	3	26	36	14	10	6	10	20	23	110	104	12	383	340	1084		

1) Does not include applications withdrawn by the applicant, applications where it was determined a permit was not needed, and applications where the permit was denied by DEQ.

It does include applications pending from previous months and those filed after 30-SEP-88.

NEW - New application  
 RW - Renewal with effluent limit changes  
 RWO - Renewal without effluent limit changes  
 MW - Modification with increase in effluent limits  
 MWO - Modification without increase in effluent limits



PERMIT CAT NUMBER	SUB- TYPE	OR NUMBER	FACILITY	FACILITY NAME	CITY	COUNTY/REGION	DATE ISSUED	DATE EXPIRES
<u>General: Cooling Water</u>								
IND	100	GEN01	NEW	OR003255-7	103832/A STALEY CONTINENTAL, INC.	PORTLAND	MULTNOMAH/NWR	20-SEP-88 31-DEC-90
IND	100	GEN01	NEW	OR003237-9	102789/A TILINE, INC.	ALBANY	LINN/WVR	30-SEP-88 31-DEC-90
<u>General: Suction Dredges</u>								
IND	700	GEN07	NEW		103983/A HANSEN, RICHARD A.		MOBILE SRC/ALL	08-SEP-88 31-JUL-91
<u>General: Confined Animal Feeding</u>								
AGR	800	GEN08	NEW		103993/A RAY VOGEL DAIRY	CENTRAL POINT	JACKSON/SWR	12-SEP-88 31-JUL-92
AGR	800	GEN08	NEW		103995/A JOLING, TEDD	JEFFERSON	MARION/WVR	12-SEP-88 31-JUL-92
AGR	800	GEN08	NEW		103997/A KREUTZER, EDWARD A.	MYRTLE POINT	COOS/SWR	12-SEP-88 31-JUL-92
AGR	800	GEN08	NEW		103999/A LEUTHOLD, DAN	TILLAMOOK	TILLAMOOK/NWR	12-SEP-88 31-JUL-92
AGR	800	GEN08	NEW		103998/A WOODWORTH, RONALD & CATHERINE	COQUILLE	COOS/SWR	12-SEP-88 31-JUL-92
AGR	800	GEN08	NEW		103996/A GARRONE, RONALD R.	MYRTLE POINT	COOS/SWR	12-SEP-88 31-JUL-92
AGR	800	GEN08	NEW		103994/A USSING & SON	VALE	MALHEUR/ER	12-SEP-88 31-JUL-92
<u>NPDES</u>								
DOM	100510	NPDES	NEW	OR003246-8	52830/A LANE COUNTY/MAPLETON COMMERCIAL AREA OWNERS ASSOCIATION, INC.	MAPLETON	LANE/WVR	06-SEP-88 31-AUG-93

PERMIT CAT NUMBER	TYPE	SUB- TYPE	OR NUMBER	FACILITY	FACILITY NAME	CITY	COUNTY/REGION	DATE ISSUED	DATE EXPIRES
DOM 100511	NPDES	RWO	OR002631-0	46790/A	KLAMATH FALLS, CITY OF	KLAMATH FALLS	KLAMATH/CR	08-SEP-88	30-JUN-93
IND 100512	NPDES	RWO	OR000088-4	12374/A	BURLINGTON NORTHERN RAILROAD COMPANY	PORTLAND	MULTNOMAH/NWR	08-SEP-88	31-JUL-93
IND 100514	NPDES	RWO	OR000034-5	24351/A	DIAMOND FRUIT GROWERS, INC.	PARKDALE	HOOD RIVER/CR	09-SEP-88	31-JUL-93
IND 100515	NPDES	RWO	OR000033-7	24337/A	DIAMOND FRUIT GROWERS, INC.	ODELL	HOOD RIVER/CR	09-SEP-88	31-JUL-93
IND 100516	NPDES	RWO	OR000032-9	24344/A	DIAMOND FRUIT GROWERS, INC.	ODELL	HOOD RIVER/CR	09-SEP-88	31-JUL-93
IND 100517	NPDES	RWO	OR000030-2	24356/A	DIAMOND FRUIT GROWERS, INC.	PINE GROVE	HOOD RIVER/CR	09-SEP-88	31-JUL-93
IND 100520	NPDES	RWO	OR000124-4	70457/A	POPE & TALBOT, INC.	OAKRIDGE	LANE/WVR	28-SEP-88	31-JUL-93
DOM 3759	NPDES	MWO	OR002635-2	41740/B	OTTER CREST WATER SERVICES CO.	OTTER CREST	LINCOLN/WVR	30-SEP-88	30-NOV-88
IND 100153	NPDES	MWO	OR003138-1	26014/B	AMERICAN SAND & GRAVEL INC.	EAGLE CREEK	CLACKAMAS/NWR	30-SEP-88	28-FEB-91

WPCF

DOM 100421	WPCF	MWO		4238/B	POWERS, PETER L. DBA	TANGENT	LINN/WVR	07-SEP-88	31-DEC-92
IND 100513	WPCF	RWO		16380/A	CORPORATION OF THE PRESIDING BISHOP OF THE CHURCH OF JESUS CHRIST OF LATTER-DAY SAINTS	ST PAUL	MARION/WVR	09-SEP-88	31-AUG-93
DOM 100421	WPCF	MWO		4238/B	POWERS, PETER L. DBA	TANGENT	LINN/WVR	14-SEP-88	31-DEC-92
IND 100518	WPCF	RWO		81590/A	SIMPLOT, J R COMPANY	HINKLE	UMATILLA/ER	20-SEP-88	31-AUG-93
AGR 3785	WPCF	MWO		43682/B	S LIVESTOCK & TRADING, INC.	ATHENA	UMATILLA/ER	21-SEP-88	31-DEC-88
DOM 100519	WPCF	RWO		95600/A	BOHEMIA INC.	GOSHEN	LANE/WVR	22-SEP-88	30-JUN-93

PERMIT TRANSFERS

Part of  
Water Quality Division Monthly Activity Report  
(Period September 1, 1988 through September 30, 1988)

<u>Permit No.</u>	<u>Previous Facility Name</u>	<u>Facility</u>	<u>New Facility Name</u>	<u>City</u>	<u>County</u>	<u>Date Transferred</u>
100421	VIP's Restaurants, Inc.	4238	Peter L. Powers dba Freeway Properties	Tangent	Linn/WVR	09/07/88 (Ownership)
3785	Johns, Smith & Beamer, Inc.	43682	S Livestock & Trading, Inc.	Athena	Umat/ERO	09/21/88 (Ownership)
3759	Otter Crest Corporation	41740	Otter Crest Water Services Co.	Otter Rock	Linc/WVR	09/30/88 (Ownership)
100153	East Co. Aggregate's, Inc.*	26014	American Sand & Gravel Inc.	Eagle Creek	Clac/NWR	09/30/88 (Ownership)

\* Names abbreviated.

WJ1137 (JDH)

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DEPARTMENT OF ENVIRONMENTAL QUALITY

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Hazardous and Solid Waste Division  
(Reporting Unit)

September 1988  
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PLAN ACTIONS COMPLETED

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

NONE

DEPARTMENT OF ENVIRONMENTAL QUALITY

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Hazardous and Solid Waste Division  
(Reporting Unit)

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SUMMARY OF HAZARDOUS WASTE PROGRAM ACTIVITIES

PERMITS

	ISSUED		PLANNED
	No. This Month	No. Fiscal Year to Date (FYTD)	No. in FY 89
Treatment	0	0	0
Storage	0	0	1
Disposal	0	0	0
Post-Closure	0	0	3

INSPECTIONS

	COMPLETED		PLANNED
	No. This Month	No. FYTD	No. in FY 89
Generator	5	16	14*
TSD	0	4	16*

CLOSURES

	PUBLIC NOTICES			CERTIFICATIONS ACCEPTED		
	No. This Month	FYTD No.	Planned in FY 89	No. This Month	No. FYTD	No. Planned in FY 89
Treatment	0	0	0	0	0	0
Storage	0	0	3	0	0	4
Disposal	0	0	0	0	0	1

\* SEA commitment only.

DEPARTMENT OF ENVIRONMENTAL QUALITY

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PLAN ACTIONS PENDING - 47

* County *	* Name of Facility *	* Date Plans Rec'd. *	* Date of Last Action *	* Type of Action and Status *	* Location *
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Municipal Waste Sources - 31

Baker	Haines	12/13/85	12/13/85	(R) Plan received	HQ
Deschutes	Knott Pit Landfill	8/20/86	8/20/86	(R) Plan received	HQ
Deschutes	Fryrear Landfill	8/20/86	8/20/86	(R) Plan received	HQ
Deschutes	Negus Landfill	8/20/86	8/20/86	(R) Plan received	HQ
Yamhill	River Bend	11/14/86	11/14/86	(R) Plan received	HQ
Marion	Ogden Martin Brooks ERF	3/24/87	3/24/87	(N) As-built plans rec'd.	HQ
Douglas	Reedsport Lndfl.	5/7/87	5/7/87	(R) Plan received	HQ
Benton	Coffin Butte	6/1/87	6/1/87	(R) Plan received	HQ
Klamath	Klamath Falls Landfill	7/6/87	7/6/87	(R) Plan received	HQ
Lane	Short Mountain Landfill	9/16/87	9/16/87	(R) Revised operational plan	HQ
Morrow	Tidewater Barge Lines (Finley Butte Lndfl.)	10/15/87	3/3/88	(N) Supplemental plan received.	HQ
Umatilla	City of Milton-Freewater	11/19/87	11/19/87	(N) Plan received (groundwater study)	HQ
Marion	Ogden-Martin (metal rec.)	11/20/87	11/20/87	(N) Plan received	HQ
Marion	Browns Island Landfill	11/20/87	11/20/87	(C) Plan received (groundwater study)	HQ

* County *	* Name of Facility *	* Date Plans Rec'd. *	* Date of Last Action *	* Type of Action and Status *	* Location *
Harney	Burns-Hines	12/16/87	12/16/87	(R) Plan received	HQ
Marion	Woodburn TS	1/5/88	1/5/88	(N) Revised plan rec'd.	HQ
Jackson	Dry Creek Landfill	1/15/88	1/15/88	(R) Groundwater report received	HQ
Washington	Hillsboro TS	1/15/88	1/15/88	(N) Plans received	HQ
Marion	Woodburn Landfill	1/22/88	1/22/88	(R) As built plans rec'd.	HQ
Multnomah	Riedel Composting	5/5/88	5/5/88	(N) Plans received	HQ
Umatilla	Pendleton Landfill	6/6/88	6/6/88	(R) Plans received	HQ
Marion	Woodburn Landfill	6/24/88	6/24/88	(R) Wastewater storage plans received	HQ
Coos	Les' Sanitary Service TS	6/30/88	6/30/88	(N) Plans received.	HQ
Malheur	Brogan-Jameson Lndfl	7/1/88	7/1/88	(C) Plans received.	HQ
Malheur	Brogan TS	7/1/88	7/1/88	(N) Plans received.	HQ
Klamath	Bio-Waste Management, Inc.	7/14/88	7/14/88	(N) Plans received	HQ
Marion	Marion Recycling Center, Inc.	7/20/88	7/20/88	(N) Plans received	HQ
Marion	Woodburn Landfill	8/15/88	8/15/88	(M) Plans received	HQ
Tillamook	Tillamook Landfill	8/16/88	8/16/88	(M) Plans received	HQ
Douglas	Lemolo Transfer	9/1/88	9/1/88	(M) Plans received	HQ
Lane	Franklin Landfill	9/29/88	9/29/88	(R) Groundwater report received	HQ
<u>Demolition Waste Sources - 2</u>					
Washington	Hillsboro Landfill	1/29/88	1/29/88	(N) Expansion plans received	
Marion	Browns Island Lndf.	6/8/88	6/8/88	(N) Plans received	HQ

* County *	* Name of Facility *	* Date Plans Rec'd. *	* Date of Last Action *	* Type of Action and Status *	* Location *
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Industrial Waste Sources - 12

Klamath	Weyerhaeuser, Klamath Falls	3/24/86	11/25/86	(N) Add'l. info. requested	HQ
Douglas	Roseburg Forest Products Co. (Riddle)	7/22/86	12/22/86	(R) Add'l. info. rec'd.	HQ
Coos	Rogge Lumber	7/28/86	6/18/87	(C) Additional info. submitted to revise previous application	HQ
Douglas	Roseburg Forest Products Co. (Dixonville)	3/23/87	3/23/87	(R) Operational plan	HQ
Douglas	Louisiana-Pacific Round Prarie	9/30/87	9/30/87	(R) Operational plan	HQ
Clatsop	Nygaard Logging	11/17/87	11/17/87	(N) Plan received	HQ
Linn	James River, Lebanon	1/22/88	4/21/88	(C) Additional information requested	HQ
Columbia	Boise Cascade St. Helens	4/6/88	4/6/88	(N) As built plans received.	HQ
Douglas	Sun Studs	6/20/88	6/20/88	(R) Plans received	HQ
Douglas	Sun Studs	7/1/88	7/1/88	(R) Operational/groundwater plans received	HQ
Douglas	IP, Gardiner	8/16/88	8/16/88	(N) Plans received	HQ
Yamhill	Boise Cascade (Willamina)	9/1/88	9/1/88	(N) Plans received	
Grant	Blue Mountain Forest Products	9/7/88	9/7/88	(N) Plans received	HQ

Sewage Sludge Sources - 2

Coos	Beaver Hill Lagoons	11/21/86	12/26/86	(N) Add'l. info. rec'd.	HQ
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* County *	Name of Facility	* Date Plans Rec'd. *	* Date of Last Action *	Type of Action and Status	* Location *
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Coos	Hempstead Sludge Lagoons	9/14/87	9/14/87	(C) Plan received	HQ
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DEPARTMENT OF ENVIRONMENTAL QUALITY

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Hazardous and Solid Waste Division  
(Reporting Unit)

September 1988  
(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			
<u>General Refuse</u>							
New	-	3	-	-	8		
Closures	-	1	3	4	2		
Renewals	-	-	-	3	11		
Modifications	-	16	1	16	0		
Total	0	20	4	23	21	180	180
<u>Demolition</u>							
New	-	1	-	-	1		
Closures	-	-	-	-	-		
Renewals	-	-	-	-	1		
Modifications	-	2	-	2	1		
Total	0	3	0	2	3	11	11
<u>Industrial</u>							
New	1	-	-	-	5		
Closures	-	-	-	-	1		
Renewals	-	1	-	6	6		
Modifications	-	8	-	8	-		
Total	1	9	0	14	12	107	107
<u>Sludge Disposal</u>							
New	-	1	-	1	1		
Closures	-	-	-	-	1		
Renewals	-	-	-	-	-		
Modifications	-	1	-	-	-		
Total	0	2	0	1	2	18	18
Total Solid Waste	1	34	4	40	38	315	315

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Hazardous and Solid Waste Division  
(Reporting Unit)

September 1988  
(Month and Year)

PERMIT ACTIONS COMPLETED

* County	* Name of Source/Project	* Date of	* Action	* Action	* *
*	*/Site and Type of Same	*	* Action	*	*
*	*	*	*	*	*
Umatilla	Pendleton Landfill	5/23/88	Addendum issued.	(not previously listed)	
Malheur	Adrian Landfill	9/29/88	Closure permit issued.		
Malheur	Harper Landfill	9/29/88	Closure permit issued.		
Malheur	Willowcreek Landfill	9/29/88	Closure permit issued.		

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Hazardous and Solid Waste Division  
(Reporting Unit)

September 1988  
(Month and Year)

PERMIT ACTIONS PENDING - 37

* County *	* Name of Facility *	* Date Appl. Rec'd. *	* Date of Last Action *	Type of Action and Status	* Location *
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Municipal Waste Sources - 21

Clackamas	Rossmans	3/14/84	2/11/87	(C) Applicant review (second draft)	HQ/RO
Baker	Haines	1/30/85	6/20/85	(R) Applicant review	HQ
Curry	Wridge Creek	2/19/86	9/2/86	(R) Draft received	HQ
Umatilla	Rahn's (Athena)	5/16/86	5/16/86	(R) Application filed	RO
Marion	Woodburn Lndfl.	9/22/86	6/22/88	(R) Applicant review	HQ
Coos	Bandon Landfill	1/20/87	1/7/88	(R) Draft received	HQ
Deschutes	Negus Landfill	2/4/87	11/16/87	(R) Applicant review	HQ
Douglas	Reedsport Lndfl.	5/7/87	1/11/88	(R) Draft received	HQ
Klamath	Klamath Falls Landfill	7/6/87	7/6/87	(R) Application filed	RO
Lane	Florence Landfill	9/21/87	1/12/88	(R) Draft received	HQ
Morrow	Tidewater Barge Lines (Finley Butte Landfill)	10/15/87	10/15/87	(N) Application filed	HQ
Douglas	Roseburg Landfill	10/21/87	12/21/87	(R) Draft received	
Curry	Port Orford Lndfl.	12/14/87	8/18/88	(R) Applicant review	HQ
Washington	Hillsboro TS	1/15/88	4/12/88	(N) Draft received	HQ
Multnomah	Riedel Composting	5/5/88	5/5/88	(N) Application received	RO/HQ
Coos	Les' Sanitary Service TS	6/30/88	8/19/88	(N) Draft received	HQ

* County *	* Name of Facility *	* Date Appl. Rec'd. *	* Date of Last Action *	* Type of Action and Status *	* Location *
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Malheur	Brogan-Jameson	7/1/88	7/1/88	(C) Application received	RO
Malheur	Brogan TS	7/1/88	7/1/88	(N) Application received	RO
Klamath	Bio-Waste Mgmt. Co.	7/14/88	8/25/88	(N) Public hearing held	HQ
Marion	Marion Recycling Center, Inc.	7/20/88	7/20/88	(N) Application received	HQ
Tillamook	Tillamook Landfill	8/16/88	8/16/88	(N) Application received	RO

Demolition Waste Sources - 3

Coos	Bracelin/Yeager (Joe Ney)	3/28/86	8/11/88	(R) Public hearing held	HQ
Washington	Hillsboro Lndfl.	1/29/88	1/29/88	(A) Application received	HQ
Marion	Browns Island Demolition	6/8/88	8/18/88	(N) Applicant review	HQ

Industrial Waste Sources - 11

Lane	Bohemia, Dorena	1/19/81	9/1/87	(R) Applicant review of second draft	HQ
Wallowa	Boise Cascade Joseph Mill	10/3/83	5/26/87	(R) Applicant comments received	HQ
Klamath	Weyerhaeuser, Klamath Falls (Expansion)	3/24/86	11/25/86	(N) Add'l. info. requested	HQ
Curry	South Coast Lbr.	7/18/86	7/18/86	(R) Application filed	RO
Baker	Ash Grove Cement West, Inc.	4/1/87	4/1/87	(N) Application received	RO
Klamath	Modoc Lumber Landfill	5/4/87	5/4/87	(R) Application filed	RO
Clatsop	Nygaard Logging	11/17/87	3/3/88	(N) Draft received	HQ
Wallowa	Sequoia Forest Ind.	11/25/87	11/25/87	(N) Application filed	RO

* County *	* Name of Facility *	* Date Appl. Rec'd. *	* Date of Last Action *	* Type of Action and Status *	* Location *
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Douglas	Glide Lumber Prod.	3/8/88	9/28/88	(R) Applicant comments received	HQ
Marion	Silverton Forest Products	5/5/88	8/31/88	(C) Applicant review	HQ
Douglas	Hayward Disp. Site	6/7/88	8/18/88	(R) Applicant review	HQ
Yamhill	Boise-Cascade (Willamina)	9/1/88	9/1/88	(N) Application received	HQ

Sewage Sludge Sources - 2

Coos	Beaver Hill Lagoons	5/30/86	3/10/87	(N) Add'l. info. received (addition of waste oil facility)	HQ
Coos	Hempstead Sludge Lagoons	9/14/87	9/14/87	(C) Application received	HQ/RO

CHEM-SECURITY SYSTEMS, INC.  
Arlington, Oregon

1988

HAZARDOUS WASTE ORIGINATION SOURCES

MONTHLY QUANTITY OF WASTE DISPOSED (TONS)<sup>1</sup>

<u>Waste Source</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>YTD</u>
Oregon	1,198	1,766	2,845	1,927	1,644	3,602	4,782	5,351	4,690				27,805
Washington	7,698	8,186	10,696	9,986	9,918	14,952	15,595	16,971	17,961				111,963
California	19	-	32	-	46	-	12	9	-				118
Alaska	-	-	-	267	9	-	-	922	540				1,738
Idaho	41	26	146	35	19	2	8	129	171				577
CSSI <sup>2,3</sup>	890	262	319	1,000	96,024	90,790	163,965	5,802	222				299,274
Other <sup>4</sup>	<u>73</u>	<u>32</u>	<u>111</u>	<u>136</u>	<u>43</u>	<u>103</u>	<u>60</u>	<u>106</u>	<u>69</u>				<u>733</u>
TOTALS	9,919	10,272	14,149	13,351	47,703	109,449	184,422	29,290	23,653				442,208

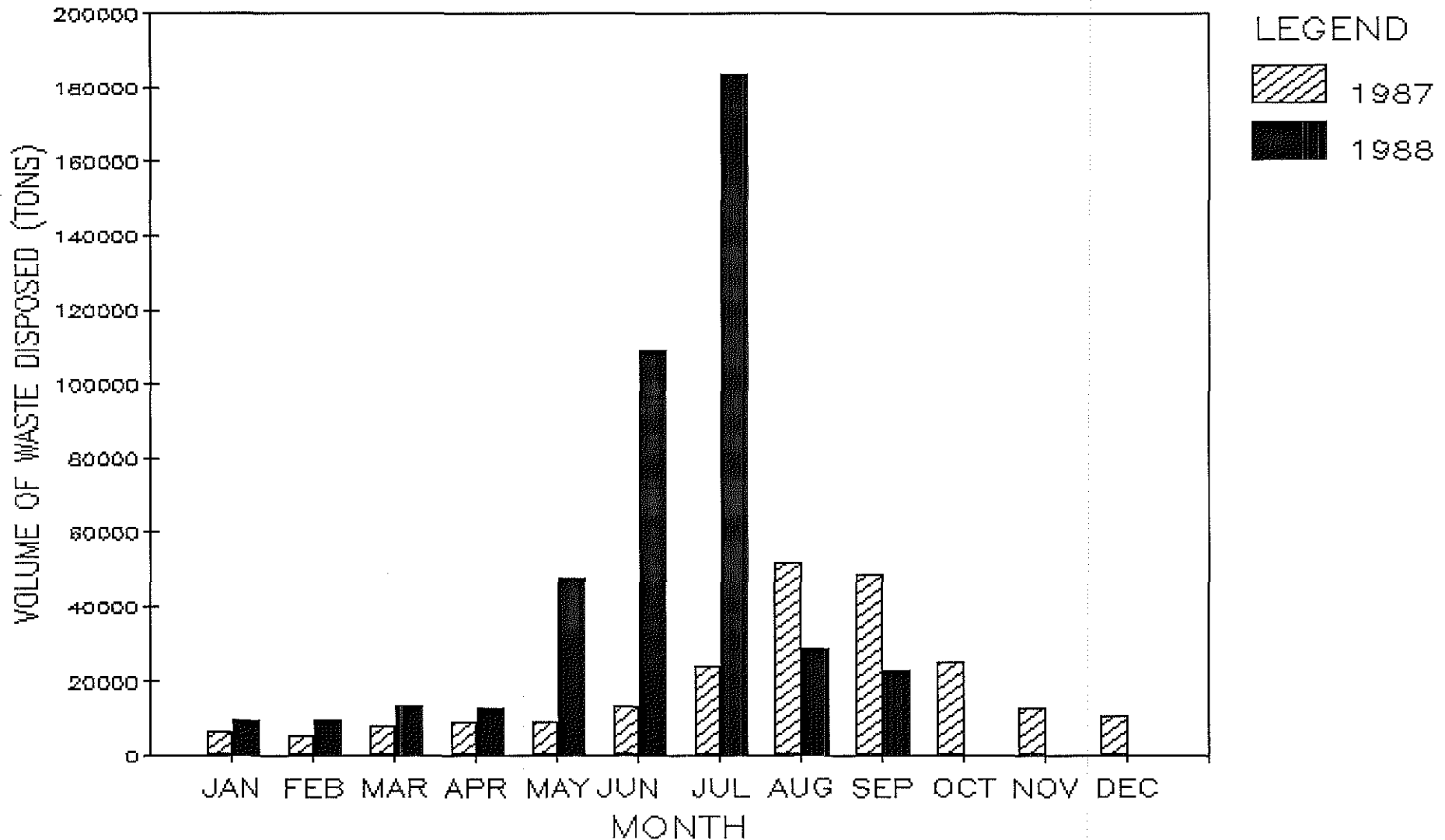
Footnotes

- 1 Quantity of waste (both RCRA and non-RCRA) received at the facility.
- 2 Waste generated on-site by CSSI.
- 3 Closure of surface impoundments occurred at the facility during the period May - August, 1988. The waste residue from the surface impoundment closures was landfilled, which accounts for the relatively high amount of waste generated by CSSI during this period.
- 4 Other waste origination sources include Utah, Montana, Hawaii, Wyoming, and British Columbia.

# HAZARDOUS WASTE ORIGINATION SOURCES CHEM-SECURITY SYSTEMS, INC.

Arlington, Oregon

## 1987 - 1988 Waste Disposal Volume Comparison





DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Noise Control Program	September, 1988
(Reporting Unit)	(Month and Year)

SUMMARY OF NOISE CONTROL ACTIONS

Source <u>Category</u>	New Actions Initiated		Final Actions Completed		Actions Pending	
	<u>Mo</u>	<u>FY</u>	<u>Mo</u>	<u>FY</u>	<u>Mo</u>	<u>Last Mo</u>
Industrial/ Commercial	13	44	19	45	187	193
Airports			0	4	0	0

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

<u>Noise Control Program</u> (Reporting Unit)	<u>September, 1988</u> (Month and Year)
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FINAL NOISE CONTROL ACTIONS

<u>County</u>	<u>* Name of Source and Location *</u>	<u>* Date *</u>	<u>* Action *</u>
Clackamas	Stanley Hydraulic Tools,	9/88	No violation
Multnomah	Rogers Construction, Gresham	9/88	No violation
Multnomah	Tri-Met MAX, SW 10th Avenue Portland	9/88	Referred to the City of Portland
Clatsop	Astoria Plywood, Astoria	9/88	In compliance
Marion	Fairway Plaza Health Foods, Woodburn	9/88	In compliance
Marion	Gerlinger Casting Corp., Salem	9/88	In compliance
Marion	North Valley Seeds, Inc. Woodburn	9/88	In compliance
Marion	SILTEC, Inc., Salem	9/88	In compliance
Marion	Sure-Gro Potting Soil Co., Hubbard	9/88	In compliance
Lane	Cascadia Company, Eugene	9/88	Referred to the City of Eugene
Lane	Dow-Corning, Springfield	9/88	Referred to the City of Springfield
Lane	Southern Pacific Transport- ation Company, River Road Hump Yard, Eugene	9/88	Referred to the U.S. Fed. Rail. Admin.
Lane	Valley Tire (VE Tire), Eugene	9/88	Referred to the City of Eugene

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

<u>Noise Control Program</u>	<u>September, 1988</u>
(Reporting Unit)	(Month and Year)

FINAL NOISE CONTROL ACTIONS

<u>County</u>	<u>* Name of Source and Location</u>	<u>* Date</u>	<u>* Action</u>
Coos	Hallmark Fisheries, Charleston	9/88	In compliance
Coos	C.M. Sanders Trucking, Coos Bay	9/88	Referred to the City of Coos Bay
Coos	South Coast Seafoods, Inc., Charleston	9/88	In compliance
Douglas	B & B Roads Quarry at Henry's Winery, Umpqua	9/88	In compliance
Josephine	Rogue White Water Excursions, on the Rogue River, near Grants Pass	9/88	Referred to Josephine Co. Sheriff River Patrol
Union	Union Pacific Railroad Co., Upper Parie Area Yard, La Grande	9/88	Referred to the U.S. Fed. Rail. Admin.

CIVIL PENALTY ASSESSMENTS

DEPARTMENT OF ENVIRONMENTAL QUALITY  
1988

CIVIL PENALTIES ASSESSED DURING MONTH OF SEPTEMBER, 1988:

<u>Name and Location of Violation</u>	<u>Case No. &amp; Type of Violation</u>	<u>Date Issued</u>	<u>Amount</u>	<u>Status</u>
Pennwalt Corporation Portland, Oregon	Stipulation and Final Order No. WQ-NWR-88-36 Stipulated civil penalty for July, 1988 violations of waste discharge limits.	8/30/88	\$750	Paid 9/15/88.
Claude St. Jean Douglas County	OS-SWR-88-68 Installed an on-site sewage disposal system without being licensed and without a permit.	9/1/88	\$500	Contested on 9/15/88.
John Bowers Klamath Falls, Oregon	AQOB-CR-88-58 Open burned a large quantity of commercial and demolition wastes.	9/1/88	\$1,500	Contested on 9/19/88.
Jack K. Davis dba/Tri-County Stove and Chimney Service Portland, Oregon	AQ-WS-88-69 Offered for sale an uncertified woodstove.	9/1/88	\$1,500	Contested on 9/27/88.
Gleneden Brick & Tile Works, Inc. Gleneden Beach, Oregon	AQ-WS-88-70 Offered for sale an uncertified woodstove.	9/1/88	\$1,500	Contested on 9/15/88.
William Lorenzana Virginia Lorenzana West Linn, Oregon	AQOB-NWR-88-78 Unauthorized open burning of domestic waste.	9/6/88	\$50	Paid 10/6/88.
Arie Jongeneel dba/A.J. Dairy, Inc. Mt. Angel, Oregon	WQ-WVR-88-73A Caused or allowed animal waste from a dairy operation to enter and pollute Bocksler Creek.	9/8/88	\$2,500	Contested on 10/3/88.
Irving Hermans Yamhill, Oregon	WQ-WVR-88-61A Caused or allowed animal waste from a hog farm to enter and pollute Roland Creek.	9/8/88	\$2,500	Contested on 9/27/88.

<u>Name and Location of Violation</u>	<u>Case No. &amp; Type of Violation</u>	<u>Date Issued</u>	<u>Amount</u>	<u>Status</u>
David M. Darling dba/Seacoast Nursery Construction Gearhart, Oregon	OS-NWR-88-86 Installed an on-site sewage disposal system without first obtain- in a permit.	9/26/88	\$100	Paid on 10/4/88.

GB7885

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Air, Water and Solid Waste Divisions  
(Reporting Unit)

October 1988  
(Month and Year)

SUMMARY OF PLAN ACTIONS

	Plans Received		Plans Approved		Plans Disapproved		Plans Pending
	Month	FY	Month	FY	Month	FY	
<u>Air</u>							
Direct Sources	9	28	8	39	0	0	11
Small Gasoline Storage Tanks Vapor Controls							
Total	9	28	8	39	0	0	11
<u>Water</u>							
Municipal	6	53	8	61	0	0	24
Industrial	8	32	11	33	0	0	3
Total	14	85	19	94	0	0	27
<u>Solid Waste</u>							
Gen. Refuse	1	9	3	9	1	3	27
Demolition	-	1	-	-	-	-	2
Industrial	-	3	-	3	-	1	13
Sludge	-	-	-	-	-	-	2
Total	1	13	3	12	1	4	44
<u>GRAND TOTAL</u>	24	126	30	145	2	4	82

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	08/23/88	COMPLETED-APRVD	09/27/88
03	2734 PRECISION CASTPARTS	CLACKAMAS	05/17/88	COMPLETED-APRVD	10/11/88
09	0018 DAW FOREST PRODUCTS CO	DESCHUTES	09/29/88	COMPLETED-APRVD	10/19/88
			09/29/88	COMPLETED-APRVD	10/19/88
26	1800 PORTLAND RENDERING CO	MULTNOMAH	08/18/88	COMPLETED-APRVD	09/27/88
26	1867 PRECISION CAST PARTS	MULTNOMAH	08/17/88	COMPLETED-APRVD	09/29/88
26	3244 BOISE CASCADE CORP.	MULTNOMAH	09/12/88	COMPLETED-APRVD	10/10/88
34	2753 UNIFIED SEWERAGE AGENCY	WASHINGTON	08/19/88	COMPLETED-APRVD	10/27/88

TOTAL NUMBER QUICK LOOK REPORT LINES 8

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Air Quality Division  
(Reporting Unit)

October 1988  
(Month and Year)

SUMMARY OF AIR PERMIT ACTIONS

	Permit Actions Received		Permit Actions Completed		Permit Actions Pending	Sources Under Permits	Sources Reqr'g Permits
	<u>Month</u>	<u>FY</u>	<u>Month</u>	<u>FY</u>			
<u>Direct Sources</u>							
New	1	8	1	9	11		
Existing	0	1	1	1	8		
Renewals	11	35	4	26	69		
Modifications	3	12	2	9	12		
Trfs./Name Chng.	<u>3</u>	<u>16</u>	<u>3</u>	<u>15</u>	<u>1</u>		
Total	18	72	11	60	101	1398	1422
<u>Indirect Sources</u>							
New	2	4	2	4	2		
Existing	0	0	0	0	0		
Renewals	0	0	0	0	0		
Modifications	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>		
Total	<u>2</u>	<u>4</u>	<u>2</u>	<u>4</u>	<u>2</u>	<u>290</u>	<u>292</u>
<u>GRAND TOTALS</u>	20	76	13	64	103	1688	1714

Number of  
Pending Permits

Comments

17	To be reviewed by Northwest Region
16	To be reviewed by Willamette Valley Region
8	To be reviewed by Southwest Region
4	To be reviewed by Central Region
7	To be reviewed by Eastern Region
16	To be reviewed by Program Operations Section
19	Awaiting Public Notice
<u>14</u>	Awaiting end of 30-day Public Notice Period
101	

MAR. 5  
AA5323 (11/88)



DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Air Quality Division	October 1988
(Reporting Unit)	(Month and Year)

PERMIT ACTIONS COMPLETED

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

Indirect Sources

Washington	Key Pacific Services Operation Center, 487 Spaces, File No. 34-8806	10/10/88	Final Permit Issued
Multnomah	Old Town Parking Garage/ Heliport, 410 Spaces, File No. 26-8807	10/10/88	Final Permit Issued

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.
10	0054 BOHEMIA INC., DRAIN PLYWD	DOUGLAS	11/17/87	PERMIT ISSUED	10/12/88	RNW
18	0083 BIO-WASTE MANAGEMENT CORP	KLAMATH	03/22/88	PERMIT ISSUED	11/01/88	NEW
24	5747 UNITED FOODS, INC.	MARION	10/17/88	PERMIT ISSUED	10/28/88	TRS
24	5954 SALEM BLACKTOP & ASPHALT	MARION	05/25/88	PERMIT ISSUED	10/12/88	RNW
26	1865 OREGON STEEL MILLS, INC.	MULTNOMAH	08/15/88	PERMIT ISSUED	10/28/88	MOD
26	2424 PENNWALT CORPORATION	MULTNOMAH	06/29/88	PERMIT ISSUED	10/12/88	MOD
26	2909 HALL-BUCK MARINE, INC.	MULTNOMAH	07/26/88	PERMIT ISSUED	10/12/88	TRS
27	0187 DALLAS FEED & SEED, INC.	POLK	10/11/88	PERMIT ISSUED	10/28/88	TRS
34	2750 LONGBOTTOM COFFEE- & TEA	WASHINGTON	04/08/88	PERMIT ISSUED	10/12/88	EXT
37	0150 BOB ANGELL INC	PORT.SOURCE	09/06/88	PERMIT ISSUED	10/12/88	RNW
37	0168 LT CONTRACTORS INC.	PORT.SOURCE	09/28/88	PERMIT ISSUED	10/12/88	RNW

TOTAL NUMBER QUICK LOOK REPORT LINES 11

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Air Quality Division  
(Reporting Unit)

October 1988  
(Month and Year)

PERMIT TRANSFERS & NAME CHANGES

<u>Permit Number</u>	<u>Company Name</u>	<u>Type of Change</u>	<u>Status of Permit</u>
26-2909	Hall-Buck Marine, Inc.	Transfer	Issued
27-0219	Al Dembowski dba Dallas Warehouse	Transfer	Awaiting Issuance
27-6019	Willamette Seed Co.	Transfer <sup>1</sup>	Being Drafted
36-8008	Conifer Plywood Co.	Name Change <sup>1</sup>	Being Drafted

<sup>1</sup>In conjunction with permit renewal.

<sup>2</sup>In conjunction with permit modification.

AD3481 (11/88)

DEPARTMENT OF ENVIRONMENTAL QUALITY  
MONTHLY ACTIVITY REPORT

Water Quality Division  
(Reporting Unit)

October 1988  
(Month and Year)

PLAN ACTIONS COMPLETED

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

INDUSTRIAL WASTE SOURCES - 11

Polk	Willamette Industries Groundwater Protection & Monitoring System	9-1-88	Approved
Marion	H. Hazenburg Dairy Manure Control Facility	8-18-88	Approved
Multnomah	Boise Cascade Corporation Gas Chromatograph/mass Spectrometer	10-18-88	Approved
Linn	F. Ruby Dairy Manure Control Facility	10-17-88	Approved
Linn	Pacific Power & Light Co. Oil Spill Control Facility	10-14-88	Approved
Tillamook	Walt Huber Manure Control Facility	10-20-88	Approved
Tillamook	Leon Schwary Manure Control Facility	10-20-88	Approved
Tillamook	Myers Bros. Manure Control Facility	10-20-88	Approved
Tillamook	Vivian & Ed Tallman Manure Control Facility	10-20-88	Approved
Tillamook	Porter Jersey Farm Manure Control Facility	10-20-88	Approved
Yamhill	Melvin Trammel Manure Control Facility	10-27-88	Approved

WC4061

DEPARTMENT OF ENVIRONMENTAL QUALITY  
MONTHLY ACTIVITY REPORT

Water Quality Division  
(Reporting Unit)

October 1988  
(Month and Year)

PLAN ACTIONS COMPLETED

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

MUNICIPAL WASTE SOURCES

Page 1 of 1

Douglas	Yoncalla Chlorination Chamber	10-19-88	Provisional Approval
Clatsop	John Day Mobile Home Park On-Site Repair for five spaces 1250 gpd	10-28-88	Provisional Approval
Douglas	Green Sanitary District LeBlanc Subdivision	10-10-88	Provisional Approval
Coos	North Bend Replace 18" and 24" with 30" sewer	11-4-88 11-8-88	Verbal Approval Provisional Approval
Tillamook	Dept. of Corrections South Fork Forest Camp RGF and Drainfield	10-20-88	Provisional Approval
Lane	Westfir System Modification Project Scope	10-12-88	Comments to City
Jackson	Applegate Christian Fellowship Addition and modification Bottomless Sand Filter	10-28-88	Provisional Approval
Jackson	Prospect Motel/Restaurant On-Site System 3860 gpd	10-17-88	Final comments to county for permit issuance

WC4061

DEPARTMENT OF ENVIRONMENTAL QUALITY  
MONTHLY ACTIVITY REPORT

Water Quality Division  
(Reporting Unit)

October 1988  
(Month and Year)

PLAN ACTIONS PENDING

* County	* Name of Source/Project	* Date	* Status	* Reviewer
*	* /Site and Type of Same	* Received	*	*
*	*	*	*	*

MUNICIPAL WASTE SOURCES - 24

Page 1 of 2

Umatilla	Larry Greenwalt Shady Rest Mobile Home Court Bottomless Sand Filter	4-21-88	Review Completion Projected 11-30-88	JLV
Lincoln	Coyote Rock RV Park Site Sewers, New Drainfield	8-30-88	Review Completion Projected 11-30-88	JLV
Deschutes	Mt. Bachelor Ski Area Pine Martin Lodge	8-17-88	Review Completion Projected 11-30-88	JLV
Curry	Brookings Preliminary Plans for outfall	8-22-88	Review Completion Projected 11-30-88	KMV
Clackamas	Milwaukie Milwaukie Marketplace	9-9-88	Review Completion Projected 11-30-88	JLV
Curry	Harbor Sanitary District Glazebrook Subdivision	9-19-88	Review Completion Projected 11-30-88	JLV
Tillamook	Bay City Block 1 Central Addition	9-26-88	Review Completion Projected 11-30-88	JLV
Clatsop	Glenwood Mobile Park Modification to dual media filter from anoxic tower	10-4-88	Review Completion Projected 11-30-88	JLV
Jackson	BCVSA Jet Drive	10-17-88	Review Completion Projected 11-30-88	JLV
Coos	Coos Bay STP #1 Lab Equipment Specs	10-20-88	Review Completion Projected 11-30-88	DSM
Jackson	Ashland Don Lewis Subdivision	10-11-88	Review Completion Projected 11-30-88	DSM
Jackson	Jacksonville Daisy Creek Subd	10-11-88	Review Completion Projected 11-30-88	DSM

DEPARTMENT OF ENVIRONMENTAL QUALITY  
MONTHLY ACTIVITY REPORT

Water Quality Division  
(Reporting Unit)

October 1988  
(Month and Year)

PLAN ACTIONS PENDING

* County	* Name of Source/Project	* Date	* Status	* Reviewer
*	* /Site and Type of Same	* Received	*	*
*	*	*	*	*

MUNICIPAL WASTE SOURCES

Page 2 of 2

- - - - - PROJECTS BELOW ARE "ON-HOLD" - - - - -

Baker	Idaho Power Company Copperfield Campground Reconstruction of On-Site System	8-25-88	Awaiting Resubmittal	JLV
Columbia	Scappoose Sewage Treatment Plant Expansion	3-11-87	On Hold, Financing Incomplete	DSM
Deschutes	Romaine Village Recirculating Gravel Filter (Revised)	4-27-87	On Hold For Surety Bond	Not Assigned
Marion	Breitenbush Hot Springs On-Site System	5-27-86	On Hold, Uncertain Financing	JLV
Benton	North Albany County Service District Spring Hill-Crocker Creek Int.	1-21-87	On Hold, Project Inactive	Not Assigned
Curry	Whaleshead Beach Campground Gravel Recirculation Filter (Revised)	5-20-87	Holding for Field Inspection	JLV
Lincoln	Whalers Rest Sewers and Septic Tanks	3-23-88	Holding for New Drainfield Plans	JLV
Multnomah	Troutdale Frontage Road Sewage Pump Station Replacement	4-25-88	Bids Rejected, Being Redesigned	DSM
Curry	Brookings Brookings Meadows Subdivision	4-25-88	Holding for Revisions	DSM
Wallowa	Wallowa Lake Co. Service District STEP System Equipment/Materials	6-6-88	Holding for Equipment Submittals	DSM
Douglas	RUSA Loma Vista Phase II Pump Station	9-23-88	Holding For Additional Design Revisions	DSM
Deschutes	Bend Bend Millwork Sewer and Pump Station	8-18-88	Awaiting Design Revisions	DSM

WC4061

DEPARTMENT OF ENVIRONMENTAL QUALITY  
MONTHLY ACTIVITY REPORT

Water Quality Division  
(Reporting Unit)

October 1988  
(Month and Year)

PLAN ACTIONS PENDING

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

INDUSTRIAL WASTE SOURCES - 3

Yamhill	Allen Fruit Pretreatment Facility	11-24-87	Review Completion Projected 11-30-88
Tillamook	Richard DuVall Manure Control Facility	10-21-88	Review Completion Projected 11-30-88
Tillamook	Hanna Car Wash Systems Closed Loop Acid Recovery System	10-28-88	Review Completion Projected 11-30-88

WC4061



Summary of Actions Taken  
On Water Permit Applications in OCT 88

3 NOV 88

Source Category & Permit Subtype	Number of Applications Filed						Number of Permits Issued						Applications Pending Permits Issuance (1)			Current Number of Active Permits		
	Month			Fiscal Year			Month			Fiscal Year			NPDES	WPCF	Gen	NPDES	WPCF	Gen
	NPDES	WPCF	Gen	NPDES	WPCF	Gen	NPDES	WPCF	Gen	NPDES	WPCF	Gen						
Domestic																		
NEW		1		8		2		1		2	3		3	19	2			
RW				1	1					1			2	1				
RWO	5	3		16	9		3	1		6	7		73	37				
MW													1					
MWO				2	4					2	3		3	4				
Total	5	4		19	22	2	4	2		11	13		82	61	2	226	196	29
Industrial																		
NEW		2	3	2	4	13		2	3		6	17	4	13	8			
RW				2			1			2			2					
RWO	3	2		7	10			2		8	5		20	26				
MW										1			3					
MWO		1		4	5	2		1		4	5			1	1			
Total	3	5	3	15	19	15	1	5	3	15	16	17	29	40	9	157	137	428
Agricultural																		
NEW				2		33								2				
RW																		
RWO		1		3									1	4				
MW																		
MWO		1		1				1			2							
Total		2		6				1			2	33	1	6		2	8	635
Grand Total	8	11	3	34	47	17	5	8	3	26	31	50	112	107	11	385	341	1092

1) Does not include applications withdrawn by the applicant, applications where it was determined a permit was not needed, and applications where the permit was denied by DEQ.

It does include applications pending from previous months and those filed after 31-OCT-88.

NEW - New application  
 RW - Renewal with effluent limit changes  
 RWO - Renewal without effluent limit changes  
 MW - Modification with increase in effluent limits  
 MWO - Modification without increase in effluent limits

PERMIT CAT NUMBER	SUB- TYPE OR NUMBER	FACILITY	FACILITY NAME	CITY	COUNTY/REGION	DATE ISSUED	DATE EXPIRES
<u>General: Suction Dredges</u>							
IND	700 GEN07 NEW	104117/A	STARNES, WAYNE M. & PIERCE, JOSEPH G.		MOBILE SRC/ALL	26-OCT-88	31-JUL-91
<u>General: Gravel Mining</u>							
IND	1000 GEN10 NEW	96115/C	LONE STAR INDUSTRIES, INC.	OREGON CITY	CLACKAMAS/NWR	06-OCT-88	31-DEC-91
<u>General: Oily Stormwater Runoff</u>							
IND	1300 GEN13 NEW	OR003262-0	104109/A MYRMO & SONS, INC.	EUGENE	LANE/WVR	25-OCT-88	31-JUL-93
<u>NPDES</u>							
DOM	100526 NPDES RW	OR002060-5	44329/A JOSEPH, CITY OF	JOSEPH	WALLOWA/ER	11-OCT-88	30-SEP-93
IND	100528 NPDES RW	OR000155-4	59417/A MULTNOMAH PLYWOOD CORPORATION	ST HELENS	COLUMBIA/NWR	21-OCT-88	30-JUN-93
DOM	100529 NPDES RWO	OR002736-7	37550/A JANTZEN BEACH WATER CO.	PORTLAND	MULTNOMAH/NWR	25-OCT-88	30-JUN-93
DOM	100530 NPDES RWO	OR002049-4	62855/A OAKLAND, CITY OF	OAKLAND	DOUGLAS/SWR	25-OCT-88	30-SEP-93
DOM	100532 NPDES RWO	OR002072-9	13745/A CANYONVILLE, CITY OF	CANYONVILLE	DOUGLAS/SWR	27-OCT-88	30-SEP-93

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PERMIT CAT NUMBER	TYPE	SUB- TYPE OR NUMBER	FACILITY	FACILITY NAME	CITY	COUNTY/REGION	DATE ISSUED	DATE EXPIRES
<u>WPCF</u>								
IND 100521	WPCF	NEW	103844/A	GERBER, TED & MERIDETH	CAVE JUNCTION	JOSEPHINE/SWR	04-OCT-88	30-SEP-93
AGR 3784	WPCF	MWO	43686/B	TAYLOR, WARREN & VIVIAN DBA		UMATILLA/ER	06-OCT-88	31-DEC-88
IND 100523	WPCF	NEW	102918/A	OREGON PLACER INC.	CANYONVILLE	DOUGLAS/SWR	06-OCT-88	31-AUG-93
IND 100524	WPCF	RWO	69550/B	GOLDEN REEF MINING CO.	SUNNY VALLEY	JOSEPHINE/SWR	07-OCT-88	30-SEP-93
IND 100525	WPCF	RWO	74486/A	ARCO OIL AND GAS CORPORATION	MIST	COLUMBIA/NWR	11-OCT-88	31-JUL-93
DOM 100527	WPCF	RWO	64736/A	OREGON STATE DEPARTMENT OF TRANSPORTATION		JACKSON/SWR	12-OCT-88	30-SEP-93
IND 100171	WPCF	MWO	90622/A	LOGAN INTERNATIONAL LTD.	METOLIUS	JEFFERSON/CR	25-OCT-88	31-JAN-91
DOM 100531	WPCF	NEW	103793/A	SUMPTER, CITY OF	SUMPTER	BAKER/ER	27-OCT-88	31-OCT-93

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PERMIT TRANSFERS

Part of  
Water Quality Division Monthly Activity Report  
(Period October 1, 1988 through October 31, 1988)

<u>Permit No.</u>	<u>Previous Facility Name</u>	<u>Facility</u>	<u>New Facility Name</u>	<u>City</u>	<u>County</u>	<u>Date Transferred</u>
3784	Johns, Smith & Beamer, Inc.	43686	Warren Taylor & Vivian Taylor dba Torco Ranch	Reith	Umat/ERO	10/06/88 (Ownership)
100171	Western Brands, Inc.	90622	Logan International Ltd.	Metolius	Jeff/CRO	10/25/88 (Name Chg)

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DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Hazardous and Solid Waste Division  
(Reporting Unit)

October 1988  
(Month and Year)

PLAN ACTIONS COMPLETED

* County	* Name of Source/Project * /Site and Type of Same	* Date of * Action	* Action	*
Klamath	Klamath Falls Landfill	5/26/88	Plans approved (not previously reported)	*
Morrow	Turner Landfill (City of Heppner)	10/4/88	Plans approved (first portion only)	*
Morrow	Tidewater Barge Lines (Findley Butte Landfill)	10/14/88	Plans approved	*
Yamhill	River Bend Landfill	10/18/88	Plans rejected	*
Tillamook	Tillamook Landfill (Transfer Station)	10/26/88	Plans approved	*
Clackamas	Canby Transfer & Recyc. Sta.	10/27/88	Plans rejected (incomplete)	*

SB8022

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Hazardous and Solid Waste Division  
(Reporting Unit)

October 1988  
(Month and Year)

SUMMARY OF HAZARDOUS WASTE PROGRAM ACTIVITIES

PERMITS

	ISSUED		PLANNED
	No. This Month	No. Fiscal Year to Date (FYTD)	No. in FY 89
Treatment	0	0	0
Storage	0	0	1
Disposal	0	0	0
Post-Closure	0	0	3

INSPECTIONS

	COMPLETED		PLANNED
	No. This Month	No. FYTD	No. in FY 89
Generator	1	17	14*
TSD	0	4	16*

CLOSURES

	PUBLIC NOTICES			CERTIFICATIONS ACCEPTED		
	No. This Month	FYTD No.	Planned in FY 89	No. This Month	No. FYTD	No. Planned in FY 89
Treatment	0	0	0	0	0	0
Storage	0	0	3	0	0	4
Disposal	0	0	0	0	0	1

\* SEA commitment only.

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Hazardous and Solid Waste Division  
(Reporting Unit)

October 1988  
(Month and Year)

PLAN ACTIONS PENDING - 44

* County *	* Name of Facility *	* Date Plans Rec'd. *	* Date of Last Action *	* Type of Action and Status *	* Location *
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Municipal Waste Sources - 27

Baker	Haines	12/13/85	12/13/85	(R) Plan received	HQ
Deschutes	Knott Pit Landfill	8/20/86	8/20/86	(R) Plan received	HQ
Deschutes	Fryrear Landfill	8/20/86	8/20/86	(R) Plan received	HQ
Deschutes	Negus Landfill	8/20/86	8/20/86	(R) Plan received	HQ
Marion	Ogden Martin Brooks ERF	3/24/87	3/24/87	(N) As-built plans rec'd.	HQ
Douglas	Reedsport Lndfl.	5/7/87	5/7/87	(R) Plan received	HQ
Benton	Coffin Butte	6/1/87	6/1/87	(R) Plan received	HQ
Lane	Short Mountain Landfill	9/16/87	9/16/87	(R) Revised operational plan	HQ
Umatilla	City of Milton-Freewater	11/19/87	11/19/87	(N) Plan received (groundwater study)	HQ
Marion	Ogden-Martin (metal rec.)	11/20/87	11/20/87	(N) Plan received	HQ
Marion	Browns Island Landfill	11/20/87	11/20/87	(C) Plan received (groundwater study)	HQ
Harney	Burns-Hines	12/16/87	12/16/87	(R) Plan received	HQ
Marion	Woodburn TS	1/5/88	1/5/88	(N) Revised plan rec'd.	HQ
Jackson	Dry Creek Landfill	1/15/88	1/15/88	(R) Groundwater report received	HQ
Washington	Hillsboro TS	1/15/88	1/15/88	(N) Plans received	HQ

* County *	* Name of Facility *	* Date Plans Rec'd. *	* Date of Last Action *	* Type of Action and Status *	* Location *
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Marion	Woodburn Landfill	1/22/88	1/22/88	(R) As built plans rec'd.	HQ
Multnomah	Riedel Composting	5/5/88	5/5/88	(N) Plans received	HQ
Umatilla	Pendleton Landfill	6/6/88	6/6/88	(R) Plans received	HQ
Marion	Woodburn Landfill	6/24/88	6/24/88	(R) Wastewater storage plans received	HQ
Coos	Les' Sanitary Service TS	6/30/88	6/30/88	(N) Plans received.	HQ
Malheur	Brogan-Jameson Lndfl	7/1/88	7/1/88	(C) Plans received.	HQ
Malheur	Brogan TS	7/1/88	7/1/88	(N) Plans received.	HQ
Klamath	Bio-Waste Management, Inc.	7/14/88	7/14/88	(N) Plans received	HQ
Marion	Marion Recycling Center, Inc.	7/20/88	7/20/88	(N) Plans received	HQ
Marion	Woodburn Landfill	8/15/88	8/15/88	(M) Plans received	HQ
Douglas	Lemolo Transfer	9/1/88	9/1/88	(M) Plans received	HQ
Lane	Franklin Landfill	9/29/88	9/29/88	(R) Groundwater report received	HQ

Demolition Waste Sources - 2

Washington	Hillsboro Landfill	1/29/88	1/29/88	(N) Expansion plans received	
Marion	Browns Island Lndf.	6/8/88	6/8/88	(N) Plans received	HQ

Industrial Waste Sources - 13

Klamath	Weyerhaeuser, Klamath Falls	3/24/86	11/25/86	(N) Add'l. info. requested	HQ
Douglas	Roseburg Forest Products Co. (Riddle)	7/22/86	12/22/86	(R) Add'l. info. rec'd.	HQ



* County *	* Name of Facility *	* Date Plans Rec'd. *	* Date of Last Action *	* Type of Action and Status *	* Location *
Coos	Rogge Lumber	7/28/86	6/18/87	(C) Additional info. submitted to revise previous application	HQ
Douglas	Roseburg Forest Products Co. (Dixonville)	3/23/87	3/23/87	(R) Operational plan	HQ
Douglas	Louisiana-Pacific Round Prarie	9/30/87	9/30/87	(R) Operational plan	HQ
Clatsop	Nygaard Logging	11/17/87	11/17/87	(N) Plan received	HQ
Linn	James River, Lebanon	1/22/88	4/21/88	(C) Additional information requested	HQ
Columbia	Boise Cascade St. Helens	4/6/88	4/6/88	(N) As built plans received.	HQ
Douglas	Sun Studs	6/20/88	6/20/88	(R) Plans received	HQ
Douglas	Sun Studs	7/1/88	7/1/88	(R) Operational/groundwater plans received	HQ
Douglas	IP, Gardiner	8/16/88	8/16/88	(N) Plans received	HQ
Yamhill	Boise Cascade (Willamina)	9/1/88	9/1/88	(N) Plans received	
Grant	Blue Mountain Forest Products	9/7/88	9/7/88	(N) Plans received	HQ

Sewage Sludge Sources - 2

Coos	Beaver Hill Lagoons	11/21/86	12/26/86	(N) Add'l. info. rec'd.	HQ
Coos	Hempstead Sludge Lagoons	9/14/87	9/14/87	(C) Plan received	HQ

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Hazardous and Solid Waste Division  
(Reporting Unit)

October 1988  
(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			
<u>General Refuse</u>							
New	-	3	-	-	8		
Closures	-	1	-	4	2		
Renewals	1	1	-	3	11		
Modifications	-	16	1	17	0		
Total	1	21	1	24	21	180	180
<u>Demolition</u>							
New	-	1	-	-	1		
Closures	-	-	-	-	-		
Renewals	-	-	-	-	1		
Modifications	-	2	-	2	1		
Total	0	3	0	2	3	11	11
<u>Industrial</u>							
New	-	-	-	-	5		
Closures	-	-	-	-	1		
Renewals	-	1	-	6	6		
Modifications	-	8	-	8	-		
Total	0	9	0	14	12	107	107
<u>Sludge Disposal</u>							
New	-	1	-	1	1		
Closures	-	-	-	-	1		
Renewals	-	-	-	-	-		
Modifications	-	1	-	-	-		
Total	0	2	0	1	2	18	18
Total Solid Waste	1	36	1	41	38	315	315

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Hazardous and Solid Waste Division  
(Reporting Unit)

October 1988  
(Month and Year)

PERMIT ACTIONS COMPLETED

* County	* Name of Source/Project	* Date of	* Action	*
*	* /Site and Type of Same	* Action	*	*
*	*	*	*	*
Klamath	Klamath Falls Landfill	5/26/88	Permit issued (not previously reported)	
Curry	Nesika Beach Transfer Station	8/16/88	Addendum issued (not previously reported)	
Clackamas	Canby Transfer & Recycling Station	10/27/88	Application rejected (incomplete)	

SB8023

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Hazardous and Solid Waste Division  
(Reporting Unit)

October 1988  
(Month and Year)

PERMIT ACTIONS PENDING - 38

* County *	* Name of Facility *	* Date Appl. Rec'd. *	* Date of Last Action *	* Type of Action and Status *	* Location *
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Municipal Waste Sources - 21

Clackamas	Rossmans	3/14/84	2/11/87	(C) Applicant review (second draft)	HQ/RO
Baker	Haines	1/30/85	6/20/85	(R) Applicant review	HQ
Curry	Wridge Creek	2/19/86	9/2/86	(R) Draft received	HQ
Umatilla	Rahn's (Athena)	5/16/86	5/16/86	(R) Application filed	RO
Marion	Woodburn Lndfl.	9/22/86	6/22/88	(R) Applicant review	HQ
Coos	Bandon Landfill	1/20/87	1/7/88	(R) Draft received	HQ
Deschutes	Negus Landfill	2/4/87	11/16/87	(R) Applicant review	HQ
Douglas	Reedsport Lndfl.	5/7/87	1/11/88	(R) Draft received	HQ
Lane	Florence Landfill	9/21/87	1/12/88	(R) Draft received	HQ
Morrow	Tidewater Barge Lines (Finley Butte Landfill)	10/15/87	10/15/87	(N) Application filed	HQ
Douglas	Roseburg Landfill	10/21/87	12/21/87	(R) Draft received	
Curry	Port Orford Lndfl.	12/14/87	8/18/88	(R) Applicant review	HQ
Washington	Hillsboro TS	1/15/88	4/12/88	(N) Draft received	HQ
Multnomah	Riedel Composting	5/5/88	5/5/88	(N) Application received	RO/HQ
Coos	Les' Sanitary Service TS	6/30/88	8/19/88	(N) Draft received	HQ
Malheur	Brogan-Jameson	7/1/88	7/1/88	(C) Application received	RO
Malheur	Brogan TS	7/1/88	7/1/88	(N) Application received	RO

SB4968 (A) = Amendment; (C) = Closure permit;  
MAR.7S (5/79) (N) = New source; (R) = Renewal

* County *	* Name of Facility *	* Date Appl. Rec'd. *	* Date of Last Action *	* Type of Action and Status *	* Location *
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Klamath	Bio-Waste Mgmt. Co.	7/14/88	8/25/88	(N) Public hearing held	HQ
Marion	Marion Recycling Center, Inc.	7/20/88	7/20/88	(N) Application received	HQ
Tillamook	Tillamook Landfill	8/16/88	8/16/88	(N) Application received	RO
Marion	Ogden Martin	10/11/88	10/11/88	(R) Application received	HQ

Demolition Waste Sources - 3

Coos	Bracelin/Yeager (Joe Ney)	3/28/86	8/11/88	(R) Public hearing held	HQ
Washington	Hillsboro Lndfl.	1/29/88	1/29/88	(A) Application received	HQ
Marion	Browns Island Demolition	6/8/88	8/18/88	(N) Applicant review	HQ

Industrial Waste Sources - 12

Lane	Bohemia, Dorena	1/19/81	9/1/87	(R) Applicant review of second draft	HQ
Wallowa	Boise Cascade Joseph Mill	10/3/83	5/26/87	(R) Applicant comments received	HQ
Klamath	Weyerhaeuser, Klamath Falls (Expansion)	3/24/86	11/25/86	(N) Add'l. info. requested	HQ
Curry	South Coast Lbr.	7/18/86	7/18/86	(R) Application filed	RO
Baker	Ash Grove Cement West, Inc.	4/1/87	4/1/87	(N) Application received	RO
Klamath	Modoc Lumber Landfill	5/4/87	5/4/87	(R) Application filed	RO
Clatsop	Nygaard Logging	11/17/87	3/3/88	(N) Draft received	HQ
Wallowa	Sequoia Forest Ind.	11/25/87	11/25/87	(N) Application filed	RO

SB4968 (A) = Amendment; (C) = Closure permit;  
 MAR.78 (5/79) (N) = New source; (R) = Renewal

* County *	* Name of Facility *	* Date Appl. Rec'd. *	* Date of Last Action *	* Type of Action and Status *	* Location *
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Douglas	Glide Lumber Prod.	3/8/88	9/28/88	(R) Applicant comments received	HQ
Marion	Silverton Forest Products	5/5/88	8/31/88	(C) Applicant review	HQ
Douglas	Hayward Disp. Site	6/7/88	8/18/88	(R) Applicant review	HQ
Yamhill	Boise-Cascade (Willamina)	9/1/88	9/1/88	(N) Application received	HQ

Sewage Sludge Sources - 2

Coos	Beaver Hill Lagoons	5/30/86	3/10/87	(N) Add'l. info. received (addition of waste oil facility)	HQ
Coos	Hempstead Sludge Lagoons	9/14/87	9/14/87	(C) Application received	HQ/RO

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Noise Control Program (Reporting Unit)	October, 1988 (Month and Year)
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SUMMARY OF NOISE CONTROL ACTIONS

Source Category	New Actions Initiated		Final Actions Completed		Actions Pending	
	<u>Mo</u>	<u>FY</u>	<u>Mo</u>	<u>FY</u>	<u>Mo</u>	<u>Last Mo</u>
Industrial/ Commercial	6	50	23	68	170	187
Airports			2	6	0	0

DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

<u>Noise Control Program</u> (Reporting Unit)	<u>October, 1988</u> (Month and Year)
--	--

FINAL NOISE CONTROL ACTIONS

County	* * Name of Source and Location	* * Date	* * Action
Multnomah	East County Recycling Center, Portland	10/88	No violation
Multnomah	Glenaire Care Center, Portland	10/88	Referred to Multnomah County
Multnomah	New Birth Full Gospel Church, NE Mallory Avenue, Portland	10/88	No violation
Multnomah	Tri-Met, MAX, near N. 9th & Main, Gresham	10/88	In compliance
Washington	Pacific Plastics, Inc., Beaverton	10/88	In compliance
Benton	Evanite Glass Fiber, Inc., Corvallis	10/88	In compliance
Benton	Diamond B Corporation, Philomath	10/88	In compliance
Benton	WTD Enterprises (formerly Midway Forest Products), Corvallis	10/88	In compliance
Linn	Oregon Strand Board Co., Brownsville	10/88	In compliance
Linn	United Foods, Inc., Albany	10/88	In compliance
Linn	WTD Enterprises (formerly Halsey Veneer, Inc.), Halsey	10/88	In compliance
Marion	Donald Feed Company, Donald	10/88	Referred to City of Donald
Marion	Riverbend Sand & Gravel, SW Turner Road, Salem	10/88	In compliance



DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY ACTIVITY REPORT

Noise Control Program  
(Reporting Unit)

October, 1988  
(Month and Year)

FINAL NOISE CONTROL ACTIONS

<u>County</u>	<u>* Name of Source and Location</u>	<u>* Date</u>	<u>* Action</u>
Jackson	Meridian Rock, Hwy #140, White City	10/88	No violation
Crook	Prineville Loggers Supply, Prineville	10/88	No violation
Crook	Ranger Millwork, Prineville	10/88	In compliance
Deschutes	Bend Salvage Company, Bend	10/88	No violation
Deschutes	Regnier Brothers Building Materials, Bend	10/88	In compliance
Deschutes	Thomas Sales & Service, Inc. Bend	10/88	No violation
Jefferson	Mountain View Millwork (formerly Earth Industries), Madras	10/88	In compliance
Klamath	Sturdi-Craft, Klamath Falls	10/88	In compliance
Lake	Gooselake Lumber, Lakeview	10/88	In compliance
Lake	Lakeview Lumber, Lakeview	10/88	In compliance
Airports			
Washington	Apple Valley Airport, near Buxton	10/88	Boundary approved
Lane	Florence Hospital Emergency Heliport, Florence	10/88	Exception granted

CIVIL PENALTY ASSESSMENTS

DEPARTMENT OF ENVIRONMENTAL QUALITY  
1988

CIVIL PENALTIES ASSESSED DURING MONTH OF OCTOBER, 1988:

<u>Name and Location of Violation</u>	<u>Case No. &amp; Type of Violation</u>	<u>Date Issued</u>	<u>Amount</u>	<u>Status</u>
West Linn School District No. 3JT West Linn, Oregon	AQAB-NWR-88-77 Failed to properly remove and handle materials contain- ing asbestos, during a renovation project at the Willamette School.	10/21/88	\$3,500	Awaiting response to notice.
Rahenkamp Wrecking, Inc. Medford, Oregon	AQAB-SWR-88-76 Failed to properly remove and handle materials containing asbestos, during a renovation project at the old KOBI television studio in Medford.	10/21/88	\$3,500	Awaiting response to notice.
Scott Scholes Portland, Oregon	AQOB-NWR-88-92 Unauthorized open burning of yard debris.	10/26/88	\$50	Awaiting response to notice.

GB7982

November, 1988  
DEQ/EQC Contested Case Log

<u>ACTIONS</u>	<u>LAST MONTH</u>	<u>PRESENT</u>
Preliminary Issues	0	1
Discovery	0	0
Settlement Action	3	3
Hearing to be scheduled	5	1
Department reviewing penalty	0	0
Hearing scheduled	2	7
HO's Decision Due	5	3
Briefing	0	0
Inactive	<u>3</u>	<u>2</u>
SUBTOTAL of cases before hearings officer	18	17
HO's Decision Out/Option for EQC Appeal	0	2
Appealed to EQC	0	0
EQC Appeal Complete/Option for Court Review	0	0
Court Review Option Taken	0	0
Case Closed	<u>4</u>	<u>0</u>
TOTAL Cases	22	19

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

November, 1988  
DEQ/EQC Contested Case Log

Pet/Resp Name	Hrng Rqst	Hrng Rfrl	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	New permit under negotiation. May resolve contested issues.
WAH CHANG	04/78	04/78		Prtys	03-P-WQ-WVR-78-2012-J NPDES Permit Modification	New permit under negotiation. May resolve contested issues.
DANT & RUSSELL, INC.	05/31/85	05/31/85	03/21/86		15-HW-NWR-85-60 Hazardous waste disposal Civil Penalty of \$2,500	Settlement agreement submitted to Bankruptcy Court for approval.
BRAZIER FOREST PRODUCTS	11/22/85	12/12/85	02/10/86	DEQ	23-HSW-85-60 Declaratory Ruling	Tentative settlement reached. Order to be prepared for EQC consideration.
CITY OF KLAMATH FALLS (SALT CAVES II)			05/03/88	<u>Ptys</u>	1-P-WQ-88 (FERC #10199)	<u>Motion to dismiss appeal filed by Conservation Parties.</u>
ZELMER, dba RIVERGATE AUTO	3/2/88	3/3/88	07/12/88	<u>Prtys</u>	AQOB-NWR-88-03 \$1,000 Civil Penalty	<u>Hearings Officer reduced penalty to \$700. Appeal rights elapse December 5.</u>
CSSI	3/31/88	4/19/88		Prtys	Permit 089-452-353	A stipulated order resolving certain disputed terms will be submitted to EQC for approval; others will be adjudicated.
NEU-GLO CANDLES	6/9/88		07/25/88	<u>Dept</u>	AQAB-NWR-88-33 Asbestos \$1,000 Civil Penalty	<u>Hearings Officer found no liability. Appeal rights elapse November 28.</u>

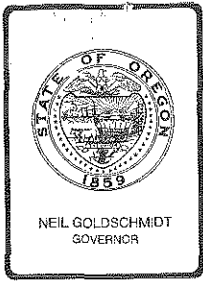
November, 1988  
DEQ/EQC Contested Case Log

Pet/Resp Name	Hrng Rqst	Hrng Rfrl	Hrng Date	Resp Code	Case Type & No.	Case Status
GUARANTEE CONSTRUCTION			10/4/88	DEQ	AQAB-NWR-88-31 \$2,000 Civil Penalty	Hearing held on 10/4/88. <u>Resp. seeks informal resolution.</u>
GEORGE FOX COLLEGE			9/7/88	DEQ	AQAB-WVR-88-38 \$3,750 Civil Penalty	Hearing held on 9/7/88. <u>Resp. seeks informal resolution.</u>
ELLIOTT-JOCHIMSEN			9/7/88	DEQ	AQAB-WVR-88-50 \$7,000 Civil Penalty	Hearing held on 9/7/88. <u>Resp. seeks informal resolution.</u>
CLAUDE ST. JEAN	9/15/88		<u>1/10/89</u>	Prtys	OS-SWR-88-68 \$500 Civil Penalty	<u>Hearing re-scheduled.</u>
GLENEDEN BRICK & TILE WORKS	9/15/88		<u>1/18/89</u>	Prtys	AQ-WS-88-70 \$1,500 Civil Penalty	<u>Hearing scheduled.</u>
JOHN BOWERS	9/19/88		<u>1/11/89</u>	Prtys	AQOB-CR-88-58 \$1,500 Civil Penalty	<u>Hearing re-scheduled to provide time for settle- ment discussions.</u>
69 CITY OF SALEM	9/26/88		<u>11/29/88</u>	Prtys	Department Order	<u>Hearing scheduled.</u>
DAVIS dbA TRI-COUNTY STOVE AND CHIMINEY SERVICE	9/27/88		<u>12/1/88</u>	Prtys	AQ-WS-88-69 \$1,500 Civil Penalty	<u>Hearing scheduled.</u>
IRVING HERMENS	9/27/88		<u>12/6/88</u>	Prtys	WQ-WVR-88-61A \$2,500 Civil Penalty and-62B, Department Order	<u>Hearing scheduled.</u>

November, 1988  
DEQ/EQC Contested Case Log

<u>Pet/Resp Name</u>	<u>Hrng Rqst</u>	<u>Hrng Rfrl</u>	<u>Hrng Date</u>	<u>Resp Code</u>	<u>Case Type &amp; No.</u>	<u>Case Status</u>
ARIE JONGANEEL dba A.J. Dairy	10/3/88		<u>12/20/88</u>	Prtys	WQ-WVR-88-73A \$2,500 Civil Penalty and -73B, Department Order	<u>Hearing scheduled.</u> <u>Cooperative resolution</u> <u>proposed by Respondent.</u>
<u>JOHN VOLBEDG</u>	<u>11/15/88</u>	<u>11/17/88</u>		<u>Hrgs</u>	<u>WQ-WVR-88-81</u>	<u>Hearing to be scheduled.</u>

70



## *Environmental Quality Commission*

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

### REQUEST FOR COMMISSION ACTION

Agenda Item D, December 9, 1988, EQC Meeting

#### Pollution Control Tax Credit

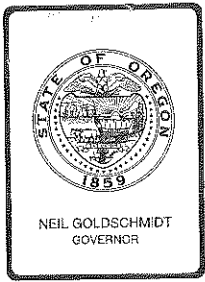
##### Summation

The pollution control tax credits in the attached report contain no unusual items.

##### Director's Recommendation

Issue tax credit certificates for pollution control facilities listed in the report.

CN:s  
MS119



## Environmental Quality Commission

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

### MEMORANDUM

To: Environmental Quality Commission

From: Director *Patricia Taylor*

Subject: Agenda Item D, December 9, 1988, EQC Meeting

### TAX CREDIT APPLICATIONS

<u>Appl. No.</u>	<u>Applicant</u>	<u>Facility</u>
T-1905	Electronic Controls Design, Inc.	Waste water treatment system
T-2129	Portland General Electric Co.	Oil spill containment facility
T-2155	Hewlett Packard	Oil spill containment tank
T-2176	Portland General Electric Co.	Oil spill containment facility
T-2237	Marie Cochran	Manure control facility
T-2295	Willamette Industries Inc.	Pneumafil filter
T-2305	Columbia Steel Casting Co., Inc.	Sand shakeout including baghouse
T-2322	Willamette Industries Inc.	Macron systems No. 42 baghouse
T-2360	South Coast Lumber Co.	Veneer dryer scrubber
T-2373	Teledyne Industries, Inc.	Waste water pre-treatment
T-2406	Willamette Industries, Inc.	Macron 42 bag filter
T-2431	Ray Davidson	Straw Storage Shed
T-2446	Raymond T. Davidson	Equipment to reduce open field burning
T-2448	Mullen Farms	Straw Storage Shed
T-2469	Columbia Helicopters, Inc.	Hot vapor degreaser
T-2471	Willamette Industries, Inc.	Chemical transfer system baghouse
T-2487	Kizer & Son	Straw Storage Shed
T-2638	Clear Pine Mouldings, Inc.	Baghouse



EQC Agenda Item D  
December 9, 1988  
Page 2

Proposed November 4, 1988 Totals:

Air Quality	\$ 1,556,012
Water Quality	347,644
Hazardous/Solid Waste	293,171
Noise	<u>0</u>
	\$ 2,196,827

1988 Calendar Year Totals not including Tax Credits Certified at this EQC meeting.

Air Quality	\$ 7,103,552
Water Quality	1,716,907
Hazardous/Solid Waste	178,947
Noise	<u>0</u>
	\$ 8,999,406

Fred Hansen

C. Nuttall:s  
(503) 229-6484  
November 23, 1988  
MS118

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

---

1. Applicant

Electronic Controls Design, Inc.  
13626 S. Freeman Road  
Mulino, OR 97042

The applicant owns and operates a printed circuit board manufacturing and digital dataloggers fabrication facility in Mulino, Oregon.

Application was made for tax credit for a water pollution control facility. The facility is being leased from Collateral Financial Services, Inc.

2. Description of Facility

The ANDCO electrochemical precipitation system consists of two electrochemical cells with electrodes, acid feed system, polymer feed system, a clarifier with flash mixer and flocculator, sludge handling system, and appropriate electrical controls and plumbing system.

Claimed Facility Cost: \$192,048.00  
(Accountant's Certification was provided).

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190 and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that:

- a. The request for preliminary certification was filed June 14, 1984, more than 30 days before construction commenced on July 15, 1984.
- b. The request for preliminary certification was approved before application for final certification was made.
- c. Construction of the facility was substantially completed on October 18, 1985 and the application for final certification was found to be complete on October 6, 1987, within 2 years of substantial completion of the facility.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the federal Environmental Protection Agency, to prevent groundwater pollution. This prevention is accomplished by the use of treatment works for industrial waste as defined in ORS 468.700.

Electronic Controls Design (ECD) previously operated a chemical precipitation system followed by two concrete-lined polishing lagoons to treat wastewater from the printed circuit board manufacturing operations. The treated effluent was discharged to Milk Creek under a National Pollutant Discharge Elimination System (NPDES) permit.

The U. S. Environmental Protection Agency advised ECD that the lagoons had to be permitted under the Resource Conservation and Recovery Act (RCRA) regulations or be closed. ECD chose to remove and close the lagoons under an agreed final order with EPA on November 6, 1984. Furthermore, the existing treatment system was found unreliable to continuously comply with its permit effluent limits. ECD decided to replace the existing treatment facility with the electrochemical precipitation facility since the lagoons were an integral part of the old system.

After the facility was completed, ECD incurred several violations of effluent permit limits for copper and nickel. The violations were attributed to operational difficulties of the new treatment facility and some production processing equipment which were the main source of pollutant loadings. ECD also had problems meeting their permit limitations for biochemical oxygen demand (BOD) and ammonia. The treatment system was not designed to treat organic pollutants but only metals. In April 1987, the Sierra Club notified ECD that they intended to file a citizen suit under the provisions of the Clean Water Act for the above mentioned violations.

In September 1987, the Department renewed the permit issued to ECD. The copper limits were adjusted to the same level as the other metals. However, the permitted levels were more restrictive than those allowed by federal guidelines. In addition, a compliance schedule was included for a step by step reduction of BOD limits from 320 mg per liter to 20 mg per liter by January 1, 1990.

In the early part of 1988, average concentrations for copper were exceeded for 2 consecutive months. The violations were again attributed to operational difficulties. As a result of these violations, the Department issued a Notice of Intent to Assess Civil Penalty in May 1988.

Since then, the facility has been in compliance with its permit effluent limits. ECD chose the strategy of controlling the organic pollutants at the point of generation and preventing its introduction to the waste stream. Furthermore, ECD has recently agreed to a Stipulation for Entry of Consent Judgement with the Sierra Club to comply with its NPDES permit conditions and limits. The agreement stipulates that ECD will make payments to Sierra Club for any permit violation that occurs between September 1, 1988 and June 1, 1989.

b. Eligible Cost Findings

In determining the percent of the pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

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

The facility does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

There is no return on investment for the facility.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

The method chosen is the accepted method for control of metals. This method is the least cost and most effective method of controlling printed circuit board manufacturing waste stream.

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

There are no savings from the facility. The cost of maintaining and operating the facility is \$79,440 annually.

- 5) 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.

There are no other factors to consider in establishing the actual cost of the facility properly allocable to prevention, control or reduction of pollution.

The actual cost of the facility properly allocable to pollution control as determined by using these factors is 100%.

5. Summation

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

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$192,048.00 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-1905.

RCDulay:crw  
WC4028  
(503) 229-5876  
November 2, 1988

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

---

1. Applicant

Portland General Electric Company  
121 SW Salmon St., Tax Dept., TB 10  
Portland, OR 97204

The applicant owns and operates a distribution substation in Salem, Oregon. Application was made for tax credit for a water pollution control facility.

2. Description of Facility

The claimed facility is a sand filter system (essentially a sand-filled trench with a baffle) installed along the northern and western boundaries of the Market Street Substation. The purpose of the facility is to contain oil that might be spilled from the transformers, circuit breakers and switches located on the property.

The Market Street Substation is located approximately two miles east of the Willamette River and has an enclosed area of approximately 35,000 square feet.

There is currently no secondary oil containment facility at the Substation. No spills have occurred at this site but there is the potential for approximately 5,000 gallons of transformer oil to drain off the property in the event of a major spill. The sand filter allows surface water to drain off the property but will stop an oil spill long enough to allow orderly cleanup.

Claimed Facility Cost: \$14,874.49  
(Accountant's Certification was provided).

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190 and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that:

- a. The request for preliminary certification was filed June 19, 1986, more than 30 days before construction commenced on August 19, 1986.
- b. The request for preliminary certification was approved before application for final certification was made.
- c. Construction of the facility was substantially completed on September 2, 1986 and the application for final certification was found to be complete on September 18, 1987, within 2 years of substantial completion of the facility.

4. Evaluation of Application

- a. The facility is eligible because the sole purpose of the facility is to prevent a substantial quantity of water pollution. This prevention is accomplished by the elimination of industrial waste as defined in ORS 468.700.
- b. Eligible Cost Findings

In determining the percent of the pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.  
  
The facility does not recover or convert waste products into a salable or usable commodity.
- 2) The estimated annual percent return on the investment in the facility.  
  
Because this facility generates no income, there is no return on the investment.
- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

Other alternatives considered were:

Transformer/circuit-breaker pits--\$30,000 to \$40,000  
Oil stop valve, piping and storage container--\$24,000 to \$30,000.

These alternatives were rejected because of cost and operational maintenance.

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

There is no savings from the facility.

- 5) 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.

There are no other factors to consider in establishing the actual cost of the facility properly allocable to prevention, control or reduction of pollution.

#### 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 sole purpose of the facility is to prevent, a substantial quantity of water pollution and accomplishes this purpose by the elimination of industrial waste as defined in ORS 468.700.
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

#### 6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$14,874.49 with 100 % allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-2129.

Jerry E. Turnbaugh:crw  
503-229-5374  
September 22, 1988  
WC3826



State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

---

1. Applicant

Hewlett Packard  
Portable Computer Division  
1000 N.E. Circle Boulevard  
Corvallis, OR 97330

The applicant owns and operates an electronic equipment manufacturing plant in Corvallis, Oregon.

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

2. Description of Facility

The facility consists of a concrete spill containment basin, 18 feet 10 inches by 19 feet 4 inches and 2 feet 10 inches high, for above ground 5,000 gallon capacity fuel oil storage tank.

Claimed Facility Cost: \$8,374.00 (Adjusted downward from the total claimed amount of \$8,724.00 for an ineligible storage tank installation cost.)

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190 and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that:

- a. The request for preliminary certification was filed July 25, 1986, more than 30 days before construction commenced on September 1, 1986.
- b. The request for preliminary certification was approved before application for final certification was made.
- c. Construction of the facility was substantially completed on October 1, 1986 and the application for final certification was found to be complete on December 16, 1987, within 2 years of substantial completion of the facility.

4. Evaluation of Application

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

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

In accordance with federal law, owners of above ground oil storage facilities that could reasonably be expected to discharge oil in harmful quantities into or upon navigable waters must provide oil spill containment systems.

The concrete spill containment basin has a capacity of 6,000 gallons which is more than the storage volume of the fuel oil tank. During normal operations, the rainfall collected in the containment basin is pumped into the storm sewers which eventually is discharged to the Willamette River. If oil is present automatic sensors will shut off the pump. Any spilled oil would be pumped out by cleanup crews for proper disposal. Any tank rupture or major accidental spill would be contained in the basin and handled by contract cleanup crews.

- b. Eligible Cost Findings

In determining the percent of the pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

- 1) The extent to which the facility is used to recover and convert waste products into a salable or usable commodity:  
The facility does not recover or convert waste products into a salable or usable commodity.
- 2) The estimated annual percent return on the investment in the facility.  
There is no return on investment for this facility.
- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

Other alternatives considered was to replace existing single wall buried tank with new double wall tank and double wall buried piping complete tank level monitoring and annular space leak detection system. Estimated cost of this alternative was \$53,400.00. It was not selected because of its inherent liabilities and higher cost.

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

There is no savings or increase in costs as a result of the facility modification.

- 5) 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.

The total cost of the claimed facility is \$8,724.00. Included in the total cost is the installation cost for the fuel oil storage tank which is \$350.00. Since the tank is not considered to be a pollution control item, the cost associated to the storage tank should not be included. Accordingly the \$8,724.00 has been adjusted by \$350.00, leaving an allocable cost of \$8,374.00.

The actual cost of the facility properly allocable to pollution control as determined by using these factors is 100%.

5. Summation

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

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$8,374.00 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-2155.

RCDulay:crw  
WC4034  
(503) 229-5876  
November 2, 1988

State of Oregon  
Department of Environmental Quality  
**TAX RELIEF APPLICATION REVIEW REPORT**

---

1. Applicant

Portland General Electric Company  
121 S.W. Salmon St., Tax Dept., TB 10  
Portland, OR 97204

The applicant owns and operates a distribution substation in Gresham, Oregon.

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

2. Description of Facility

The claimed facility is an oil-stop valve installed in the stormwater drain system that serves the Hogan South Substation which is located between Powell Boulevard and Portland Traction Co. right-of-way, approximately 300-feet west of S.E. 242nd Drive (Hogan Road).

Claimed Facility Cost: \$11,031.49

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190 and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that:

- a. The request for preliminary certification was filed September 9, 1986, more than 30 days before installation commenced on December 9, 1986.
- b. The request for preliminary certification was approved before application for final certification was made.
- c. Installation of the facility was substantially completed on February 27, 1987 and the application for final certification was found to be complete on September 23, 1988, within 2 years of substantial completion of the facility.

4. Evaluation of Application

- a. The sole purpose of the facility is to prevent a substantial quantity of water pollution.

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

No oil spills have occurred at this site but prior to the installation of the stop valve, the potential existed for up to 6,425 gallons of oil to flow off the property in the stormwater system if a major spill had occurred.

b. Eligible Cost Findings

In determining the percent of the pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

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

The facility does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

This facility does not generate revenue and so does not provide a return on the investment.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

Other alternatives considered and found to be unacceptable were; transformer/circuit breaker pits (\$30,000-\$40,000) and sand filters (\$24,000-\$30,000).

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

There are no savings from the facility.

- 5) 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.

There are no other factors to consider in establishing the actual cost of the facility properly allocable to prevention, control or reduction of pollution.

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 sole purpose of the facility is to prevent a substantial quantity of water pollution and accomplishes this purpose by the elimination of industrial waste as defined in ORS 468.700.
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$11,031.49 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-2176.

J. E. Turnbaugh:hs  
WH2993  
(503) 229-5374  
October 10, 1988

State of Oregon  
Department of Environmental Quality

**TAX RELIEF APPLICATION REVIEW REPORT**

---

1. Applicant

Marie Cochran  
1340-North Bank Road  
Coquille, OR 97423

The applicant owns and operates a dairy in Coquille, Oregon.

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

2. Description of Facility

The claimed facility is a roofed manure-stacking building having a concrete floor and retaining walls with storage capacity for solids of approximately 9,366 cubic feet and 2,774 cubic feet for liquids. The facility will accommodate the waste generated by 100 cows for 150 days.

The facility received cost-sharing funds from the US Department of Agriculture Stabilization and Conservation Service in the amount of \$3,500.00.

Claimed Facility Cost: \$11,987.47\*

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190 and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that:

- a. The request for preliminary certification was filed September 2, 1986, more than 30 days before construction commenced on October 14, 1986.
- b. The request for preliminary certification was approved before application for final certification was made.
- c. Construction of the facility was substantially completed on August 28, 1987, and the application for final certification was found to be complete on August 26, 1988, within 2 years of substantial completion of the facility.

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\* (Accountant's Certification was provided).



4. Evaluation of Application

- a. The facility is eligible because the sole purpose of the facility is to reduce a substantial quantity of water pollution.

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

Before construction of the stacking building, the manure would have been piled outside, making it susceptible to leaching by rainwater and occasional flooding.

The building is out of the flood plain and allows manure to be stockpiled under cover during rainy weather. This provides opportunity for holding manure until drier weather when it can be spread on the pastures or fields to be farmed. Pollution of the Coquille river due to manure runoff during the rainy season is eliminated.

- b. Eligible Cost Findings

In determining the percent of the pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

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

The facility does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

This facility does not generate any return, either as a cost savings or a salable product. The manure is used as before; the facility merely allows it to be stored under cover instead of out in the rain.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

The method chosen is the accepted method for control of manure run-off to streams.

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

There is no savings or increase in costs as a result of the facility construction.

- 5) 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.

There are no other factors to consider in establishing the actual cost of the facility properly allocable to prevention, control or reduction of pollution.

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 prevent a substantial quantity of water pollution and accomplishes this purpose by the elimination of industrial waste as defined in ORS 468.700.
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$11,987.47 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-2237.

J.E. Turnbaugh:hs  
WH2992  
(503) 5374  
September 26, 1988

State of Oregon  
Department of Environmental Quality  
TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Willamette Industries, Inc.  
Korpine Division  
3800 First Interstate Tower  
1300 SW Fifth Avenue  
Portland, OR 97201

The applicant owns and operates a particleboard manufacturing facility in Bend, Oregon.

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

2. Description of Facility

The facility is a Pneumafil primary baghouse size 8.5-162-12 which was installed to replace an existing uncontrolled 21,300 CFM low pressure air cyclone for the press clean up air system.

Claimed Facility Cost: \$60,272.40  
(Accountant's Certification was provided).

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that:

- a. The request for preliminary certification was filed June 16, 1987, more than 30 days before installation commenced on September 1, 1987.
- b. The request for preliminary certification was approved before application for final certification was made.
- c. Installation of the facility was substantially completed on December 31, 1987, and the application for final certification was found to be complete on September 27, 1988, within 2 years of substantial completion of the facility.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the Department, to prevent air pollution. The requirement is to comply with OAR 340-21-060.

The surrounding neighborhood has been impacted by fugitive emissions for several years. As a result, the Department has been conducting a fallout bucket study. One of the processes thought to be causing the fallout problem is the press clean up air system with an uncontrolled cyclone.

b. Eligible Cost Findings

In determining the percent of the pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

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

The facility does not recover or convert waste products into a salable or usable commodity. The material collected by the facility is disposed of in a landfill.

- 2) The estimated annual percent return on the investment in the facility.

There is no return on investment for this facility.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

There is no known alternative.

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

There is no savings from the facility. The cost of maintaining and operating the facility is \$4,975.00 annually.

- 5) 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.

There are no other factors to consider in establishing the actual cost of the facility properly allocable to prevention, control or reduction of pollution.

The actual cost of the facility properly allocable to pollution control as determined by using this factor is 100%.

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for final tax credit certification because air contaminants are eliminated as defined in ORS 468.275.
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$60,272.40 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-2295.

Terri Sylvester:k  
AK1139  
(503) 229-5057  
November 7, 1988

State of Oregon  
Department of Environmental Quality  
TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Columbia Steel Casting Co., Inc.  
10425 North Bloss Avenue  
Portland, OR 97203

The applicant owns and operates a steel foundry at 10425 North Bloss in Portland, Oregon.

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

2. Description of Facility

The claimed facility consists of a bag filter dust collection system.

Claimed Facility Cost: \$145,588.76  
(Accountant's Certification was provided).

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that:

- a. The request for preliminary certification was filed July 22, 1987, more than 30 days before construction commenced on October 21, 1987.
- b. The request for preliminary certification was approved before application for final certification was made.
- c. Construction of the facility was substantially completed on March 11, 1988, and the application for final certification was found to be complete on October 4, 1988, within 2 years of substantial completion of the facility.

4. Evaluation of Application

- a. The facility is eligible because the sole purpose of the facility is to prevent a substantial quantity of air pollution from the new Sand-Shakeout System. This prevention is accomplished by installing a bag filter dust collection system.

The facility has been inspected by Department personnel and was found to be operating in compliance with Department regulations and permit conditions.

b. Eligible Cost Findings

In determining the percent of the pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

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

The facility does not recover or convert waste products into a salable or usable commodity. All material collected by the facility is disposed of in a landfill.

- 2) The estimated annual percent return on the investment in the facility.

There is no return on the investment in the facility. The sole purpose of the facility is to prevent air pollution.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

The method chosen is the accepted method for control of particulate.

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

There is no savings from the facility. The cost of maintaining and operating the facility is \$10,200 annually.

- 5) 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.

There are no other factors to consider in establishing the actual cost of the facility properly allocable to prevention, control or reduction of pollution.

The actual cost of the facility properly allocable to pollution control as determined by using these factors is 100%.

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 sole purpose of the facility is to prevent a substantial quantity of air pollution and accomplishes this purpose by the installation of a bag filter dust collection system.
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$145,588.76 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-2305.

W. J. Fuller:k  
AK1077  
(503) 229-5749  
October 19, 1988



State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Willamette Industries, Inc.  
Duraflake Division  
3800 First Interstate Tower  
1300 SW 5th Avenue  
Portland, OR 97201

The applicant owns and operates a particleboard manufacturing facility in Albany, Oregon.

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

2. Description of Facility

The facility is a Macron Model No. 42 secondary baghouse installed on the high pressure transport system from the green dryer to the raw material system.

Claimed Facility Cost: \$15,094.89  
(Accountant's Certification was provided).

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that:

- a. The request for preliminary certification was filed August 6, 1987 more than 30 days before installation commenced on October 17, 1987.
- b. The request for preliminary certification was approved before application for final certification was made.
- c. Installation of the facility was substantially completed on November 4, 1987 and the application for final certification was found to be complete on September 27, 1988 within 2 years of substantial completion of the facility.

4. Evaluation of Application

- a. The facility is eligible because the sole purpose of the facility is to reduce a substantial quantity of air pollution.

This reduction is accomplished by elimination of air contaminants, as defined in ORS 468.275.

b. Eligible Cost Findings

In determining the percent of the pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

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

The facility does not recover or convert waste products into a salable or usable commodity. The material collected by the facility is disposed of in a landfill.

- 2) The estimated annual percent return on the investment in the facility.

There is no return on investment for this facility.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

A high efficiency cyclone was considered, but rejected because it would not have been as effective as a baghouse.

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

There is no savings from the facility. The cost of maintaining and operating the facility is \$3,604.00. annually.

- 5) 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.

There are no other factors to consider in establishing the actual cost of the facility properly allocable to prevention, control or reduction of pollution.

The actual cost of the facility properly allocable to pollution control as determined by using this factor is 100%.

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for final tax credit certification because air contaminants are eliminated as defined in ORS 468.275.

- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$15,094.89 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-2322.

Terri Sylvester:CDJ  
AD3945  
(503) 229-5057  
November 7, 1988

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

South Coast Lumber Company  
Plywood Division  
P.O. Box 670  
Brookings, OR 97415

The applicant owns and operates a plywood manufacturing plant in Brookings, Oregon.

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

2. Description of Facility

A five-stage, Model B-5S Burley wet scrubber to control particulate emissions from a veneer dryer (no. 4) installed in 1987.

Claimed Facility Cost: \$71,390.00  
(Accountant's Certification was provided).

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that:

- a. The request for preliminary certification was filed October 1, 1987, more than 30 days before installation commenced on December 15, 1987.
- b. The request for preliminary certification was approved before application for final certification was made.
- c. Installation of the facility was substantially completed on February 29, 1988, and the application for final certification was found to be complete on October 27, 1988, within 2 years of substantial completion of the facility.

4. Evaluation of Application

- a. The facility is eligible because the sole purpose of the facility is to control a substantial quantity of air pollution.

This control is accomplished by elimination of air contaminants as defined in ORS 468.275.

- b. Eligible Cost Findings

In determining the percent of the pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

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

The facility does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

The return on the investment is zero, as there are operating costs and no income resulting from operating the facility.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

Other alternatives of equipment were evaluated as being less cost-effective than the Burley wet scrubber.

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

There is no savings from the facility. The cost of maintaining and operating the facility is \$20,635 annually.

- 5) 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.

There are no other factors to consider in establishing the actual cost of the facility properly allocable to prevention, control or reduction of pollution.

The actual cost of the facility properly allocable to pollution control as determined by using these factors is 100%.

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 sole purpose of the facility is to control a substantial quantity of air pollution and accomplishes this purpose by the elimination of particulate air contaminant discharges to atmosphere.
- c. The facility complies with DEQ statutes and rules and permit conditions.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$71,390.00 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-2360.

DNeff:k  
AK1094 (10/88)  
(503) 229-6480  
October 27, 1988

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Teledyne Industries, Inc.  
Teledyne Wah Chang Albany  
1600 Old Salem Road  
Albany, OR 97321

The applicant owns and operates a zirconium, hafnium, tantalum, and niobium manufacturing and forming facility in Albany, Oregon.

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

2. Description of Facility

The claimed facility is a uranium removal system for the pretreatment of waste stream from the separation process of zirconium and hafnium metals prior to discharging to the central wastewater treatment facility. The facility consists of agitated mixing tanks, clarifiers, filters, storage vessels, associated control equipment and building. The uranium removal process is considered company confidential.

Claimed Facility Cost: \$ 1,051,451.00  
(Accountant's Certification was provided).

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190 and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that:

- a. The request for preliminary certification was filed October 25, 1985, more than 30 days before construction commenced on January 6, 1986.
- b. The request for preliminary certification was approved before application for final certification was made.
- c. Construction of the facility was substantially completed on December 16, 1986 and the application for final certification was found to be complete on October 29, 1987, within 2 years of substantial completion of the facility.

4. Evaluation of Application

- a. The facility is eligible because the sole purpose of the facility is to reduce a substantial quantity of water pollution. This reduction is accomplished by the use of treatment works for industrial waste as defined in ORS 468.700.

Zircon sand contains a relatively low amount of uranium. Considerable efforts have been expended to remove or capture radioactive material prior to its introduction into liquid/aqueous process. A major portion of the radioactive zircon sand constituents are discarded at the sand chlorination radioactive-waste system. Any uranium left appears in the wastewater treatment system at an average concentration of 13 parts per million and ultimately discharged in the final effluent at very low levels and/or ends up in the clarifier sludge. The clarifier sludge is pumped for disposal to the "Farm Ponds" north of the plant site.

Since the installation and operation of the uranium removal facility, the uranium content of the waste stream discharging to the wastewater treatment system has been reduced to an average of 3 parts per million, equivalent to a removal efficiency of 76%. The uranium bearing sludge removed by the new facility is being disposed of at a radioactive waste disposal facility at the Hanford complex in Washington. The uranium content of the final sludge being disposed of to the "Farm Ponds" has been greatly reduced by about 70%.

The existing discharge permit issued to Teledyne Wah Chang requires that the settling pond (farm ponds) sludges be characterized and quantified and data be reported to the Department in conjunction with the Remedial Investigation/Feasibility Study and Record of Decision plan as ordered by the Commission. As a result of the construction of the claimed facility, a less contaminated sludge may help facilitate approval for a plan for final disposal of settling pond sludges.

- b. Eligible Cost Findings

In determining the percent of the pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

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

The facility does not recover or convert waste products into a salable or usable commodity. The material collected by the facility is disposed of to a radioactive waste disposal facility.



- 2) The estimated annual percent return on the investment in the facility.

There is no return on investment in the facility.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

There are no known alternatives.

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

There is no savings from the facility. The company is reluctant to provide the cost of maintaining and operating the facility as they consider the uranium removal process as company confidential.

- 5) 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.

There are no other factors to consider in establishing the actual cost of the facility properly allocable to prevention control or reduction of pollution.

The actual cost of the facility properly allocable to pollution control as determined by using these factors is 100%.

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 sole purpose of the facility is to reduce a substantial quantity of water pollution and accomplishes this purpose by the disposal of industrial waste as defined in ORS 468.700.
- c. The facility complies with DEQ statutes and rules, Commission order, and permit conditions.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$1,051,451.00 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-2373.

RCDulay:crw  
WC4026  
(503) 229-5876  
November 2, 1988

State of Oregon  
Department of Environmental Quality  
TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Willamette Industries, Inc.  
Duraflake Division  
3800 First Interstate Tower  
1300 SW 5th Avenue  
Portland, OR 97201

The applicant owns and operates a particleboard manufacturing facility in Albany, Oregon.

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

2. Description of Facility

The facility is a Macron Model No. 42 secondary baghouse installed on the fire retardant sander dust disposal bin cyclone.

Claimed Facility Cost: \$22,631.40.  
(Accountant's Certification was provided).

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that:

- a. The request for preliminary certification was filed December 28, 1987 more than 30 days before installation commenced on February 1, 1988.
- b. The request for preliminary certification was approved before application for final certification was made.
- c. Installation of the facility was substantially completed on March 16, 1988 and the application for final certification was found to be complete on September 27, 1988 within 2 years of substantial completion of the facility.

4. Evaluation of Application

- a. The facility is eligible because the sole purpose of the facility is to reduce a substantial quantity of air pollution.

This reduction is accomplished by elimination of air contaminants, as defined in ORS 468.275.

b. Eligible Cost Findings

In determining the percent of the pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

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

The facility does not recover or convert waste products into a salable or usable commodity. The material collected by the facility is disposed of in a landfill.

- 2) The estimated annual percent return on the investment in the facility.

There is no return on investment for this facility.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

There is no known alternative.

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

There is no savings from the facility. The cost of maintaining and operating the facility is \$3,748.00.

- 5) 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.

There are no other factors to consider in establishing the actual cost of the facility properly allocable to prevention, control or reduction of pollution.

The actual cost of the facility properly allocable to pollution control as determined by using these factors is 100%.

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for final tax credit certification because air contaminants are eliminated as defined in ORS 468.275.

- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$22,631.40 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-2406.

Terri Sylvester:CDJ  
AD3947  
(503) 229-5057  
November 8, 1988

State of Oregon  
Department of Environmental Quality  
TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Ray Davidson  
4058 Davidson Road NE  
St. Paul, OR 97137

The applicant owns and operates a grass seed farm operation in St. Paul, Oregon.

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

2. Description of Claimed Facility

The facility described in this application is a straw storage shed (70' x 164' x 21') located at 4608 Davidson Road NE, St. Paul, Oregon. The building will provide cover for 1,000 tons of straw. The land and building are owned by the applicant.

Claimed facility cost: \$43,853  
(Accountant's Certification was provided.)

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility has met all statutory deadlines in that:

- a. The request for preliminary certification was filed January 27, 1988, more than 30 days before construction commenced on April 1, 1988.
- b. The request for preliminary certification was approved before application for final certification was made.
- c. Construction of the facility was substantially completed on June 20, 1988, and the application for final certification was found to be complete on November 10, 1988, within two years of substantial completion of the facility.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to reduce a substantial quantity of air pollution.

This reduction is accomplished by reduction of air contaminants, defined in ORS 468.275, and the facility's qualification as a "pollution control facility", defined in OAR 340-16-025(1). The facility also meets the definition provided in OAR 340-16-025(2)(g)(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. Eligible Cost Findings

In determining the percent of the pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

1. The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The facility promotes the conversion of a waste product (straw) into a salable commodity by providing straw storage.

2. The estimated annual percent return on the investment in the facility.

Using Table 1 of OAR 340-16-030 for a life of 10 years, the annual percent return on investment is 0%.

3. The alternative methods, equipment and costs for achieving the same pollution control objective.

The method chosen is the accepted method for reduction of air pollution. The method is the least costly most effective method of reducing air contaminants.

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

There is no savings or increase in costs as a result of the facility.

5. 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.

There are no other factors to consider in establishing the actual cost of the facility properly allocable to prevention, control or reduction of air pollution.

The actual cost of the facility properly allocable to pollution control as determined by using these factors is 100%.

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 sole purpose of the facility is to reduce a substantial quantity of air pollution and accomplishes this purpose by the reduction of air contaminants, as defined in ORS 468.275.
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$43,853, with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application Number TC-2431.

B Finneran:ka  
(503) 686-7837  
November 17, 1988



**DEPARTMENT OF ENVIRONMENTAL QUALITY**  
**APPLICATION FOR FINAL CERTIFICATION OF A POLLUTION CONTROL FACILITY FOR**  
**TAX RELIEF PURPOSES PURSUANT TO ORS 468.155 ET. SEQ.**

(Continued)

**SECTION IV**  
**SIGNIFICANT DATES**  
**AND INFORMATION**

- (12) Has claimed facility previously been certified by DEQ for tax credit, or is tax credit application currently pending on claimed facility or any portion of it? Yes \_\_\_\_\_, please explain. No X
- (13) Has claimed facility, or any portion of it, previously been certified as an Energy Conservation Facility by the State Department of Energy, or is such an application pending? Yes \_\_\_\_\_, please explain. No X

**SECTION V**  
**ALLOCATION OF COSTS**

(1) Provide the following information regarding costs associated with the claimed facility. Fill out tables as designated.

a. Actual cost of the claimed facility \$ 43,853.

b. Salvage value of any facility removed from service \$ 0.

c. Calculation of annual cash flows:

YEAR	GROSS ANNUAL INCOME*	ANNUAL OPERATING EXPENSES*	ANNUAL CASH FLOW
1-	<u>0</u>	<u>1,570.</u>	<u>0 (-1,570)</u>
2-	<u>0</u>	<u>1,570.</u>	<u>0 (-1,570)</u>
3-	<u>0</u>	<u>1,570.</u>	<u>0 (-1,570)</u>
4-	<u>0</u>	<u>1,595.</u>	<u>0 (-1,595)</u>
5-	<u>0</u>	<u>1,595.</u>	<u>0 (-1,595)</u>
TOTALS	<u>0</u>	<u>7,900.</u>	<u>0 (-7,900)</u>

d. Average annual cash flow \$ 0 (-1,580)

Calculate by using the following formula:  

$$\frac{\text{Total of Annual Cash Flows}}{5} = \text{Average Annual Cash Flow}$$

e. Useful life of claimed facility 10 years

f. Return on investment factor \$ 0

Calculate by using the following formula:  

$$\frac{\text{Cost of Facility}}{\text{Average Annual Cash Flow}} = \text{Return on Investment Factor}$$

g. Annual percent return on investment (ROI) (Use Table 1, OAR 340-16-030) 0 %

h. Reference annual percent return on investment (RROI) (Use Table 2, OAR 340-16-030) 16.1 %

i. Portion of actual costs properly allocable to pollution control 100 %

Calculate by using the following formula:  

$$\frac{\text{RROI} - \text{ROI}}{\text{RROI}} \times 100\% = \text{Percent allocable}$$

\*Attach calculations for each of the first five years.

REVISIONS MADE BY  
 BRIAN FINNERAN  
 DEQ 11-10-88

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Raymond T. Davidson  
R & D Farms, Inc.  
4058 Davidson Road NE  
St. Paul, OR 97137

The applicant owns and operates a grass seed farm operation in St. Paul, Oregon.

Application was made for tax credit for air pollution control equipment.

2. Description of Claimed Equipment

The equipment described in this application are a conventional straw baler, bale wagon, and hay squeeze used to remove straw from fields that would otherwise be open burned. The equipment is owned by the applicant.

Claimed equipment cost: \$79,700  
(Accountant's Certification was provided.)

3. Procedural Requirements

The equipment is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The equipment has met all statutory deadlines in that:

- a. The request for preliminary certification was filed March 3, 1988, less than 30 days before purchase on March 17, 1988. However, according to the process provided in OAR 340-16-015(1)(b), the application was received by DEQ staff and the applicant was notified that the application was complete, and purchase could commence.
- b. The request for preliminary certification was approved before application for final certification was made.
- c. Purchase of the equipment was substantially completed on March 17, 1988, and the application for final certification was found to be complete on October 14, 1988, within two years of substantial purchase of the equipment.

#### 4. Evaluation of Application

a. The equipment is eligible because the principal purpose of the facility is to reduce a substantial quantity of air pollution. This reduction is accomplished by reduction of air contaminants, defined in ORS 468.275, and the equipment's qualification as a "pollution control facility", defined in OAR 340-16-025(1). The equipment also meets the definition provided in OAR 340-16-025 (2)(g)(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. Eligible Cost Findings

In determining the percent of the pollution control equipment cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

1. The extent to which the facility is used to reduce air pollution.

The equipment promotes the reduction of air pollution by removing straw from fields which would otherwise be open burned.

2. The estimated annual percent return on the investment in the equipment.

Using Table 1 of OAR 340-16-030 for a life of 10 years, the annual percent return on investment is 6.1%.

3. The alternative methods, equipment and costs for achieving the same pollution control objective.

The method chosen is the accepted method for reduction of air pollution. The method is the least costly, most effective method of reducing air contaminants.

4. Any related savings or increase in costs which occur or may occur as a result of the purchase of the equipment.

There is no related savings or increase in costs as a result of equipment purchase.

5. Any other factors which are relevant in establishing the portion of the actual cost of the equipment 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.

There are no other factors to consider in establishing the actual cost of the equipment properly allocable to prevention, control or reduction of air pollution.

The actual cost of the equipment properly allocable to pollution control as determined by using these factors is 62%.

5. Summation

- a. The equipment was purchased in accordance with all regulatory deadlines.
- b. The equipment is eligible for final tax credit certification in that the sole purpose of the equipment is to reduce a substantial quantity of air pollution and accomplishes this purpose by the reduction of air contaminants, as defined in ORS 468.275.
- c. The equipment complies with DEQ statutes and rules.
- d. The portion of the equipment that is properly allocable to pollution control is 62%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$79,700, with 62% allocated to pollution control, be issued for the equipment claimed in Tax Credit Application Number TC-2446.

B Finneran:ka  
(503) 686-7837  
November 17, 1988

DEPARTMENT OF ENVIRONMENTAL QUALITY

APPLICATION FOR FINAL CERTIFICATION OF A POLLUTION CONTROL FACILITY  
TAX RELIEF PURPOSES PURSUANT TO ORS 468.155 ET. SEQ.

(Continued)

**SECTION IV  
SIGNIFICANT DATES  
AND INFORMATION**

(12) Has claimed facility previously been certified by DEQ for tax credit, or is tax credit application currently pending on claimed facility or any portion of it? Yes \_\_\_\_\_, please explain. No  X

(13) Has claimed facility, or any portion of it, previously been certified as an Energy Conservation Facility by the State Department of Energy, or is such an application pending? Yes \_\_\_\_\_, please explain. No  X

**SECTION V  
ALLOCATION OF COSTS**

(1) Provide the following information regarding costs associated with the claimed facility. Fill out tables as designated.

a. Actual cost of the claimed facility \$  79,700.

b. Salvage value of any facility removed from service \$  0

c. Calculation of annual cash flows:

YEAR	GROSS ANNUAL INCOME*	ANNUAL OPERATING EXPENSES*	ANNUAL CASH FLOW
1-	<u> 42,000. </u>	<u> 33,758. </u>	<u> 8,242. </u>
2-	<u> 43,000. </u>	<u> 33,758. </u>	<u> 9,242. </u>
3-	<u> 43,000. </u>	<u> 35,730. </u>	<u> 7,270. </u>
4-	<u> 44,000. </u>	<u> 36,180. </u>	<u> 7,820. </u>
5-	<u> 45,000. </u>	<u> 37,680. </u>	<u> 7,320. </u>
TOTALS	<u> 217,000. </u>	<u> 177,106. </u>	<u> 39,894. </u>

d. Average annual cash flow \$  7,979.   
Calculate by using the following formula:  
$$\frac{\text{Total of Annual Cash Flows}}{5} = \text{Average Annual Cash Flow}$$

e. Useful life of claimed facility  10  years

f. Return on investment factor \$  10.00   
Calculate by using the following formula:  
$$\frac{\text{Cost of Facility}}{\text{Average Annual Cash Flow}} = \text{Return on Investment Factor}$$

g. Annual percent return on investment (ROI) (Use Table 1, OAR 340-16-030)   ~~0~~   %

h. Reference annual percent return on investment (RROI) (Use Table 2, OAR 340-16-030)  16.1  % (SEE ATTACHED)

i. Portion of actual costs properly allocable to pollution control   ~~100~~   %  
Calculate by using the following formula:  
$$\frac{\text{RROI} - \text{ROI}}{\text{RROI}} \times 100\% = \text{Percent allocable}$$

\*Attach calculations for each of the first five years.

DEPARTMENT OF ENVIRONMENTAL QUALITY

APPLICATION FOR FINAL CERTIFICATION OF A POLLUTION CONTROL FACILITY FOR TAX RELIEF PURPOSES PURSUANT TO ORS 468.155 ET. SEQ.

(Continued)

**SECTION IV  
SIGNIFICANT DATES  
AND INFORMATION**

(12) Has claimed facility previously been certified by DEQ for tax credit, or is tax credit application currently pending on claimed facility or any portion of it? Yes \_\_\_\_\_, please explain. No \_\_\_\_\_

(13) Has claimed facility, or any portion of it, previously been certified as an Energy Conservation Facility by the State Department of Energy, or is such an application pending? Yes \_\_\_\_\_, please explain. No \_\_\_\_\_

**SECTION V  
ALLOCATION OF COSTS**

(1) Provide the following information regarding costs associated with the claimed facility. Fill out tables as designated.

a. Actual cost of the claimed facility \$ \_\_\_\_\_

b. Salvage value of any facility removed from service \$ \_\_\_\_\_

c. Calculation of annual cash flows:

YEAR	GROSS ANNUAL INCOME*	ANNUAL OPERATING EXPENSES*	ANNUAL CASH FLOW
1-	_____	_____	_____
2-	_____	_____	_____
3-	_____	_____	_____
4-	_____	_____	_____
5-	_____	_____	_____
TOTALS	<u>217,000</u>	<u>177,106</u>	<u>39,894</u>

d. Average annual cash flow \$ 7,979  
 Calculate by using the following formula:  

$$\frac{\text{Total of Annual Cash Flows}}{5} = \text{Average Annual Cash Flow}$$

e. Useful life of claimed facility 10 years

f. Return on investment factor \$ 10  
 Calculate by using the following formula:  

$$\frac{\text{Cost of Facility}}{\text{Average Annual Cash Flow}} = \text{Return on Investment Factor}$$

g. Annual percent return on investment (ROI) (Use Table 1, OAR 340-16-030) 6.145 %

h. Reference annual percent return on investment (RROI) (Use Table 2, OAR 340-16-030) 16.1 %

i. Portion of actual costs properly allocable to pollution control 62.96 %  
 Calculate by using the following formula:  

$$\frac{\text{RROI} - \text{ROI}}{\text{RROI}} \times 100\% = \text{Percent allocable}$$

\*Attach calculations for each of the first five years.

RECALCULATED BY  
 BRIAN FINNEGAN,  
 DEQ FIELD BUREAU  
 MANAGER 11-17-88

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

---

1. Applicant

Gerald P. & Kathleen A. Mullen  
Mullen Farms  
17792 River Road NE  
St. Paul, OR 97137

The applicant owns and operates a grass seed farm operation in St. Paul, Oregon.

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

2. Description of Claimed Facility

The facility described in this application is a straw storage shed (70' x 168' x 22') located at 21612 River Road NE, St. Paul, Marion County, Oregon 97137. The building will provide cover for 1,000 tons of baled straw per year. The land and building are owned by the applicant. The straw is exported to Japan for livestock feed.

Claimed facility cost: \$53,032  
(Accountant's Certification was provided.)

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility has met all statutory deadlines in that:

- a. The request for preliminary certification was filed March 3, 1988, more than 30 days before construction commenced on May 2, 1988.
- b. The request for preliminary certification was approved before application for final certification was made.
- c. Construction of the facility was substantially completed on July 25, 1988, and the application for final certification was found to be complete on August 16, 1988, within two years of substantial completion of the facility.

#### 4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to reduce a substantial quantity of air pollution.

This reduction is accomplished by reduction of air contaminants, defined in ORS 468.275, and the facility's qualification as a "pollution control facility", defined in OAR 340-16-025(1).

The facility also meets the definition provided in OAR 340-16-025 (2)(g)(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. Eligible Cost Findings

In determining the percent of the pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

1. The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The facility promotes the conversion of a waste product (straw) into a salable commodity by providing straw storage.

2. The estimated annual percent return on the investment in the facility.

Using Table 1 of OAR 340-16-030 for a life of 10 years, the annual percent return on investment is 0%.

3. The alternative methods, equipment and costs for achieving the same pollution control objective.

The method chosen is the accepted method for reduction of air pollution. The method is the least costly most effective method of reducing air contaminants.

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

There is no savings or increase in costs as a result of the facility installation.

5. 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.

There are no other factors to consider in establishing the actual cost of the facility properly allocable to prevention, control or reduction of air pollution.



The actual cost of the facility properly allocable to pollution control as determined by using these factors is 100%.

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 sole purpose of the facility is to reduce a substantial quantity of air pollution and accomplishes this purpose by the reduction of air contaminants, as defined in ORS 468.275.
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$53,032, with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application Number TC-2448.

B Finneran:ka  
(503) 686-7837  
November 17, 1988

DEPARTMENT OF ENVIRONMENTAL QUALITY

APPLICATION FOR FINAL CERTIFICATION OF A POLLUTION CONTROL FACILITY FOR TAX RELIEF PURPOSES PURSUANT TO ORS 468.155 ET. SEQ.

(Continued)

SECTION IV SIGNIFICANT DATES AND INFORMATION	<p>(12) Has claimed facility previously been certified by DEQ for tax credit, or is tax credit application currently pending on claimed facility or any portion of it? Yes _____, please explain. No <u>No</u></p>																														
	<p>(13) Has claimed facility, or any portion of it, previously been certified as an Energy Conservation Facility by the State Department of Energy, or is such an application pending? Yes _____, please explain. No <u>No</u></p>																														
SECTION V ALLOCATION OF COSTS	<p>(1) Provide the following information regarding costs associated with the claimed facility. Fill out tables as designated.</p> <p>a. Actual cost of the claimed facility \$ <u>53,032.</u></p> <p>b. Salvage value of any facility removed from service \$ <u>0.</u></p> <p>c. Calculation of annual cash flows:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; border-bottom: 1px solid black;">YEAR</th> <th style="text-align: center; border-bottom: 1px solid black;">GROSS ANNUAL INCOME*</th> <th style="text-align: center; border-bottom: 1px solid black;">ANNUAL OPERATING EXPENSES*</th> <th style="text-align: center; border-bottom: 1px solid black;">ANNUAL CASH FLOW</th> </tr> </thead> <tbody> <tr> <td style="text-align: left;">1-</td> <td style="text-align: center;"><u>0</u></td> <td style="text-align: center;"><u>1,793.</u></td> <td style="text-align: center;"><u>0</u></td> </tr> <tr> <td style="text-align: left;">2-</td> <td style="text-align: center;"><u>0</u></td> <td style="text-align: center;"><u>1,793.</u></td> <td style="text-align: center;"><u>0</u></td> </tr> <tr> <td style="text-align: left;">3-</td> <td style="text-align: center;"><u>0</u></td> <td style="text-align: center;"><u>1,793.</u></td> <td style="text-align: center;"><u>0</u></td> </tr> <tr> <td style="text-align: left;">4-</td> <td style="text-align: center;"><u>0</u></td> <td style="text-align: center;"><u>1,818.</u></td> <td style="text-align: center;"><u>0</u></td> </tr> <tr> <td style="text-align: left;">5-</td> <td style="text-align: center;"><u>0</u></td> <td style="text-align: center;"><u>1,818.</u></td> <td style="text-align: center;"><u>0</u></td> </tr> <tr> <td style="text-align: left;">TOTALS</td> <td style="text-align: center;"><u>0</u></td> <td style="text-align: center;"><u>9,015.</u></td> <td style="text-align: center;"><u>0</u></td> </tr> </tbody> </table> <p>d. Average annual cash flow \$ <u>0</u>                  Calculate by using the following formula:  <math display="block">\frac{\text{Total of Annual Cash Flows}}{5} = \text{Average Annual Cash Flow}</math></p> <p>e. Useful life of claimed facility <u>10</u> years</p> <p>f. Return on investment factor \$ <u>0</u>                  Calculate by using the following formula:  <math display="block">\frac{\text{Cost of Facility}}{\text{Average Annual Cash Flow}} = \text{Return on Investment Factor}</math></p> <p>g. Annual percent return on investment (ROI)                  (Use Table 1, OAR 340-16-030) <u>0</u> %</p> <p>h. Reference annual percent return on investment                  (RROI) (Use Table 2, OAR 340-16-030) <u>16.1</u> %</p> <p>i. Portion of actual costs properly allocable                  to pollution control <u>100</u> %                  Calculate by using the following formula:  <math display="block">\frac{\text{RROI} - \text{ROI}}{\text{RROI}} \times 100\% = \text{Percent allocable}</math></p> <p>*Attach calculations for each of the first five years.</p>			YEAR	GROSS ANNUAL INCOME*	ANNUAL OPERATING EXPENSES*	ANNUAL CASH FLOW	1-	<u>0</u>	<u>1,793.</u>	<u>0</u>	2-	<u>0</u>	<u>1,793.</u>	<u>0</u>	3-	<u>0</u>	<u>1,793.</u>	<u>0</u>	4-	<u>0</u>	<u>1,818.</u>	<u>0</u>	5-	<u>0</u>	<u>1,818.</u>	<u>0</u>	TOTALS	<u>0</u>	<u>9,015.</u>	<u>0</u>
YEAR	GROSS ANNUAL INCOME*	ANNUAL OPERATING EXPENSES*	ANNUAL CASH FLOW																												
1-	<u>0</u>	<u>1,793.</u>	<u>0</u>																												
2-	<u>0</u>	<u>1,793.</u>	<u>0</u>																												
3-	<u>0</u>	<u>1,793.</u>	<u>0</u>																												
4-	<u>0</u>	<u>1,818.</u>	<u>0</u>																												
5-	<u>0</u>	<u>1,818.</u>	<u>0</u>																												
TOTALS	<u>0</u>	<u>9,015.</u>	<u>0</u>																												

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Columbia Helicopters, Inc.  
P.O. Box 3500  
Portland, OR 97208

The applicant owns and operates a helicopter maintenance and leasing operation at Aurora, Oregon.

Application was made for tax credit for a hazardous waste minimization facility.

2. Description of Facility

The facility includes a high velocity plastic pellet paint stripper system and a hot vapor degreaser unit. This equipment is housed in a 30 ft. X 47 ft. concrete building. The building is divided into three rooms. The largest room houses the hot vapor degreaser. The remaining rooms house the high velocity plastic pellet paint stripper equipment and the paint removal or "blast" area. The paint removal area is lined and floored with aluminum panels to deflect the high velocity plastic beads and reduce erosion.

Claimed Facility Cost: \$207,925  
(Accountant's Certification was provided).

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that:

- a. The request for preliminary certification was filed May 8, 1985 more than 30 days before construction commenced on June 17, 1987.
- b. The request for preliminary certification was approved before application for final certification was made.
- c. Construction of the facility was substantially completed December 1987 and the application for final certification was found to be complete on September 1, 1988 within 2 years of substantial completion of the facility.

4. Evaluation of Application

- a. The facility is eligible because the sole purpose of the facility is to reduce a substantial quantity of hazardous waste, as defined in ORS 466.005.

This reduction is accomplished by an innovative process change. Approximately 5,300 gals. of methylene chloride waste from the paint removal operation and 280 gals. of spent 1,1,1 trichloroethane solvent from the degreasing operation are eliminated annually from the waste streams by the new process.

- b. Eligible Cost Findings

In determining the percent of the pollution control facility cost allocable to pollution control, the following factors have been considered and analyzed as indicated:

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

The facility does not recover or convert waste products into a salable or usable commodity.

- 2) The estimated annual percent return on the investment in the facility.

Average annual cash flow is \$2,274. This results from the old process operating expenses minus the new process estimated operating expenses. Dividing the claimed facility cost by the average annual cash flow, gives a return on investment (ROI) factor of 91. Using the formula in OAR 340-16-030(5)(c), for a useful facility life of 30 years, the ROI is zero.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

The high velocity plastic bead paint stripping process is the "State-of-the-Art in industrial nonsolvent paint removal operations. This method is effective and minimizes the production of hazardous waste. No other nonchemical stripping processes were considered because none was identified to be commercially viable during research into alternative methods.

Several degreasing operations were considered. The chosen alternative was the least expensive.

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

There is no savings or increase in costs as a result of the installation of the facility.

- 5) 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.

There are no other factors to consider in establishing the actual cost of the facility properly allocable to prevention, control or reduction of pollution.

Based on these findings, factor 2 above is the most applicable factor.

The actual cost of the facility properly allocable to pollution control as determined by using this factor is 100%.

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 sole purpose of the facility is to reduce a substantial quantity of hazardous waste, by the redesign of the paint stripping process and the parts degreasing operations.
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$207,925 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-2469.

Eduardo G. Chiong:f  
ZF3587  
(503) 229-5326  
November 1, 1988

State of Oregon  
Department of Environmental Quality  
TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Willamette Industries, Inc.  
Duraflake Division  
3800 First Interstate Tower  
1300 SW 5th Avenue  
Portland, OR 97201

The applicant owns and operates a particleboard manufacturing facility in Albany, Oregon.

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

2. Description of Facility

The facility is a Western Pneumatic Model No. 42 primary baghouse to control emissions from the Fire Retardant Chemical dust feeder transfer system.

Claimed Facility Cost: \$17,221.90  
(Accountant's Certification was provided).

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that:

- a. The request for preliminary certification was filed April 22, 1988 more than 30 days before installation commenced on June 1, 1988.
- b. The request for preliminary certification was approved before application for final certification was made.
- c. Installation of the facility was substantially completed on July 13, 1988 and the application for final certification was found to be complete on September 27, 1988 within 2 years of substantial completion of the facility.

4. Evaluation of Application

- a. The facility is eligible because the sole purpose of the facility is to reduce a substantial quantity of air pollution.

This reduction is accomplished by elimination of air contaminants, as defined in ORS 468.275.

b. Eligible Cost Findings

In determining the percent of the pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

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

The material collected by the facility is estimated to have a value of \$3,340.00 annually and is recycled into the manufacturing process.
- 2) The estimated annual percent return on the investment in the facility.  

There is no return on investment for this facility.
- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.  

There is no known alternative.
- 4) Any related savings or increase in costs which occur or may occur as a result of the installation of the facility.  

There is no savings from the facility. Gross material recovered from this facility is estimated to be \$3,340.00 annually. The cost of maintaining and operating the facility is \$3,738.00 annually.
- 5) 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.  

There are no other factors to consider in establishing the actual cost of the facility properly allocable to prevention, control or reduction of pollution.

The actual cost of the facility properly allocable to pollution control as determined by using this factor is 100%.

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for final tax credit certification because air contaminants are eliminated as defined in ORS 468.275.

- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$17,221.90 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-2471.

Terri Sylvester:CDJ  
AD3946  
(503) 229-5057  
November 7, 1988



State of Oregon  
Department of Environmental Quality  
TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Charles S. Kizer, President  
Kizer & Son, Inc.  
24552 Rowland Road  
Harrisburg, OR 97446

The applicant owns and operates a grass seed farm operation in Harrisburg, Oregon.

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

2. Description of Claimed Facility

The facility described in this application is a straw storage shed (100 x 160' x 20') eaves steel frame, clear span building with metal roof and three side walls located at 24488 Rowland Road, Linn County, Harrisburg, Oregon 97446. (The shed will enclose 1,200 tons of straw. The baled or densified straw is intended for shipment to Japan for livestock feed.) The land and building are owned by Kizer & Son, Inc. a corporation.

Claimed facility cost: \$89,661.10  
(Accountant's Certification was provided.)

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility has met all statutory deadlines in that:

- a. The request for preliminary certification was filed May 13, 1988, less than 30 days before construction commenced on June 6, 1988.

However, according to the process provided in OAR 340-16-015(1)(b), the application was received by DEQ staff and the applicant was notified that the application was complete, and construction could commence.

- b. The request for preliminary certification was approved before application for final certification was made.
- c. Construction of the facility was substantially completed on August 1, 1988, and the application for final certification was found to be complete on October 20, 1988, within two years of substantial completion of the facility.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to reduce a substantial quantity of air pollution.

This reduction is accomplished by reduction of air contaminants, defined in ORS 468.275, and the facility's qualification as a "pollution control facility", defined in OAR 340-16-025(1). The facility also meets the definition provided in OAR 340-16-025 (2)(g)(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. Eligible Cost Findings

In determining the percent of the pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

1. The extent to which the facility is used to recover and convert waste products into a salable or usable commodity.

The facility promotes the conversion of a waste product (straw) into a salable commodity by providing straw storage.

2. The estimated annual percent return on the investment in the facility.

Using Table 1 of OAR 340-16-030 for a life of 25 years, the annual percent return on investment is 0%.

3. The alternative methods, equipment and costs for achieving the same pollution control objective.

The method chosen is the accepted method for reduction of air pollution. The method is the least costly most effective method of reducing air contaminants.

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

There is no savings or increase in costs as a result of the facility installation.

5. 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.

There are no other factors to consider in establishing the actual cost of the facility properly allocable to prevention, control or reduction of air pollution.

The actual cost of the facility properly allocable to pollution control as determined by using these factors is 100%.

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 sole purpose of the facility is to reduce a substantial quantity of air pollution and accomplishes this purpose by the reduction of air contaminants, as defined in ORS 468.275.
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$89,661.10, with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application Number TC-2487.

B Finneran:ka  
(503) 686-7837  
November 17, 1988

**DEPARTMENT OF ENVIRONMENTAL QUALITY**  
**APPLICATION FOR FINAL CERTIFICATION OF A POLLUTION CONTROL FACILITY FOR**  
**TAX RELIEF PURPOSES PURSUANT TO ORS 468.155 ET. SEQ.**

(Continued)

<b>SECTION IV SIGNIFICANT DATES AND INFORMATION</b>	<p>(12) Has claimed facility previously been certified by DEQ for tax credit, or is tax credit application currently pending on claimed facility or any portion of it? Yes _____, please explain. No <u>X</u></p>																														
	<p>(13) Has claimed facility, or any portion of it, previously been certified as an Energy Conservation Facility by the State Department of Energy, or is such an application pending? Yes _____, please explain. No <u>X</u></p>																														
<b>SECTION V ALLOCATION OF COSTS</b>	<p>(1) Provide the following information regarding costs associated with the claimed facility. Fill out tables as designated.</p> <p>a. Actual cost of the claimed facility <span style="float: right;">\$ <u>89661.10</u></span></p> <p>b. Salvage value of any facility removed from service <span style="float: right;">\$ <u>0.00</u></span></p> <p>c. Calculation of annual cash flows:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; border-bottom: 1px solid black;">YEAR</th> <th style="text-align: center; border-bottom: 1px solid black;">GROSS ANNUAL INCOME*</th> <th style="text-align: center; border-bottom: 1px solid black;">ANNUAL OPERATING EXPENSES*</th> <th style="text-align: center; border-bottom: 1px solid black;">ANNUAL CASH FLOW</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1-</td> <td style="text-align: center;"><u>2250.00</u></td> <td style="text-align: center;"><u>9.00</u></td> <td style="text-align: center;"><u>2250.00</u></td> </tr> <tr> <td style="text-align: center;">2-</td> <td style="text-align: center;"><u>2250.00</u></td> <td style="text-align: center;"><u>0.00</u></td> <td style="text-align: center;"><u>2250.00</u></td> </tr> <tr> <td style="text-align: center;">3-</td> <td style="text-align: center;"><u>2250.00</u></td> <td style="text-align: center;"><u>0.00</u></td> <td style="text-align: center;"><u>2250.00</u></td> </tr> <tr> <td style="text-align: center;">4-</td> <td style="text-align: center;"><u>2250.00</u></td> <td style="text-align: center;"><u>0.00</u></td> <td style="text-align: center;"><u>2250.00</u></td> </tr> <tr> <td style="text-align: center;">5-</td> <td style="text-align: center;"><u>2250.00</u></td> <td style="text-align: center;"><u>0.00</u></td> <td style="text-align: center;"><u>2250.00</u></td> </tr> <tr> <td style="text-align: center;">TOTALS</td> <td style="text-align: center;"><u>11250.00</u></td> <td style="text-align: center;"><u>0.00</u></td> <td style="text-align: center;"><u>11250.00</u></td> </tr> </tbody> </table> <p>d. Average annual cash flow <span style="float: right;">\$ <u>2250.00</u></span>          Calculate by using the following formula:  <math display="block">\frac{\text{Total of Annual Cash Flows}}{5} = \text{Average Annual Cash Flow}</math></p> <p>e. Useful life of claimed facility <span style="float: right;"><u>25</u> years</span></p> <p>f. Return on investment factor <span style="float: right;">\$ <u>39.85</u></span>          Calculate by using the following formula:  <math display="block">\frac{\text{Cost of Facility}}{\text{Average Annual Cash Flow}} = \text{Return on Investment Factor}</math></p> <p>g. Annual percent return on investment (ROI) (Use Table 1, OAR 340-16-030) <span style="float: right;"><u>Less than 0.00</u> %</span></p> <p>h. Reference annual percent return on investment (RROI) (Use Table 2, OAR 340-16-030) <span style="float: right;"><u>16.1</u> % (1987 rate)</span></p> <p>i. Portion of actual costs properly allocable to pollution control <span style="float: right;"><u>100</u> %</span>          Calculate by using the following formula:  <math display="block">\frac{\text{RROI} - \text{ROI}}{\text{RROI}} \times 100\% = \text{Percent allocable}</math></p> <p>*Attach calculations for each of the first five years.</p>			YEAR	GROSS ANNUAL INCOME*	ANNUAL OPERATING EXPENSES*	ANNUAL CASH FLOW	1-	<u>2250.00</u>	<u>9.00</u>	<u>2250.00</u>	2-	<u>2250.00</u>	<u>0.00</u>	<u>2250.00</u>	3-	<u>2250.00</u>	<u>0.00</u>	<u>2250.00</u>	4-	<u>2250.00</u>	<u>0.00</u>	<u>2250.00</u>	5-	<u>2250.00</u>	<u>0.00</u>	<u>2250.00</u>	TOTALS	<u>11250.00</u>	<u>0.00</u>	<u>11250.00</u>
YEAR	GROSS ANNUAL INCOME*	ANNUAL OPERATING EXPENSES*	ANNUAL CASH FLOW																												
1-	<u>2250.00</u>	<u>9.00</u>	<u>2250.00</u>																												
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TOTALS	<u>11250.00</u>	<u>0.00</u>	<u>11250.00</u>																												

Re-computed - see  
 attached amended  
 section V  
 Jim Britton  
 11-17-88

DEPARTMENT OF ENVIRONMENTAL QUALITY

APPLICATION FOR FINAL CERTIFICATION OF A POLLUTION CONTROL FACILITY FOR TAX RELIEF PURPOSES PURSUANT TO ORS 468.155 ET. SEQ.

(Continued)

**SECTION IV  
SIGNIFICANT DATES  
AND INFORMATION**

(12) Has claimed facility previously been certified by DEQ for tax credit, or is tax credit application currently pending on claimed facility or any portion of it? Yes \_\_\_\_\_, please explain. No X

(13) Has claimed facility, or any portion of it, previously been certified as an Energy Conservation Facility by the State Department of Energy, or is such an application pending? Yes \_\_\_\_\_, please explain. No X

**SECTION V  
ALLOCATION OF COSTS**

(1) Provide the following information regarding costs associated with the claimed facility. Fill out tables as designated.

a. Actual cost of the claimed facility \$ 89,661.10

b. Salvage value of any facility removed from service \$ 0

c. Calculation of annual cash flows:

YEAR	GROSS ANNUAL INCOME*	ANNUAL OPERATING EXPENSES*	ANNUAL CASH FLOW
1-	<u>2,500</u>	<u>2,700</u>	<u>&lt;200&gt;</u>
2-	<u>2,500</u>	<u>2,700</u>	<u>&lt;200&gt;</u>
3-	<u>2,500</u>	<u>2,700</u>	<u>&lt;200&gt;</u>
4-	<u>2,500</u>	<u>2,700</u>	<u>&lt;200&gt;</u>
5-	<u>2,500</u>	<u>2,700</u>	<u>&lt;200&gt;</u>
TOTALS	<u>12,500</u>	<u>13,500</u>	<u>&lt;1,000&gt;</u>

d. Average annual cash flow \$ <200>  
 Calculate by using the following formula:  

$$\frac{\text{Total of Annual Cash Flows}}{5} = \text{Average Annual Cash Flow}$$
<40>

e. Useful life of claimed facility 25 years

f. Return on investment factor \$ 0  
 Calculate by using the following formula:  

$$\frac{\text{Cost of Facility}}{\text{Average Annual Cash Flow}} = \text{Return on Investment Factor}$$

g. Annual percent return on investment (ROI) (Use Table 1, OAR 340-16-030) 0 %

h. Reference annual percent return on investment (RROI) (Use Table 2, OAR 340-16-030) 16.1 %

i. Portion of actual costs properly allocable to pollution control 100 %  
 Calculate by using the following formula:  

$$\frac{\text{RROI} - \text{ROI}}{\text{RROI}} \times 100\% = \text{Percent allocable}$$

\*Attach calculations for each of the first five years.

KIZER & SON, INC.

24552 Rowland Rd.  
Harrisburg, OR 97446  
October 20, 1988

APPLICATION FOR FINAL CERTIFICATION OF A POLLUTION CONTROL FACILITY FOR TAX RELIEF PURPOSES.

Explanation of "GROSS ANNUAL INCOME" (page 4)

We have a contract for 1988 crop to provide (1) straw, (2) storage, (3) site for handling and (4) truck loading and weighing facilities for an annual payment of \$9000.00.

We allocated this as follows:

1200 tons of straw @ \$5.00/ton*	\$6000.00
- Storage	2250.00 ✓
- Site for handling	250.00 ✓
- Truck loading and weighing	500.00

\*Much of this requires clipping of regrowth after harvest. The \$5.00 hardly pays this cost.

Explanation of "ANNUAL OPERATING EXPENSES" (page 4)

Taxes (real property)	\$2500.00	2700
Insurance	200.00	
Less saving of "burn fees on 600 acres"	<del>2700.00</del>	\$2100 fees
Net annual "expense"	0.00	

11-22-88 3:15 pm Phone conference

Gross Annual Income \$2500

Annual Operating Expenses \$2700

useful life 10 yrs

State of Oregon  
Department of Environmental Quality  
TAX RELIEF APPLICATION REVIEW REPORT

---

1. Applicant

Clear Pine Moulding, Inc.  
1155 N. Main  
P.O. Box 309  
Prineville, OR 97754

The applicant owns and operates a pine moulding manufacturing facility in Prineville, Oregon.

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

2. Description of Facility

Baghouse system serving as a primary and secondary dust collector of wood residue from wood processing equipment.

Claimed Facility Cost: \$15,445.00 (Adjusted downward from the total claimed amount of \$16,060.00 for an ineligible noise silencer) (Accountant's Certification was provided).

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that:

- a. The request for preliminary certification was filed August 23, 1988, less than 30 days before installation commenced on August 24, 1988. However, according to the process provided in OAR 340-16-015(1)(b), the application was reviewed by DEQ staff and the applicant was notified that the application was complete and that installation could commence.
- b. The request for preliminary certification was approved before application for final certification was made.
- c. Installation of the facility was substantially completed on September 9, 1988, and the application for final certification was found to be complete on October 21, 1988, within 2 years of substantial completion of the facility.

4. Evaluation of Application

a. The facility is eligible because the sole purpose of the facility is to reduce a substantial quantity of air pollution. This reduction is accomplished by elimination of, air contaminants as defined in ORS 468.275.

b. Eligible Cost Findings

In determining the percent of the pollution control facility cost allocable to pollution control, the following factors from ORS 468.190 have been considered and analyzed as indicated:

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

The material collected by the facility is disposed of in a landfill.

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

The return on the investment for this facility is zero as there is no significant value to the dust collected and there are maintenance and operation costs.

3) The alternative methods, equipment and costs for achieving the same pollution control objective.

No alternative emission control systems were considered.

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

There is no savings from the facility. The cost of maintaining and operating the facility is \$1,714 annually.

5) 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.

A claim for \$16,060.00 was made which included a noise silencer with a cost of \$615. Because this silencer is located in the duct work for the purpose of reducing noise levels within the plant working area it is not eligible for pollution control tax credit. Accordingly the \$16,060.00 has been adjusted by \$615, leaving an allocable cost of \$15,445.00.



The actual cost of the facility properly allocable to pollution control as determined by using these factors is 100%.

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 sole purpose of the facility is to reduce a substantial quantity of air contaminants as defined in ORS 468.275.
- c. The facility complies with DEQ statutes and rules and permit conditions.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$15,445.00 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-2638.

Don K. Neff  
AD3902  
(503) 229-6480  
October 28, 1988

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

---

1. Applicant

Bend Garbage Company, Inc.  
61480 Parrell Road  
Bend, OR 97702

The applicant owns and operates a solid waste collection and recycling business in Bend, Oregon.

Application was made for tax credit for a solid waste, recycling facility.

2. Description of Facility

Claimed Facility Cost: \$85,246.

The facility described in this application consists of a full line recycling depot in Bend, Oregon to serve the general public and to bale cardboard. Facilities include a 38' X 60' metal building for storage of recyclables, a 28' X 66' covered area for receiving and processing recyclables, and a 40' X 40' metal building with a cardboard baler.

3. Procedural Requirements

The facility is governed by ORS 468.150 through 468.190, and by OAR Chapter 340, Division 16.

The facility met all statutory deadlines in that:

- a. The request for preliminary certification was filed more than 30 days before construction began. Preliminary certification was approved on October 6, 1983 and construction began in May 1984.
- b. The request for preliminary certification was approved before application for final certification was made.
- c. Construction of the facility was substantially completed in December 1987 and the application for final certification was found to be complete in September 1988, within 2 years of substantial completion of the facility.

4. Evaluation of Application

- a. The facility is eligible because the sole purpose of the facility is to reduce a substantial quantity of solid waste by recycling.

This reduction is accomplished through a full line of recycling services for the public. Materials received include glass, newspaper, tin cans, aluminum, waste oil, office paper, and cardboard. Facilities include a baler for the marketing and shipment of cardboard. This full-scale recycling depot did not previously exist at the sanitary landfill.

The depot processes an average of 1620 tons per year of recyclable material that was previously disposed in the landfill.

The facility also has, as a principal purpose, compliance with ORS 459.165, which requires the opportunity to recycle at the solid waste landfill.

Costs consist solely of construction of a recycling material storage building and processing area, and a cardboard baling facility and storage area. Total cost is \$85,246.

b. Eligible Cost Findings

In determining the percent of the pollution control facility cost allocable to pollution control, the following factors have been considered and analyzed as indicated:

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

The entire facility is devoted to the purpose of recycling waste products.

- 2) The estimated annual percent return on the investment in the facility.

There is a negative calculated cash flow anticipated for the facility.

- 3) The alternative methods, equipment and costs for achieving the same pollution control objective.

There are no other alternatives considered, as the Department requires that the opportunity to recycle be provided at the landfill.

- 4) Any related savings or increase in costs as a result of the installation of the facility.

Bend Garbage Company leases at no cost the recycling storage and processing facility to the Bend Recycling Team.

For each of the 1620 tons diverted from the landfill, there is an avoided cost of disposal. However, these avoided costs are not attributed to Bend Garbage Company, Inc. and are thus public benefits of the facility.

- 5) 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.

There are no other factors relevant to establishing the portion of the actual cost of the facility properly allocable to pollution control.

Based on the finding, factors 1 and 2 are the most applicable factors. Therefore, the portion of the actual cost allocable to pollution control is 100%.

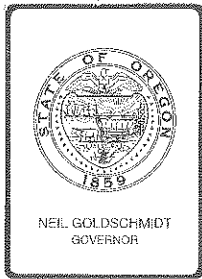
5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for final tax credit certification in that the sole purpose of the facility is to reduce a substantial quantity of solid waste by recycling.
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$85,246 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-2642.

SG:f  
SF3537  
(503) 229-5782  
October 12, 1988



## *Environmental Quality Commission*

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

Agenda Item E, December 9, 1988, EQC Meeting

### Request for Authorization to Conduct a Public Hearing Concerning Proposed Rules for Delegation of Air Quality Construction Approval to the Department

#### ISSUE

Should the Commission delegate authority to the Director for both approval and denial of Air Quality construction plans.

#### SUMMARY

Currently there is statutory authority for delegation of air quality construction plan review and approval/disapproval by the Commission to the Director. Although adopted out of sync from the normal sequence, regulatory authority also exists for delegation of air quality construction plan review and approval by the Commission to the Director. For complete delegation, regulatory authority for delegation of plan disapproval is needed.

Alternatively, the Commission could recognize the existing rules as adequate for delegation of construction plan approval and retain authority for issuing orders prohibiting construction.

#### DIRECTOR'S RECOMMENDATION

The Director recommends that the Commission authorize a public hearing to consider rule revisions that would delegate to the Director authority for both air quality construction plan approval and issuance of orders prohibiting construction.

AD3983.A



## *Environmental Quality Commission*

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

### MEMORANDUM

**To:** Environmental Quality Commission

**From:** Director

**Subject:** Agenda Item E, December 9, 1988 EQC Meeting  
Request for Authorization to Conduct a Public Hearing  
Concerning Proposed Rules for Delegation of Air Quality  
Construction Approval to the Department

### Background

The Legislature, during the 1985 legislative session, adopted a provision which allows the Commission to Delegate its duties concerning the review and approval of construction plans for air pollution sources to the Director of the Department (ORS 468.325(d)) (Attachment A). The way it is now, the Department reviews such plans and conditionally approves or denies the proposed construction. The Commission must then formally take action to confirm the Department's action. Commission approval is usually granted as part of the activity report that is presented to the Commission at the beginning of each Commission meeting.

The rules concerning Notice of Construction and Approval of Plans (OAR 340-20-030) (Attachment B) were originally adopted by the Commission in 1970. Subsequently, in 1972, rules for the Air Contaminant Discharge Permit program were adopted by the Commission (OAR 340-20-140 through 185).

The Commission gave the authority for both construction plan approval and permit approval to the Director and provided for an appeal process to the Commission. Since the Statutes establishing these programs were adopted by the Legislature at different times, the Statutes were different in the duties required to be carried out by the Commission and the Department.

While the pre 1985 permit statutes clearly state that the Director is the permit issuing authority, the construction plan approval statutes designate the Commission as the approval authority. In practice, most actions concerning construction approval or denial are permit decisions. The Director has the authority under the permit provisions, to approve or deny permits and to institute enforcement actions, including issuing orders halting construction. Only those construction approvals or denials that do not require a permit action are dealt with through the Notice of Construction and Approval of Plans provisions.

Agenda Item E,  
EQC Meeting  
December 9, 1988  
Page 2

Examples of situations where the construction plan approval provisions apply are for sources that are too small to need a permit and for replacement of air pollution control equipment at permitted facilities where a permit modification is not required.

The conflict between the Statute which required Commission approval of construction plans and the desire of the Commission to have the Department conduct such actions was resolved when the statute was revised in 1985. As a result of that revision, the Commission can formally delegate this responsibility to the Director. The rules that were adopted by the Commission in 1970 already provide for Department approval of construction plans. Therefore, no rule revision is technically required for the Commission to delegate authority for approval of construction plans to the Director. However, under the construction plan approval rules, only the Commission can issue an order prohibiting construction. If the Commission wishes to delegate this authority to the Director a rule revision is needed.

An appeal provision was also adopted by the Legislature, which provides that any person subject to a decision of the Director concerning approval or denial of a proposed construction project may demand a hearing before the Commission. At such a hearing, the Commission could review the decision of the Director and either uphold the Director's decision or make some other decision. This provision is consistent with the rules and practices that have been employed by the Department and the Commission.

### Alternatives

The Commission has the following alternatives.

1. If the Commission wishes to fully delegate the air quality construction plan program to the Director, the Commission could delegate the authority for issuing orders prohibiting construction by adoption of a revision of OAR 340-20-030 as proposed in Attachment C. If this alternative is adopted by the Commission, the Commission could authorize the Department to hold a public hearing on the proposed rule revisions. The proposed revisions would then be brought back to the Commission for adoption at a future meeting. Per the existing statutes, appeals of the Director's decisions by any person subject to such decisions would be made to the Commission.

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EQC Meeting  
December 9, 1988  
Page 3

2. The Commission could decide to limit delegation to only review and approval of air quality construction plans. This alternative would simply require an affirmation on the part of the Commission of their desire for such a limited delegation.
3. The Commission could decide not to delegate the authority for approval of air quality construction plans to the Director. Such an action by the Commission would result in plans continuing to be brought before the Commission for confirmation of actions recommended by the Department.

Director's Recommendation

The Director recommends that the Commission authorize a public hearing to consider revision to the rule concerning delegation of authority to the Director for both air quality construction plan approval and issuance of orders prohibiting construction.

*Mike Hansen*  
for  
Fred Hansen

Attachments

- A. ORS 468.325 Notice Prior to Construction of New Sources
- B. OAR 340-20-030 Notice of Construction and Approval of Plans
- C. Wording for possible rule revisions

AD3983



(2) Within 30 days of receipt of such notice, the commission may require, as a condition precedent to approval of the construction, the submission of plans and specifications. After examination thereof, the commission may request corrections and revisions to the plans and specifications. The commission may also require any other information concerning air contaminant emissions as is necessary to determine whether the proposed construction is in accordance with the provisions of ORS 448.305, 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745 and this chapter and applicable rules or standards adopted pursuant thereto.

(3) If the commission determines that the proposed construction is in accordance with the provisions of ORS 448.305, 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745 and this chapter and applicable rules or standards adopted pursuant thereto, it shall enter an order approving such construction. If the commission determines that the construction does not comply with the provisions of ORS 448.305, 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745 and this chapter and applicable rules or standards adopted pursuant thereto, it shall notify the applicant and enter an order prohibiting the construction.

(4) If within 60 days of the receipt of plans, specifications or any subsequently requested revisions or corrections to the plans and specifications or any other information required pursuant to this section, the commission fails to issue an order, the failure shall be considered a determination that the construction may proceed. The construction must comply with the plans, specifications and any corrections or revisions thereto or other information, if any, previously submitted.

(5) Any person against whom the order is directed may, within 20 days from the date of mailing of the order, 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 pursuant to the applicable provisions of ORS 183.310 to 183.550.

(6) The commission may delegate its duties under subsections (2) to (4) of this section to the Director of the Department of Environmental Quality. If the commission delegates its duties under this section, any person against whom an order of the director is directed may demand a hearing before the commission as provided in subsection (5) of this section.

**468.325 Notice prior to construction of new sources; order authorizing or prohibiting construction; effect of no order; appeal.**

(1) The commission may require notice prior to the construction of new air contamination sources specified by class or classes in its rules or standards relating to air pollution.

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

## AIR POLLUTION CONTROL

### DIVISION 20

#### GENERAL

#### Highest and Best Practicable Treatment and Control Required

**340-20-001** Notwithstanding the general and specific emission standards and regulations contained in this Division, the highest and best practicable treatment and control of air contaminant emissions shall in every case be provided so as to maintain overall air quality at the highest possible levels, and to maintain contaminant concentrations, visibility reduction, odors, soiling and other deleterious factors at the lowest possible levels. In the case of new sources of air contamination, particularly those located in areas with existing high air quality, the degree of treatment and control provided shall be such that degradation of existing air quality is minimized to the greatest extent possible.

Stat. Auth.: ORS Ch.  
 Hist.: DEQ 37, f. 2-15-72, Ef. 3-1-72

#### Exceptions

**340-20-003** Except as provided in ORS 468.450, the provisions of these rules do not apply to:

- (1) Agricultural operations and the growing or harvesting of crops and the raising of fowls or animals.
- (2) Use of equipment in agricultural operations in the growth of crops or the raising of fowls or animals.
- (3) Barbeque equipment used in connection with any residence.
- (4) Agricultural land clearing operations or land grading.
- (5) Heating equipment in or used in connection with residences used exclusively as dwellings for not more than four families; or
- (6) Fires set or permitted by any public officer, board, council or commission when such fire is set or permission given in the performance of such duty of the officer for the purpose of weed abatement, the prevention or elimination of a fire hazard, or the instruction of employes in the methods of fire fighting, which is in the opinion of such officer necessary, or from fires set pursuant to permit for the purpose of instruction of employes of private industrial concerns in methods of fire fighting, or for civil defense instruction.

Stat. Auth.: ORS Ch.  
 Hist.: DEQ 15, f. 6-12-70, ef. 9-1-70; DEQ 37, f. 2-15-72, ef. 3-1-72

#### Registration

##### Registration in General

**340-20-005** The following air contaminant sources, not under the jurisdiction of a regional air pollution control authority, shall register with the Department no later than March 1, 1971, and annually thereafter as required by this rule:

- (1) Aluminum reduction plants.
- (2) Hot mix asphalt plants.

- (3) Rendering plants.
- (4) Kraft and sulfite pulp mills.
- (5) Installations operating wigwam waste burners.
- (6) Plywood, particleboard, and fiberboard plant sites.
- (7) Open burning refuse disposal sites receiving more than 500 tons/year of refuse.
- (8) Thermal-electric power generating plants.
- (9) Other contaminant sources shall register with the Department when so requested.

Stat. Auth.: ORS Ch.  
 Hist.: DEQ 15, f. 6-12-70, ef. 9-1-70

#### Registration Requirements

**340-20-010** (1) Registration shall be completed within 30 days following the mailing date of the request by the Department.

(2) Registration shall be made on forms furnished by the Department and completed by the owner, lessee of the source, or agent.

(3) The following information shall be reported by registrants:

- (a) Name, address, and nature of business.
- (b) Name of local person responsible for compliance with these rules.
- (c) Name of person authorized to receive requests for data and information.
- (d) A description of the production processes and a related flow chart.
- (e) A plot plan showing the location and height of all air contaminant sources. The plot plan shall also indicate the nearest residential or commercial property.
- (f) Type and quantity of fuels used.
- (g) Amount, nature, and duration of air contaminant emissions.
- (h) Estimated efficiency of air pollution control equipment under present or anticipated operating conditions.
- (i) Amount and method of refuse disposal.

Stat. Auth.: ORS Ch.  
 Hist.: DEQ 15, f. 6-12-70, ef. 9-1-70

#### Re-registration

**340-20-015** (1) Once a year upon the annual date of registration, a person responsible for an air contaminant source shall reaffirm in writing the correctness and current status of the information furnished to the Department.

(2) Any change in any of the factual data reported under section 340-20-010(3) shall be reported to the Department, at which time re-registration may be required on forms furnished by the Department.

Stat. Auth.: ORS Ch.  
 Hist.: DEQ 15, f. 6-12-70, ef. 9-1-70

#### Notice of Construction and Approval of Plans

##### Requirement

**340-20-020** No person shall construct, install, or establish a new source of air contaminant emission of any class listed in section 340-20-025(1) and not under the jurisdiction of a regional air quality control authority without first notifying the Department in writing.

Stat. Auth.: ORS Ch.

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

Hist.: DEQ 15, f. 6-12-70, ef. 9-1-70

**Scope**

**340-20-025** (1) This regulation shall apply to the following classes of sources of air contaminant emission:

- (a) Air pollution control equipment.
- (b) Fuel burning equipment rated at 400,000 BTU per hour or greater.
- (c) Refuse burning equipment rated at 50 pounds per hour or greater.
- (d) Open burning operations.
- (e) Process equipment having emission to the atmosphere.

(f) Such other sources as the Department may determine to be potentially significant sources of air contamination.

(2) New construction, installation or establishment includes:

(a) Addition to or enlargement or replacement of an air contamination source.

(b) A major alteration or modification of an air contamination source that may significantly affect the emission of air contamination.

Stat. Auth.: ORS Ch.

Hist.: DEQ 15, f. 6-12-70, ef. 9-1-70; DEQ 37, f. 2-15-72, ef. 3-1-72

**Procedure**

**340-20-030** (1) Notice of Construction. Any person intending to construct, install, or establish a new source of air contaminant emissions of a class listed in section 340-20-025(1) shall notify the Department in writing on a form supplied by the Department.

(2) Submission of Plans and Specifications. The Department may within 30 days of receipt of a Notice of Construction require the submission of plans and specifications for air pollution control equipment and facilities and their relationship to the production process. The following information may also be required:

- (a) Name, address, and nature of business.
- (b) Name of local person responsible for compliance with these rules.
- (c) Name of person authorized to receive requests for data and information.
- (d) A description of the production processes and a related flow chart.
- (e) A plot plan showing the location and height of all air contaminant sources. The plot plan shall also indicate the nearest residential or commercial property.
- (f) Type and quantity of fuels used.
- (g) Amount, nature and duration of air contaminant emissions.
- (h) Estimated efficiency of air pollution control equipment under present or anticipated operating conditions.
- (i) Amount and method of refuse disposal.
- (j) The Department may require corrections and revisions to the plans and specifications to insure compliance with applicable rules, orders and statutes.

(3) Notice of Approval:

(a) The Department shall upon determining that the proposed construction is in the opinion of the Department in accordance with the provisions of applicable rules, order, and statutes, notify the person concerned that construction may proceed.

(b) A Notice of Approval to proceed with construction shall not relieve the owner of the obligation of complying with applicable emission standards and orders.

(4) Order Prohibiting Construction:

(a) If within 60 days of receipt of the items set forth in section 340-20-030(2) the Environmental Quality Commission determines that the proposed construction is not in accordance with applicable statutes, rules, regulations and orders, it shall issue an order prohibiting the construction, installation or establishment of the air contamination source. Said order is to be forwarded to the owner by certified mail.

(b) Failure to issue such order within the time prescribed herein shall be considered a determination that the proposed construction, installation, or establishment may proceed, provided that it is in accordance with plans, specifications, and any corrections or revisions thereto, or other information, if any, previously submitted, and provided further that it shall not relieve the owner of the obligation of complying with applicable emission standards and orders.

(5) Hearing. Pursuant to law, a person against whom an order prohibiting construction is directed may within 20 days from the date of mailing of the order, demand a hearing. The demand shall be in writing, state the grounds for hearing, and be mailed to the Director of the Department of Environmental Quality. The hearing shall be conducted pursuant to the applicable provisions of ORS Chapter 183.

(6) Notice of Completion. Within thirty (30) days after any person has constructed an air contamination source as defined under section 340-20-010(1), he shall so report in writing on a form furnished by the Department, stating the date of completion of construction and the date the source was or will be put in operation.

Stat. Auth.: ORS Ch.

Hist.: DEQ 15, f. 6-12-70, ef. 9-1-70

**Compliance Schedules**

**340-20-032** (1) The Department shall attempt to encourage voluntary cooperation of all persons responsible for an air contamination source, as defined by ORS 468.275(4). To facilitate this cooperation and provide for a progressive program of air pollution control, the Department may negotiate with such persons a schedule of compliance. The schedule will set forth the dates and terms and conditions by which the person responsible for an air contamination source shall comply with applicable air quality rules or statutes:

(a) The schedule may be in lieu of a hearing and shall be in writing and signed by the Director of the Department or his designated officer and an authorized agent of the person responsible for the air contamination source. After the schedule is executed by both parties, it shall be confirmed by order of the Department.

(b) Compliance schedules providing for final compliance at a date later than 18 months from the date of execution shall contain requirements for periodic reporting and increments of progress toward compliance, at intervals of less than 18 months.

(c) No compliance schedule shall allow emissions on a permanent basis in excess of applicable standards and rules.

(2) In the event a negotiated schedule of compliance cannot be established, the Department may set a show cause

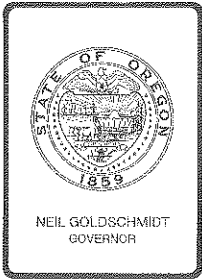
Agenda Item E,  
EQC Meeting  
December 9, 1988  
Attachment C

Wording for Possible Rule Revisions

Revise the following rule:

OAR 340-20-030(4) Order Prohibiting Construction - change  
Environmental Quality Commission to Director of the Department

AD3983



## *Environmental Quality Commission*

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

### REQUEST FOR COMMISSION ACTION

Agenda Item F, December 9, 1988 EQC Meeting

Proposed Adoption of LRAPA Eugene-Springfield Carbon Monoxide (CO) Attainment Redesignation and Adoption of Maintenance Plan as a Revision to the State Implementation Plan, OAR 340-20-047

#### ISSUE

Data show that the Eugene-Springfield area, once in nonattainment for Carbon Monoxide (CO) has met applicable criteria for attaining the federal CO standard. CO nonattainment in the Eugene-Springfield area was primarily related to traffic circulation. Attainment was achieved by changing traffic flow. An inspection and maintenance program was not required.

The Lane Regional Air Pollution Authority (LRAPA) Board of Directors has approved a joint request by LRAPA and the Lane Council of Governments to redesignate the Eugene-Springfield area as in attainment for CO, and replace the existing State Implementation Plan (SIP) CO Control Strategy with a Maintenance Plan. This proposed CO redesignation and maintenance plan has been reviewed by Department staff who found it to be at least as stringent as and consistent with corresponding state regulations. The U.S. Environmental Protection Agency has tentatively approved the redesignation.

The LRAPA Board of Directors has requested that the Commission adopt the CO redesignation and maintenance plan as a revision to the SIP. The most reasonable alternative to be considered is that of adoption.

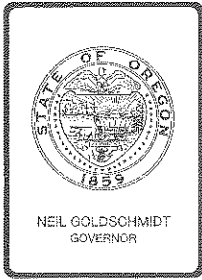
#### SUMMARY

The proposed rule redesignates the Eugene-Springfield area as in attainment with CO standards, and sets forth a plan for maintaining CO standards.

#### DIRECTOR'S RECOMMENDATION

Adopt.

AD3982



## 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, December 9, 1988 EQC Meeting  
Proposed Adoption of LRAPA Eugene-Springfield CO  
Attainment Redesignation and Adoption of Maintenance  
Plan as a Revision to the State Implementation Plan,  
OAR 340-20-047

### BACKGROUND

The Lane Regional Air Pollution Authority (LRAPA) is responsible for regulating most air pollution sources in Lane County. Most, but not all of LRAPA's regulations are part of the State Implementation Plan (SIP). LRAPA exercises the same air quality control functions that are vested in the Commission and Department, subject to Commission and Department overview. (ORS 468.535) After receiving authorization from the Department to conduct a joint EQC-LRAPA rulemaking hearing, LRAPA adopts rule revisions, and submits them to the Department for presentation to the Commission. The Commission may then adopt or approve the rule revisions. SIP revisions must then be submitted to the Environmental Protection Agency (EPA).

This agenda item proposes adoption of the LRAPA's Eugene-Springfield Carbon Monoxide (CO) attainment redesignation and amendment of the SIP by replacing the existing Eugene-Springfield CO Control Strategy with an Attainment Demonstration and Maintenance Plan (Attachment A).

In 1979, the Eugene-Springfield area was designated as a non-attainment area for Carbon Monoxide, based on ambient air quality measurements taken by the LRAPA. The Lane Council of Governments (LCOG), as the designated transportation planning agency for Lane County, developed a plan to attain the standards by 1987, the federally mandated deadline. This plan was incorporated into the Oregon SIP. CO attainment was achieved primarily through traffic circulation modifications. An inspection and maintenance program was not necessary.

LRAPA has measured and documented progress towards lowering the emissions of CO from motor vehicles and reducing ambient levels of CO. (Attachment B - Staff Report to LRAPA's Board of Directors) These data show that Eugene-Springfield has not violated the

federal CO standard for the last three years. EPA criteria for CO attainment require that eight consecutive calendar quarters must elapse without a violation. Eugene-Springfield clearly meets the EPA criteria for CO attainment. In addition to presenting ambient air quality data that demonstrate attainment, LRAPA's Board of Directors has adopted a maintenance plan to assure that the Eugene-Springfield area will continue to meet CO standards through the year 2000. The Eugene-Springfield CO Maintenance plan consists of the Eugene parking and circulation plan, regulation of indirect sources under LRAPA's Indirect Source Permit Rules, and a set of enforcement, review and monitoring commitments by LRAPA and the City of Eugene.

Two years ago, the City of Eugene began working on a Central Area Transportation Study (CATS), including a comprehensive parking and circulation plan. The plan addresses traffic flows in and around the central business district of the city which is the area of non-attainment. It provides mitigation of "hot spot" zones identified by LRAPA in 1984 and 1985. It incorporates synchronized traffic lights, removal of on-street parking, creation of turn pockets, etc., to assure smooth traffic flow. The plan includes near-term major development projects. (Attachment A, p.5).

LRAPA has made the commitment to utilize its indirect source review requirements to assure, on a case-by-case basis, that major new developments do not interfere with continuing attainment status. LRAPA will also enforce the City of Eugene Parking and Circulation Plan, monitor for CO and conduct periodic monitoring studies to ensure continued attainment. LRAPA and the City of Eugene will annually review the parking and circulation plan, making changes as necessary to ensure compliance with ambient air quality standards. (Attachment A, p. 5).

#### Rulemaking Process

On November 17, 1987 LRAPA approved Eugene's CAT Study as a parking and circulation plan under LRAPA's indirect source rules. The City of Eugene, by resolution, committed to annual review and adjustment of programs as part of the maintenance strategy. The Department reviewed LRAPA's request for CO attainment redesignation, found the proposal to be at least as stringent as corresponding state regulations, and authorized LRAPA to hold a joint EQC/LRAPA/LCOG hearing. The U.S. Environmental Protection Agency (EPA) had tentatively approved the redesignation and maintenance plan. On September 13, 1988, LRAPA held a concurrent hearing with LCOG to adopt CATS and the city's resolution, and to incorporate LRAPA's indirect source rules into the SIP. Legal notice of the public hearing was published in the Cottage Grove

Sentinel, the Eugene Register-Guard and the Springfield News. The Rulemaking Statements are Attachment C. LRAPA also adopted a joint resolution with LCOG to forward to the EPA a request to revise the SIP. This joint LRAPA/LCOG resolution is Attachment D. On September 22, LCOG adopted the joint resolution.

#### Alternatives and Evaluation

1. Take no action or deny the request. Eugene-Springfield would remain designated as non-attainment for CO. Although it is not on EPA's list of areas subject to post 1987 non-attainment requirements, the Eugene-Springfield area would remain subject to industrial emissions offset requirements and federal sanctions. EPA could eventually put the Eugene-Springfield area on the post 1987 non-attainment list, and request a formal SIP revision.
2. Approve the SIP revision as requested. This would officially put Eugene-Springfield in attainment for CO under state regulations, and would also add LRAPA's indirect source rules to the Oregon SIP, as part of the maintenance strategy for Eugene-Springfield.

#### Director's Recommendation

It is recommended that the Commission adopt the LRAPA/LCOG proposed attainment demonstration and maintenance plan as a revision to the SIP (OAR 340-20-047) and authorize the Department to request that EPA redesignate the Eugene-Springfield as an attainment area for CO.

  
Fred Hansen

- Attachments A - Eugene-Springfield CO Attainment Demonstration and Maintenance Plan  
B - Staff Report to LRAPA's Board of Directors  
C - Rulemaking Statements  
D - Joint LCOG-LRAPA Resolution

Sarah Armitage  
229-5581  
November 22, 1988  
AD3982.A



**SECTION 4.7**  
**ATTAINMENT DEMONSTRATION AND MAINTENANCE PLAN**  
**FOR THE**  
**EUGENE-SPRINGFIELD AIR QUALITY MAINTENANCE AREA**  
**FOR CARBON MONOXIDE**

*LANE REGIONAL AIR POLLUTION AUTHORITY*  
*LANE COUNCIL OF GOVERNMENTS*  
*OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY*

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## SECTION 4.7

# ATTAINMENT DEMONSTRATION AND MAINTENANCE PLAN FOR THE EUGENE-SPRINGFIELD AIR QUALITY MAINTENANCE AREA FOR CARBON MONOXIDE

### 4.7.0 INTRODUCTION

The March 22, 1979 State Implementation Plan (SIP) revision for carbon monoxide (CO) concluded that the air quality in the Eugene-Springfield Air Quality Maintenance Area (AQMA) violated the 8-hour federal Ambient Air Quality Standard for CO. This revision included a prediction that the AQMA would achieve attainment by 1987 without implementation of any additional local control measures. This argument relied heavily on emission reductions from motor vehicles due to the Federal Motor Vehicle Emission Control Program (FMVECP), additional local traffic engineering improvements and the strong local emphasis on alternative modes (mass transit, bicycling and carpooling). Since attainment was not predicted by the federally-mandated deadline (1982), an analysis of reasonably available control measures was performed (June 26, 1980). The study concluded that applying additional control measures to the AQMA would not achieve attainment sooner than the FMVECP and existing local control measures would.

The progress in attaining the standards has been monitored by the Lane Regional Air Pollution Authority (LRAPA). Annual progress reports were issued which document the changes in emissions and the ambient levels of CO within the Eugene-Springfield AQMA. These reports clearly demonstrate that CO emissions from transportation sources and resultant ambient concentrations at the designated monitoring site have continued a downward trend. Based upon the improvement in the ambient levels over the past several years and recent programs which will continue to keep the ambient levels below the standards, it is now appropriate to declare the AQMA in attainment with the CO standards.

### 4.7.1 STANDARD ATTAINMENT DEMONSTRATION

Since 1971, LRAPA has maintained a continuous monitoring site for CO in downtown Eugene. It was data from this site that led to the non-attainment designation by the EPA under Part D of the Clean Air Act. CO is a seasonal pollutant in the AQMA, with highest levels occurring only during the winter months. The meteorology during these high periods is characterized by cold temperatures, with light winds and poor vertical mixing. These are generally periods when the National Weather Service has declared an Air Stagnation Advisory (ASA). As depicted in Table 1, the AQMA has experienced several winters over the past nine years that have had extensive ASA periods. However, though the meteorological conditions were conducive to high levels, the AQMA

SECTION 4.7  
ATTAINMENT DEMONSTRATION AND MAINTENANCE PLAN FOR THE  
EUGENE-SPRINGFIELD AIR QUALITY MAINTENANCE AREA FOR  
CARBON MONOXIDE

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has not violated the standards since 1980 (see Table 2), with only single exceedances occurring in 1983 and 1985. As a result, the Eugene-Springfield AQMA satisfies the basic EPA requirement for demonstrating attainment status of eight consecutive quarters of data without a violation of the standard.

Because the data demonstrating attainment comes from a single site, a monitoring study was conducted during the winter CO season of 1983-1984 to evaluate the representativeness of the downtown Eugene site (see "Study to Evaluate the Representativeness of the Permanent Carbon Monoxide Site for the Eugene-Springfield AQMA", May, 1984, Appendix 4.7-4). The results of this study demonstrated that the permanent monitoring site adequately represents the peak CO levels in the Eugene-Springfield AQMA and is a suitable indicator of CO attainment status. This study did, however, identify a hot spot location at a freeway intersection blocks from the downtown monitor which resulted in a follow-up monitoring study being performed in 1985 (see "Study to Evaluate Potential Hot Spot Carbon Monoxide Sites Within the Eugene-Springfield AQMA", June, 1985, Appendix 4.7-5). This second study identified an additional hot spot location near downtown. Both studies examined numerous potential hot spot sites throughout the metropolitan area, and only two were identified which were near downtown Eugene. These studies concluded that these hot spot locations are isolated microscale problem areas and that the permanent monitoring site in downtown Eugene represents the peak area-wide CO levels.

Subsequent to identification, areas around both hot spot locations have had major transportation projects proposed. Under LRAPA's Indirect Source Rules (see Appendix 4.7-1), each project was required to provide mitigating measures to lower maximum concentrations at the hot spots and to assure that ambient air quality standards will not be violated. One project is completed with the mitigating measures in place. Work is in progress at the other.

#### 4.7.2 STANDARD MAINTENANCE PROGRAM

Under LRAPA's Indirect Source Permit rules, all proposed major transportation projects in Lane County must demonstrate that they will not contribute to a violation of the ambient air standards. These projects must receive a permit from LRAPA prior to commencing construction. As mentioned previously, these rules have been used by LRAPA to mitigate CO emissions near the two hot spot locations. In addition to the mitigating measures, additional CO monitoring has been required. This will assure that ambient CO levels will be maintained.

SECTION 4.7  
ATTAINMENT DEMONSTRATION AND MAINTENANCE PLAN FOR THE  
EUGENE-SPRINGFIELD AIR QUALITY MAINTENANCE AREA FOR  
CARBON MONOXIDE

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Although the entire Eugene-Springfield AQMA was designated as a non-attainment area under Part D, monitoring studies have demonstrated that the actual non-attainment area is limited to central Eugene. Recognizing this, the City of Eugene has addressed the CO problem as part of its planning process. On November 17, 1987, the LRAPA Board of Directors approved the Eugene Parking and Circulation Plan (see Appendix 4.7-3) under the auspices of Title 20 of the LRAPA Rules and Regulations which govern indirect sources. This plan provides a set of projects and implementation strategies which address the transportation impacts of growth and development in the city center. They were designed to insure that air quality standards will be maintained. The plan is based on the technical analysis performed by the City of Eugene in the Central Area Transportation Study (CATS) (see Appendix 4.7-2). The air quality analysis portion of CATS was performed using the date normalizing rollback technique recommended by EPA Region X. The projected area-wide CO emissions under the worst-case scenario (see Table 3) show a steady decline through the year 2000. As a result, the air quality projections for the worst-case scenario indicate a steady improvement in ambient levels through the year 2000 (see Table 4). Although even the future worst-case scenario is projected to maintain attainment with the standards, the scenario adopted for implementation by the Eugene City Council and LRAPA Board of Directors was the best future case of those analyzed in CATS.

4.7.2-1 Summary of Local Commitments to the Maintenance Plan

The following local commitments are designed to provide adequate assurance of maintaining the ambient CO standards through the year 2000:

- A. LRAPA will continue to enforce Title 20 of LRAPA's rules, requiring proposed major transportation projects in Lane County to demonstrate that they will not cause or contribute to a violation of ambient air quality standards;
- B. LRAPA will enforce the City of Eugene Parking and Circulation Plan to ensure compliance;
- C. LRAPA and the City of Eugene will annually review the Parking and Circulation Plan, making changes as necessary to ensure that Ambient Air Quality Standards will not be violated;
- D. LRAPA will continue to monitor for CO at the designated monitoring site; and
- E. LRAPA will conduct periodic short-duration monitoring studies to ensure continued attainment.

**TABLE 1**

*EUGENE-SPRINGFIELD  
WINTER AIR STAGNATION ADVISORY PERIODS  
NOVEMBER--FEBRUARY*

<u>Winter Season</u>	<u>Total Number of ASA Days</u>
1979--1980	16
1980--1981	19
1981--1982	10
1982--1983	11
1983--1984	0
1984--1985	19
1985--1986	15
1986--1987	8
1987--1988	0

**TABLE 2**

*AMBIENT CARBON MONOXIDE LEVELS  
DOWNTOWN EUGENE MONITORING SITE  
8-HOUR AVERAGES  
PPM*

<u>Year</u>	<u>Maximum Level</u>	<u>Second Highest Level</u>	<u>Number of Days &gt; 9 PPM</u>
1980	12	10	2
1981	8	8	0
1982	9	8	0
1983	10	9	1
1984	9	8	0
1985	11	8	1
1986	9	8	0
1987	7	7	0

**TABLE 3**

*CENTRAL EUGENE  
CARBON MONOXIDE EMISSION ESTIMATES  
TONS/YEAR*

<u>SOURCE</u>	<u>1987</u>	<u>1990</u>	<u>1995</u>	<u>2000</u>
Transportation	6,264	6,021	5,413	4,517
Home Wood Heating	1,232	1,348	1,344	1,344
TOTAL	7,496	7,369	6,757	5,861

**TABLE 4**

*CITY OF EUGENE CENTRAL AREA TRANSPORTATION STUDY  
PROJECTED SECOND-HIGHEST CO CONCENTRATIONS  
WORST-CASE SCENARIO  
PPM*

<u>Year</u>	<u>CO Level</u>
1985	9.18
1987	9.07
1990	8.87
1995	8.39
2000	7.72

Agenda Item No. 6

LRAPA Board of Directors Meeting

September 13, 1988

TO: Board of Directors  
FROM: Donald R. Arkell, Director  
SUBJ: Staff Report and Recommendations on "Eugene-Springfield Request for Change in Attainment Status for Carbon Monoxide"

**DISCUSSION**

Carbon monoxide (CO) is a colorless, odorless gas which, when respired in significant concentrations, acts to restrict the oxygen uptake by the blood. Because of the significant health impacts, the U. S. Environmental Protection Agency (EPA) has set ambient standards for this pollutant. In a 1979 report prepared by the Lane Council of Governments (LCOG), in conjunction with LRAPA, it was concluded that the Eugene/Springfield area violated the 8-hour federal Ambient Air Quality Standard for CO. It was predicted in that report that the CO standard would be attained by 1987, through the replacement of older cars by newer ones, with certain improvements to specific local streets and roadways and with a strong local emphasis on alternative modes.

Annual progress reports issued to EPA by LRAPA have demonstrated that CO emissions from transportation sources have been significantly reduced over the past several years and that the resultant concentrations of CO measured at the designated monitoring site in downtown Eugene have also shown a downward trend. In fact, the data show that this area has not violated the ambient standards since 1980. This clearly meets the EPA requirement for demonstrating attainment of eight consecutive quarters without a violation of the standard.



In order to successfully justify a change in the attainment status, it must be demonstrated not only that the standard has been attained, but also that it will be maintained for at least ten years into the future. LRAPA's Indirect Source Rules, which require all major transportation projects in Lane County to demonstrate that they will not contribute to a violation of the ambient standard, contribute significantly to this demonstration.

The City of Eugene's recently-approved Parking and Circulation Plan, adopted by the LRAPA Board of Directors November 17, 1987, provides for a set of projects and implementation strategies to address the transportation impacts of growth and development in the city center. These were designed to insure that the air quality standards will be maintained. LRAPA and the City of Eugene are committed to providing an annual review of this program and making changes if conditions warrant. In addition, LRAPA will continue to monitor for CO to assure continued attainment. This will provide the needed local commitment to successfully demonstrate maintenance of the standard through the year 2000.

This proposal has been submitted to the State of Oregon A-95 review process, and no comments have been received to date. Notice of this hearing was published in the Cottage Grove Sentinel, the Eugene Register-Guard and the Springfield News.

#### DIRECTOR'S RECOMMENDATION

Based on these facts and on the information in the attached report, it is the Director's recommendation that the board approve this request for attainment status change.

REJ/mjd

## STATEMENT OF NEED FOR PROPOSED RULE AMENDMENTS

Pursuant to ORS 183.335(2), the following statement provides information on the proposed action to amend Oregon's Revised State Implementation Plan (SIP) for Particulate Matter for the Eugene/Springfield Air Quality Maintenance Area.

Legal Authority

ORS 468.020, ORS 468.505, ORS 468.535, and the Federal Clean Air Act Amendments of 1977 (PL 95-95).

Need for Amendments

In 1979, it was determined that the Eugene-Springfield area was not in compliance with federal standards for carbon monoxide. A State Implementation Plan for Carbon Monoxide was adopted in 1979, committing to attainment of the federal standards by December of 1987. The standards have not been violated since 1980. Through adherence to strategies in the SIP, and with adoption of a Traffic and Circulation Plan for downtown Eugene (the area of highest CO levels), it is now predicted that the area will maintain compliance at least through the year 2000. The proposed request for re-designation of the area to attainment status for carbon monoxide would remove Eugene-Springfield from EPA's list of non-complying areas for this pollutant, thus avoiding possible future sanctions.

Principal Documents Relied Upon

1. State of Oregon State Implementation Plan Revision for Carbon Monoxide, Eugene/Springfield AQMA
2. Clean Air Act Amendments of 1977 (PL 95-95)
3. ORS 468, et. seq.
4. LRAPA Staff Report to Board of Directors, September 13, 1988

## FISCAL AND ECONOMIC IMPACT STATEMENT

The change in compliance status from non-attainment to attainment should have no economic impact.

## LAND USE CONSISTENCY STATEMENT

The proposed SIP revision does not affect land use as described in any applicable land use plan in Lane County.

/mjd  
09/13/88

RESOLUTION NO. 88-8

December 9, 1988 EQC Meeting  
Agenda Item FJOINT RESOLUTION OF THE  
LANE COUNCIL OF GOVERNMENTS AND  
THE LANE REGIONAL AIR POLLUTION AUTHORITY

RESOLUTION FOR THE PURPOSE OF REQUESTING THAT THE EUGENE-SPRINGFIELD AIR QUALITY MAINTENANCE AREA BE DESIGNATED AS AN ATTAINMENT AREA FOR CARBON MONOXIDE.

WHEREAS, the Lane Council of Governments (L-COG) is the designated metropolitan planning organization for transportation planning and is the lead agency for carbon monoxide planning in the metropolitan area; and

WHEREAS, the Lane Regional Air Pollution Authority (LRAPA) has overall air quality responsibilities in the Eugene-Springfield area and Lane County; and

WHEREAS, in 1979 LRAPA and L-COG adopted State Implementation Plan Revisions for the Eugene-Springfield area which indicated carbon monoxide problems were concentrated in the vicinity of downtown Eugene and which projected attainment of the federal carbon monoxide standards by 1987; and

WHEREAS, actions contained in the State Implementation Plan Revisions have been implemented, resulting in actual reductions of motor vehicle emissions sufficient to attain the federal standards; and

WHEREAS, air quality monitoring performed by LRAPA indicates no violations of the carbon monoxide standard have occurred since 1980, thus demonstrating attainment of the standard; and

WHEREAS, planning work performed by LRAPA and L-COG indicate the carbon monoxide standard will continue to be maintained; and

WHEREAS, the LRAPA Board approved the Eugene Parking and Circulation Plan which includes projects and strategies to ensure air quality standards will be maintained; and

WHEREAS, the LRAPA Board conducted a public hearing on the request for an attainment designation for the Eugene-Springfield Air Quality Maintenance Area.

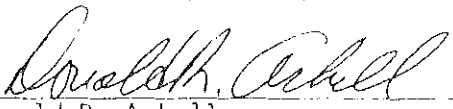
NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the Lane Council of Governments and the Board of Directors of the Lane Regional Air Pollution Authority that the U. S. Environmental Protection Agency be requested to designate the Eugene-Springfield Air Quality Maintenance Area as an attainment area for carbon monoxide.

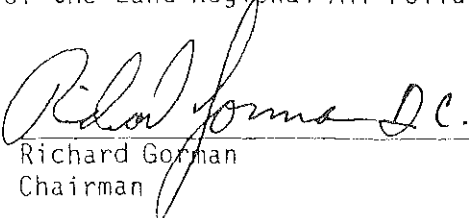
ADOPTED by the Board of Directors of the Lane Council of Governments this 22st day of September, 1988.

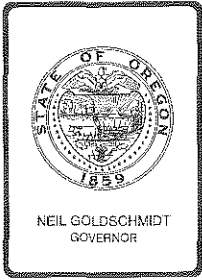
\_\_\_\_\_  
George Kloeppel  
Executive Director

\_\_\_\_\_  
Bob Bryson  
Chairman

ADOPTED by the Board of Directors of the Lane Regional Air Pollution Authority this 13th day of September, 1988.

  
\_\_\_\_\_  
Donald R. Arkell  
Director

  
\_\_\_\_\_  
Richard Gorman  
Chairman



## Environmental Quality Commission

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

### MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Amendment to Item G, December 9, 1988, EQC Meeting

Request for Exception to OAR 340-41-026(2) (An EQC Policy Requiring Growth and Development Be Accommodated Within Existing Permitted Loads) by the City of Halsey, Oregon.

### Purpose of Amendment

The purpose of this amendment is to provide the Commission with the Hearing Officer's report and summary and evaluation of public comment received on the City's request for increases in mass discharge limitations.

The request for an exception to the policy requiring growth and development be accommodated within existing allowable discharge loads, unless otherwise approved by the Commission, is a substantive permit issue requiring public notice. As part of the permit issuance process and in anticipation that a public hearing might be requested during the routine permit public notice procedure, the Department prepared a notice of hearing on the proposed National Pollutant Discharge Elimination System (NPDES) permit for the City of Halsey (Attachment A).

The public hearing was held on November 17, 1988. Testimony from the City's engineer requested the record be held open beyond November 18 to provide additional comment on the draft permit. The summary and response to testimony includes the additional comments received on the draft permit.

The proposed permit includes interim effluent limitations for the existing system and proposed increases in wasteload limits upon completion of treatment facility improvements. The public comment was summarized, evaluated and is being included as an addendum to the staff report.

### Evaluation

The Hearing Officer's report and summary and evaluation of public comment on the City's request for an increase in mass discharge for its proposed expanded treatment facility is presented in Attachment B. This report includes copies of written testimony.

No objections to the proposed load increase were raised. Testimony from Senator Mae Yih, the City and its engineer concerning the proposed increase elaborated on reasons they believe it is important that the Commission

approve an exception to OAR 340-41-026(2) on December 9, 1988. The City has made a good faith effort to complete planning and financing to construct expanded facilities which will result in improved treatment and fewer months of discharge to Muddy Creek. The City has experienced budget cuts and does not believe the residents can afford a project that would enable them to stay within the current mass load.

Additionally, one commentor suggested that the permit require discharges from the lagoon be curtailed if Muddy Creek flows rise above flood stage. Concern about public perception that treated sewage waste water may contaminate property was expressed. The Department evaluated this concern and considered both the public health concern and whether discharges of treated and disinfected effluent discharges might exacerbate flood conditions. The Department concluded that at peak discharge flow rates, treated effluent would not increase bacterial values above instream background levels at any time. Also, a 1 cfs effluent discharge flow compared to 1000 cfs stream flow at flood stage suggests that lagoon flows will not exacerbate flooding.

Since the hearing dealt with any issue relative to the content of the proposed permit, there were also comments and suggestions concerning other permit issues. The permit is proposed to be modified as shown in Attachment C. These changes are summarized as follows:

1. The Department concludes it is appropriate to modify the BOD and TSS percent removal requirement from 85% to 65%. Also, because the lagoon system is to be sized and designed to accommodate high flows, the lagoon will be capable of treating effluent to 35 mg/l. Thus, the original requested load increase should be decreased from 164 to 115 pounds per day TSS monthly average. However, if the Commission does not approve the requested load increase, higher percent removals may be required.
2. Revisions to the compliance schedule for completion of engineering plans and specifications and award of construction bids, are made to correspond with the engineer's revised schedule.
3. Following re-evaluation of the basis for identifying a 50 foot mixing zone in the draft permit, the Department concludes that a 100 foot mixing zone is appropriate.
4. Minor "housekeeping" changes to correspond with the existing permitted discharge period for the treatment system until expansion is completed, to clarify the purpose of the influent flow specified for the existing facility, and the dilution factor for the proposed facility.

Amendment to Agenda Item G, EQC Meeting  
December 9, 1988  
Page 3

Director's Recommendation

The Director recommends that this report be appended to the staff report of Agenda Item G. Furthermore, the Director recommends that the increased BOD<sub>5</sub> loading be approved as requested, but that the increased total suspended solids loading be approved for 115 pounds per day instead of 164 pounds per day as requested.



Fred Hansen

Mary M. Halliburton:REF:kjc  
WJ1321  
229-5065  
December 5, 1988

- Attachments:
- A. Public Hearing Notice
  - B. Hearing Officer's Report, Including Summary and Response to Public Comment and Copies of Written Testimony
  - C. Revised Draft NPDES Permit for the City of Halsey

*Oregon Department of Environmental Quality*

# A CHANCE TO COMMENT ON...

WATER QUALITY WASTE DISCHARGE PERMITS

Date Prepared: 10/07/88

Notice Issued: 10/14/88

Comments Due: 11/18/88

**WHO ARE THE APPLICANTS**

City of Adair Village, STP  
City of Halsey, STP

**WHAT IS PROPOSED:**

Modification of National Pollutant Discharge Elimination System (NPDES) permit limitations to allow the Cities of Adair Village and Halsey to expand the capacities of their sewage treatment plants from 0.200 million gallons per day (MGD) to 0.318 MGD and 0.096 MGD to 0.394 MGD, respectively.

**WHAT ARE THE HIGHLIGHTS:**

The Cities each propose to construct additional treatment capacity to accommodate the wastewater loads of larger and growing populations in the two communities, and to resolve permit violations. The permitted monthly average biochemical oxygen demand (BOD) and total suspended solids (TSS) discharge limits for the expanded facilities would be increased only in the wet weather season of November 1 - April 30. The monthly average discharge load from the Adair Village system would be increased by 33 pounds per day BOD and 83 pounds per day TSS. Discharge of Adair Village's treated effluent to Bowers Slough would be eliminated. Treated and disinfected waste instead would be discharged to the Willamette River. The City of Halsey's discharge load to Muddy Creek would be increased by 51 pounds per day BOD and 84 pounds per day TSS. There will be no discharge during the low river flow period of May 1 through October 31 from either facility.

**HOW IS THE PUBLIC AFFECTED:**

There will be an increase in the amounts of BOD and TSS discharged to the Willamette River from the Adair Plant and to Muddy Creek from the Halsey Plant. However, no detrimental water quality effects of these increased discharges are predicted.

**HOW TO COMMENT:**

Public hearings have been scheduled for: City of Halsey at 2:00 p.m., and City of Adair Village at 6:00 p.m., on the following date and location:

Thursday, November 17  
Albany Armory  
George Miller, Room B  
104 SW 4th Avenue  
Albany, Oregon



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.

The public will have the opportunity to give oral or written testimony at these hearings.

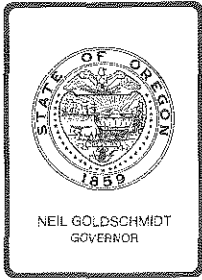
Written comments should be presented to DEQ by Friday, November 18 at the following address:

Department of Environmental Quality  
Water Quality Division  
811 S.W. Sixth Avenue  
Portland, OR 97204  
Telephone: 229-6099

**WHAT IS THE  
NEXT STEP:**

After the public testimony has been received and evaluated, the proposed modifications will be revised as appropriate and will be presented to the Environmental Quality Commission for their consideration. The Commission may approve the increase, approve a modified proposal or deny the increase.





## Environmental Quality Commission

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

### MEMORANDUM

To: Environmental Quality Commission Date: December 7, 1988  
 From: Mary M. Halliburton, Hearings Officer  
 Subject: Agenda Item No. G, December 9, 1988, EQC Meeting

Hearings Officer's Report on Proposed Modification of the National Pollutant Discharge Elimination System (NPDES) Permit Limitations to Allow the City of Halsey to Increase the City's Sewage Treatment Plant Discharge Loading to Muddy Creek.

A public hearing was held Thursday, November 17, 1988 at the Albany Armory, 104 SW 4th Avenue, Albany, Oregon at 2:00 PM. The hearing was preceded by public notice issued October 14, 1988 (Attachment A).

The hearings officer summarized the purpose of the hearing and reminded those present that the hearing record would close at 5:00 PM, Friday, November 18. The Department at that time would then summarize and respond to all written and oral comment for inclusion in the material the Environmental Quality Commission (EQC) will review at their December 9, 1988 EQC meeting.

In addition, those present were advised that if so desired, they may receive a copy of the EQC staff report, and summary and response to oral and written testimony.

An overview of the proposed modifications being considered for the City of Halsey's wastewater treatment facility was presented by Francis Dzata, Project Officer, DEQ.

Following the presentation by Francis Dzata, the public hearing commenced. The hearing officer noted that Senator Mae Yih had requested that the written testimony she provided be made part of the hearing record.

Those who signed up to provide comment were called individually to provide comment. Four persons provided oral comment. Each supported the proposed increase in discharge to Muddy Creek. One person recommended discharge to Muddy Creek not be allowed when Muddy Creek experiences flooding.

### Summary of Oral and Written Testimony

#### Mae Yih, State Senator:

Senator Yih was unable to attend the public hearing but submitted written testimony to the Department November 15, 1988, supporting the City's

Hearings Officer's Report on Halsey  
December 9, 1988  
Page 2

application for expansion of the sewage treatment plant. The Senator's support is based on the prediction that water quality will not be affected in the receiving stream and that the increased discharge will only occur during the wet weather months.

Concern was also expressed that further delays in the approval of the application by the EQC will result in financial consequences that the citizens of Halsey can ill afford.

Arthur Case Jr., Mayor, City of Halsey:

Mayor Case's comments supported the expansion of the current lagoon treatment system. He addressed the economic impacts of the project, thus far, and expressed concern about the process Halsey has experienced to date in completing the steps to bring their request for discharge loads to the EQC.

The City requested guidance from the Department of Environmental Quality in February, 1988. In May, the City received a letter confirming that a mass load increase would require the approval of the EQC. Prior to receipt of this letter the City had proceeded with the facilities plan report, passed a bond measure in the amount of \$300,000, held a 30 day public notice and sent their facility plan and to the Public Clearinghouse for their 45 day public notice. Mayor Case stated that by this time all parties involved knew that EQC approval of the mass load increase was required. The request by the Department for another public hearing in November has put the project behind schedule 30 - 60 days, placed the project in a less favorable bidding position and delayed the obtaining the Linn county conditional use permit.

The City has committed substantial financial resources to the project thus far, a portion of which is an advance for facility planning from EPA which would require repayment if the project is not built. Also, if the mass load increase is not granted and the City is required to implement spray irrigation (Option 2) or addition of intermittent sand filters (Option 3), substantial increases in initial and annual operating costs will result to the City. Further, the City will have to go back to the voters for more funding.

The City is small, has less than 300 hook-ups and can not afford additional costs. The City has experienced budget cuts and has only one public works employee. Implementation of Options 2 and 3 would require more maintenance than the city can afford and he feels that the enlarged lagoon system is the best choice for the City.

Department's Response:

The Department acknowledges that the City of Halsey has made a good faith effort to complete facility planning and arrange local financing to be eligible for construction grant award by September 30, 1988. The Department apologizes for not providing written response to the City's February request for guidance on future treatment criteria until May 1988. It unfortunately

Hearings Officer's Report on Halsey  
December 9, 1988  
Page 3

was assumed that the verbal phone communication with the City's engineer in March 1988 provided sufficient guidance on lagoon seepage criteria, treatment criteria, including federal 85% removal requirements and the need for the facility plan to address alternatives to stay within the existing mass loads and evaluate impacts on receiving water quality. Additionally, to prevent miscommunication in the future on the need for public notice on permit related actions prior to design and construction of proposed facilities, the grant and permit sections are developing procedures whereby all potential grantees are made aware of the Department's permit related procedures. It appears that the grant award condition also notifying the permittee of the need for EQC action on the requested load increase prior to release of the grant monies did not adequately prepare the City for procedural steps for public notice that would be required on the load increase request.

Sharon McDonald, City Recorder/Public Works Director, City of Halsey:

Ms. McDonald gave testimony on behalf of the City of Halsey supporting the projected expansion of the lagoon system, and submitted for the record a written copy of her testimony.

The City of Halsey is a small rural community with a small staff and a tax base to match. The residents of the City have, since 1968, defeated every ballot measure which would result in an increase in costs to the voters. Beginning in 1983, the City Counsel has been aware of the need for improvements to the sewer system and made efforts to make corrections as funds have allowed. The City continues to suffer from the voters unwillingness to approve adequate funding of City services and hire additional staff. Thus, the City continues to balance services against the economic burden placed upon its residents, many of which are senior citizens on a fixed income. Consequently, the choice of the increase in mass load increase is the most attractive to the City since it is the least costly option and allows the City funds within the approved budget for the removal of excessive Inflow and Infiltration.

The City views the EQC approval of the mass load increase as crucial to the timely and successful completion of the project. Delays encountered thus far have placed the City at least 30 days behind schedule. Further delays will cause the cost of the project to increase resulting in budget overrun, an unfavorable bid timing and a return to the voters for further funding. It is Ms. McDonald's opinion that given the voters past record on funding essential City services that the entire project could be killed if additional funding is required. In conclusion, the City feels it has worked very hard to meet DEQ, EPA and other Department requirements and asks the EQC consider the limitations of the City both financially and physically in considering the City's request for a mass load increase given the environmental impact has been shown to be negligible.

Hearings Officer's Report on Halsey  
December 9, 1988  
Page 4

Steve Downs, Project Manager, Westech Engineering, Inc:

Mr. Downs expanded on the technical aspects of the project and provided additional information at the hearing to support the City's request for a mass load increase. He stated that the City has shown a good faith effort in the undertaking of inflow and infiltration work and implementation of interim spray irrigation measures to remain within the existing permitted limits. In addition, he noted:

1. Under the preferred option, the City will be expanding the current holding period from five months under the current permit to six months under the proposed permit. Other options were reviewed by the City and the beneficial uses and impacts of the options as well as the beneficial uses impact of increased loads to Muddy Creek were evaluated. Input from other state agencies was solicited: State Historical Preservation, Fish and Wildlife, DEQ, LCDC, State Lands, and Water Resources.
2. Technical options and costs were evaluated. Summer irrigation and winter discharge to stay within current limits would require a removal of greater than 75 percent of the I/I in the system. Effluent polishing with an intermittent sand filter with a 25 percent removal of I/I would result in a discharge load of about one half the current permit limits. However, because this option would result in a greater level of treatment than EPA's minimum requirements, it would not be grant eligible. Both of these options are beyond the City's financial capabilities. The City has agreed to a three year program to reduce I/I by 30 percent under the preferred option.
3. Mr. Downs requested that a decision whether to allow an increase be made on December 9, 1988, so that the City may proceed and be on line next fall with the treatment facility. Mr. Downs also requested that additional time be given to the City to review the proposed draft permit beyond the close of the hearing. With regard to Mr. Down's request for additional time to review the draft permit, the Department verbally concurred following the public hearing that it was appropriate for the City to have additional time. The Department received the City's comments on November 29, 1988. Mr. Downs requested: (1) the percent removal requirement for BOD and TSS be modified from 85 to 65 percent (%); (2) clarification of the flow limitation for the existing facilities; (3) reassessment of the proposed mixing zone length and dilution factor requirement; and (4) revisions to the compliance schedule.

Department's Response:

1. The Department concurs it is appropriate to modify the BOD and TSS percent removal requirement from 85% to 65%. Upon further evaluation, it is also appropriate to reduce the permitted monthly average TSS effluent concentration from 50 mg/l to 35 mg/l to ensure a minimum of 65% removal of TSS. Lagoon systems sized and designed to accommodate

Hearings Officer's Report on Halsey  
December 9, 1988  
Page 5

higher peaks of the magnitude that Halsey experiences will also be capable of treating effluent to 35 mg/l TSS. The TSS monthly average mass load based on this concentration limit at a design flow of 0.394 mgd is 115 pounds per day. However, if the Commission does not approve wasteload increases, higher percent removal requirements and more stringent effluent concentration limits may be required.

2. The non-discharge period applicable to the facilities prior to upgrade will be modified to reflect the non-discharge period for which the existing system was designed, June 1 through October 31, rather than May 1 through October 31.
3. The approved dry weather flow limit of 0.096 mgd is recognized as the design basis for the existing system. It is not a limitation. Schedule C of the permit requires the City to upgrade its treatment system. No enforcement action would be contemplated unless the interim effluent limits or compliance schedules are not achieved. The compliance schedules will be modified to correspond to the engineer's revised schedule.
4. The condition concerning the required dilution factor will be modified to clearly reflect that either a dilution factor of 0.48 or an instream flow of 75 cfs is required to allow discharge to Muddy Creek between November 1 and April 30. The Department maintains that the instream water quality standard for dissolved oxygen of 95 percent saturation applies to Muddy Creek. Fish and Wildlife considers Muddy Creek to be a migratory cutthroat trout stream. These fish are a type of salmonid.
5. The Department reviewed the calculations performed to determine an appropriate mixing zone length. The calculation which resulted in specifying a mixing zone length in the draft permit is appropriate for lake and ocean outfalls but not for streams. The stream velocity needs to be accounted for in determining effluent dispersion. A new computer analysis justifies a mixing zone length of 100 feet. At daily maximum effluent BOD concentrations, background water quality effluent and effluent plume concentrations would be equal 100 feet downstream.

Mr. Dave MacPherson, a farmer in Oakville area whose land borders Muddy Creek approximately 20 miles downstream from the point of discharge:

Mr. MacPherson supports the expansion of the treatment facility by the City. However, he is concerned about effluent discharge during periods of high stream flows which may result in flooding around a neighbor's home. Mr. MacPherson asks that the City consider curtailing winter discharges when flooding occurs in the area. Although the flow of effluent from the treatment system may not contribute significant flows to the creek, he feels that the psychological effect of the City's discharge may result in complaints from his neighbor.

Hearings Officer's Report on Halsey  
December 9, 1988  
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Department's Response:

The Department considered both the potential for treated and disinfected wastewater contributing to flood conditions and potential for public health concerns if discharge occurs during flood conditions. It was concluded that effluent discharges to Muddy Creek would not adversely effect water quality, cause instream fecal coliform values to increase above background levels, nor exacerbate flooding. At peak lagoon discharge rates, effluent will be adequately treated and disinfected. Furthermore, the effluent to Muddy Creek flow at flood stage dilution factor would exceed a 1:1000 dilution at the point of discharge. Effluent flow will be less than one (1) cubic foot per second (cfs) while Muddy Creek flows would overtop the stream bank at about 1000 cfs stream flow. The nearest dwelling is about one mile below the point of discharge.

Attachments: Written Testimony Received Concerning Proposed Increase in  
Mass Discharge Limits and the Draft NPDES Permit

Mary M. Halliburton:kjc  
WJ1330  
229-6099  
December 7, 1988

MAE YIH  
LINN AND BENTON COUNTIES  
DISTRICT 19

REPLY TO ADDRESS INDICATED:

- S 214 - State Capitol  
Salem, Oregon 97310-1347  
Phone (503) 378-8847
- 34465 Yih Lane NE  
Albany, Oregon 97321  
Phone (503) 327-2666



OREGON STATE SENATE  
SALEM, OREGON  
97310-1347

ATTACHMENT B-1  
COMMITTEES  
Chair:  
Western States Legislative  
Forestry Task Force  
Member:  
Emergency Board  
Human Resources

November 15, 1988

RECEIVED  
NOV 17 1988

Mary Halliburton  
Department of Environmental Quality  
811 SW Sixth Avenue  
Portland, OR 97204

Water Quality Division  
Dept. of Environmental Quality

Dear Ms. Halliburton:

Since I will not be able to attend the November 17 hearing regarding the expansion of the capacity of Halsey City's sewage treatment plant, I am writing to express my support for Halsey's application. I would appreciate it if you will enter my letter into your record.

I support Halsey's application primarily because no detrimental water quality affects of these discharges are predicted, and the requested monthly discharge would be increased only in the wet-weather months of November 1 through April 30.

The plan, designed by Westech Engineering of Salem, has gone through meetings with DEQ representatives earlier in March, and a 45-day public meeting notice at the State Clearing House. There was a response through the State Clearing House from DEQ, Water Resources Dept., and the State Historic Preservation Office. All concerns were addressed. The DEQ/EPA report returned with a "finding of no significant impact."

Voters in Halsey have approved the bond election in May inspite of a high combined property tax rate of near \$40/\$1000 in the city. They did, however, turn down the city's one-year operating levy, street improvement, and Central Linn school levy requests. Any further delay of approval of the discharge application will result in financial consequences that Halsey citizens can ill afford.

The sewage treatment plan is well-designed, has been reviewed by three state departments and offices, and the discharge will have no significant impact to the receiving stream. I urge your expeditious approval to allow work to go ahead without creating hardship to citizens in a small rural city who is still recovering from a difficult economy.

Sincerely,

Mae Yih  
State Senator

MY:tw

cc: Fred Hansen - Director, DEQ  
Art Case, Jr.- Mayor of Halsey

DEQ PUBLIC HEARING

NOVEMBER 17, 1987 - 2:00pm

ALBANY, OREGON

RE: BOD/TSS pound load increase for City of Halsey  
discharge into Muddy Creek system

THE CITY OF HALSEY IS A SMALL RURAL COMMUNITY - NOT A LARGE URBAN CITY. WE DO NOT HAVE THE STAFF TO EFFECTIVELY DEAL WITH COMPLEX, TIME-CONSUMING SITUATIONS, MAINLY BECAUSE THERE ARE NO FUNDS AVAILABLE TO HIRE SUCH PERSONNEL.

THE TAX BASE FOR THE CITY FOR 1988/89 IS \$32,206! - *Almost \$40/1,000 combined rate.*

A MEASURE WAS PUT ON THE MAY PRIMARY BALLOT TO INCREASE THIS TAX BASE TO \$64,000 WITH A PROMISE TO NOT GO BEYOND THAT AMOUNT FOR 2 YEARS. THE MEASURE WAS DEFEATED BY THE VOTERS.

HISTORICALLY, THE VOTERS OF HALSEY HAVE DEFEATED EVERY MEASURE WHICH COST MONEY, WITH ONE EXCEPTION. IN 1968 THEY PASSED A 25-YEAR, \$525,000 BOND MEASURE TO FUND CONSTRUCTION OF THE SEWER COLLECTION AND TREATMENT SYSTEM AND A WATER DISTRIBUTION SYSTEM. THESE BONDS WILL BE PAID OFF IN 1993/94.

BEGINNING IN 1983 THE COUNCIL HAS BEEN AWARE OF A NEED TO IMPROVE THE SEWER SYSTEM AND TOOK STEPS TO MEET THOSE NEEDS. A PRELIMINARY STUDY WAS COMPLETED USING BUDGETED FUNDS. A NEED FOR SMOKE TESTING WAS FOUND, SO THE FUNDS WERE BUDGETED--THE TESTING DONE--AND FOLLOWUP WORK WAS COMPLETED.

A STRONG NEED FOR I/I CORRECTING WAS FOUND. SOME TV INSPECTION WAS DONE AND THEN SOME GROUT WORK AND OTHER REPAIRS WERE MADE.

WHEN IT WAS APPARENT THAT THE SUMMER HOLDING CAPACITY WAS INADEQUATE, THE CITY INSTITUTED AN INTERIM IRRIGATION PROGRAM ON THE 19 ACRES OWNED ADJACENT TO THE LAGOON PONDS.

ALL OF THESE MEASURES WERE TAKEN BY THE CITY AS BUDGETED FUNDS BECAME AVAIL-  
ABLE. AT THE SAME TIME SEVERAL BALLOT MEASURES WERE DEFEATED BY THE VOTERS, INCLUDING A TAX BASE INCREASE ~~of~~ A ONE-YEAR OPERATING LEVY FOR THE GENERAL FUND TO MAINTAIN THE SAME LEVEL OF SERVICES THEY THEN HAD. AS THESE WERE DEFEATED THE BUDGET CRUNCH BECAME MORE CRITICAL. THEY ALSO DEFEATED A BOND MEASURE FOR STREET MAINTENANCE.



DURING 1987/88 THE VOTERS DEFEATED A ONE-YEAR LEVY REQUEST OF \$13,600 TO FUND THE SECOND PUBLIC WORKS EMPLOYEE FOR THE YEAR. THEREFORE, THE CITY NOW HAS 1 FULL TIME PUBLIC WORKS EMPLOYEE TO MAINTAIN ALL CITY SERVICES: INCLUDING THE WATER DISTRIBUTION SYSTEM, WASTEWATER SYSTEM, STREET WORK, STORM DRAINS, PARKS, ETC. THE CITY RECORDER FUNCTIONS AS THE PUBLIC WORKS DIRECTOR, BUILDING OFFICIAL, BUDGET OFFICER, ETC. THAT IS THE EXTENT OF THE CITY STAFF.

MUCH OF THE CITIZENSHIP OF OUR COMMUNITY IS SENIOR CITIZENS. THESE PEOPLE ARE ON A FIXED INCOME. ANY INCREASE IN PROPERTY TAXES AND/OR USER CHARGES HAS A VERY BIG IMPACT ON THOSE BUDGETS. WITH THIS IN MIND, THE CITY HAS TRIED TO BALANCE THE NEED FOR SERVICES AGAINST THE ECONOMIC BURDEN WHICH COULD BE CAUSED TO SOME OF THE RESIDENTS OF THE CITY. WE HAVE BUDGETED AS WISELY AS WASN POSSIBLE IN THIS EXPANSION PROJECT. THE OPTION CHOSEN FOR EXPANSION ( WHICH REQUIRES THE POUND LOAD INCREASE) WAS MOST ATTRACTIVE BECAUSE OF THE COST-EFFECTIVE BALANCE.

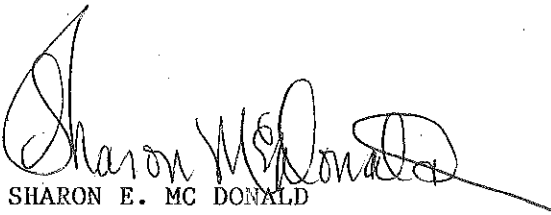
DURING THE PROCESS OF STUDYING THE PROBLEMS AND SELECTING THE CORRECT OPTION FOR THE CITY, THE ECONOMIC COST-EFFECTIVENESS WAS THE MAIN PRIORITY. THE I/I CORRECTION WAS NOT COST-EFFECTIVE ENOUGH IN THE DEQ/EPA GUIDELINES TO BE CONSIDERED FOR GRANT FUNDING. HOWEVER, THE COUNCIL REALIZED THAT THIS PROBLEM MUST BE ADDRESSED. THEREFORE, DURING THE SCHEDULING AND BUDGETING PROCESS, THE CITY CHOSE TO PUT A \$300,000 BOND MEASURE ON THE BALLOT, AT A TIME WHEN THE ENGINEER'S ESTIMATE OF THE CITY'S SHARE OF THE EXPANSION PROJECT WOULD BE APPROXIMATELY \$225,000, SO THAT THE I/I REPAIRS COULD BE STARTED. IF THIS MONEY MUST BE USED FOR A MORE COMPLEX TREATMENT SYSTEM, THERE WILL BE NO MONEY FOR I/I CORRECTION.

THE ENVIRONMENTAL IMPACT WAS PROVED NEGLIGIBLE IN THE CITY'S EYES, THEREFORE THE CITY FELT THE NEXT DECISION SHOULD MAKE THE ECONOMIC IMPACT AS NEGLIGIBLE AS POSSIBLE - THUS THE REQUEST FOR THE BOD/TSS POUND LOAD INCREASE. IF THIS IS ALLOWED, THE CITY MAY PROCEED TO SELL THE \$300,000 BOND ISSUE PASSED BY THE VOTERS IN MAY; WE MAY HIRE AN ENGINEER FOR THE DESIGN AND CONSTRUCTION (STEP II AND III) OF THE PROJECT, SO THAT THE BIDS MAY BE PUT OUT AS SOON AS POSSIBLE.

DUE TO THE UNEXPECTED DELAY IN GETTING AN E.Q.C. DETERMINATION, THE CITY WILL BE AT LEAST 30-DAYS BEHIND SCHEDULE BY DECEMBER 9th. EVERY DELAY, AT THIS POINT, WILL CAUSE AN INCREASE IN COST TO THE CITY. AT THE VERY LEAST, IT COULD CAUSE AN UNFAVORABLE BID TIMEING. OUR BUDGET WAS SET WITH A SCHEDULE OF PAYMENT & RECEIPTS IN MIND. AS THAT SCHEDULE FALLS BEHIND, COSTS WILL RISE AND THE BUDGET WILL SHOW A

SHORTFALL. AS WE ALL KNOW, A SHORTFALL WOULD MEAN RETURNING TO THE VOTERS FOR FURTHER FUNDING. GIVEN THE HISTORY OF THE CITY, IT WILL NOT ONLY BE UNFORTUNATE - BUT MOST LIKELY IMPOSSIBLE - TO PASS ANOTHER MEASURE. THIS WOULD EFFECTIVELY KILL THE ENTIRE PROJECT. EVEN THAT HAS A FINANCIAL IMPACT IN THAT APPROXIMATELY \$9,000 HAS BEEN ADVANCED ON THE GRANT FOR PLANNING, AND THAT AMOUNT WOULD BECOME A REPAYABLE LIABILITY TO THE CITY. A CHANGE, OR MODIFICATION, IN DESIGN COULD ALSO PUT THE ENTIRE PROJECT IN JEOPARDY.

THE CITY HAS WORKED VERY HARD, WITH LIMITED FUNDS AND LIMITED STAFF, TO MEET ALL OF THE TIME-LINES AND CRITERIA SET FORTH BY THE DEQ/EPA AND ALL DEPARTMENTS INVOLVED. WE ARE NOW ASKING THAT THESE LIMITATIONS IN STAFF, AS WELL AS FUNDING, BE GIVEN A STRONG WEIGHT IN THE DECISION BY THE E.Q.C. TO ALLOW THE REQUESTED BOD/TSS POUND LOAD INCREASES. WE FEEL THAT OUR FACILITY PLAN IS VERY COMPLETE AND THAT THE ENVIRONMENTAL IMPACT HAS BEEN SHOWN AS EXTREMELY NEGLIGIBLE IN THE MUDDY CREEK DISCHARGE AREA. THEREFORE, THE ECONOMIC IMPACT SHOULD BECOME A STRONG CRITERIA FOR MAKING A POSITIVE DECISION.



SHARON E. MC DONALD  
CITY OF HALSEY  
PUBLIC WORKS DIRECTOR  
CITY RECORDER



**WESTECH ENGINEERING, INC.**  
CONSULTING ENGINEERS & PLANNERS

RECEIVED  
NOV 29 1988

Water Quality Division  
Dept. of Environmental Quality

PRINCIPALS

C.H. STEKETEE, P.E.  
S.A. WARD, P.E.  
S.C. DOWNS, P.E.

November 28, 1988

Ms. Mary Halliburton  
DEQ Water Quality Division  
811 S.W. 6th  
Portland, OR 97204

RE: City of Halsey  
File No. 36320

Dear Ms. Halliburton:

On behalf of the City of Halsey, we have reviewed the preliminary draft NPDES Permit, which was given to City representatives on November 17, 1988.

In general, we believe the proposed permit effluent limitations and compliance schedules realistically reflect the City's prevailing conditions and anticipated construction schedule for the expanded facilities; assuming the EGC approves the City's requested increase in mass discharge loads. However, we believe some comments on the proposed permit are appropriate.

1. Page 2. The longer non-discharge period (May 1 through October 31) does not go into effect until the expanded lagoons become operational. Therefore, the interim limits contained in Conditions Ala.(1) and (2) and Alb. should reflect the currently permitted non-discharge period of June 1 through October 31.
2. Page 2. We understand that the average dry weather flow limitation [Condition Ala (3)] reflects the treatment facility's approved design capacity and is not an enforced condition of the permit. The proposed limit of 0.096 MGD accurately reflects the City's currently dry weather seasonal average, but not the currently experienced maximum monthly average dry weather flow (0.163 MGD). Until the impending project is completed, and prevailing I/I is reduced under the City's on-going efforts, the City has no means available to limit summer flows to the stated 0.096 MGD.
3. Page 3. Condition A2a (3) prohibits discharges when Effluent BOD/Dilution Factor exceeds 0.48, or when Muddy Creek flows fall below 75 cfs. We understand from

November 28, 1988  
Ms. Mary Halliburton  
Page 2

discussions with DEQ representatives that this condition is based upon the standard of maintaining a dissolved oxygen concentration of at least 95 percent of saturation for a Salmonid fish producing stream. Our (as well as the City's) discussions with Wayne Hunt, Oregon Dept. of Fish and Wildlife (ODFW) - Salem, indicate that Muddy Creek has no salmon or stealhead run; nor any documented run of cutthroat trout. Benton County's Muddy Creek apparently does have some cutthroat trout, and he "assumes" that Linn County's Muddy Creek may also. However, long-time Halsey residents are not aware of any such trout; and the testimony provided at the November 17 public hearing did not substantiate the assumption that Muddy Creek is a Salmonid stream.

The City is willing to abide with the 0.48 ratio for Effluent BOD/Dilution Factor (which translates into a 75 cfs limitation at design flows and an effluent BOD concentration of 60 mg/l), pending collection of additional streamflow data during the coming months as a rating curve is developed for the already installed stream gage. However, we request that this condition remain open to further evaluation and negotiation during the project certification period; pending the development of DEQ/ODFW documentation that Muddy Creek is indeed a Salmonid fish producing stream.

4. Page 3. Condition A2a (3) requires that BOD and TSS removal efficiency shall not be less than 85 percent monthly average. We understand that this is based on the influent and effluent concentrations, and not mass loads. As revealed in the Facilities Plan, winter (discharge) period influent concentrations for BOD and TSS have averaged 66.8 and 75.8 mg/l respectively. 85 percent removal would require effluent concentrations to average 10.0 and 11.4 mg/l respectively. The City has committed to reducing I/I flows by 25 percent over the next three years; effectively increasing the wastewater's influent concentration. However, 85 percent removal would still require effluent concentrations of 13.4 and 15.2 mg/l for BOD and TSS. Such discharges are not possible with any stabilization lagoon or rock filter effluent polishing; but would require intermittent slow sand filtration of the lagoon effluent, which is beyond the City's financial capability.

We understand that EPA secondary treatment standards allow stabilization lagoons to provide as low as 65 percent removal. Since Halsey's lagoons will discharge only during the winter-high streamflow months (and under a 30/50 standard for BOD/TSS), we request that the 85 percent

November 28, 1988  
Ms. Mary Halliburton  
Page 3

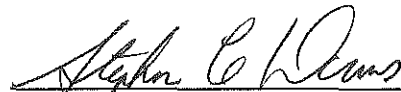
reduction standard be reduced to 65 percent; pending an evaluation of the project's success and lagoon's performance as part of the project certification.

5. Page 3. The City's present permit specifies a mixing zone of 100 feet from the point of discharge into Muddy Creek. The City concurs with reducing the width of the mixing zone to 25 feet, and in limiting its upstream distance to 10 feet (Condition A3). However, considering the results of DEQ's October 1986 mixing zone survey, and the lack of any documented adverse impact on the receiving stream, it is requested that the downstream segment of the mixing zone be retained at the currently permitted 100 feet.
6. Page 5. As we discussed on November 17th, the City's compliance schedule should be revised as follows to reflect the December 9th delay of the EQC's decision.
  - a. Condition Cl.a. to read "February 28, 1989".
  - b. Condition Cl.b to read "May 31, 1989".
  - c. The remaining dates to remain "as is", except possibly shifted to the end of the preceding month to correspond to the revised dates above.

On behalf of the City, we appreciate this opportunity to comment on the City's draft permit, and trust these comments are self explanatory. Please call me if you have any questions or need further information.

Sincerely,

WESTECH ENGINEERING, INC.



---

Stephen C. Downs, P.E.  
Project Manager

cc: City of Halsey  
Ralph Funk, DEQ Water Quality Division  
Francis Dzata, DEQ Water Quality Division  
DEQ Willamette Valley Region - Salem

# PRELIMINARY

Expiration Date: 12-31-93  
Permit Number:  
File Number: 36320  
Page 1 of 6 Pages

## NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

### WASTE DISCHARGE PERMIT

Department of Environmental Quality  
811 Southwest Sixth Avenue, Portland, OR 97204  
Telephone: (503) 229-5696

Issued pursuant to ORS 468.740 and The Federal Clean Water Act

**ISSUED TO:**

City of Halsey  
P.O. Box 35  
Halsey, OR 97348

**SOURCES COVERED BY THIS PERMIT:**

Type of Waste	Outfall Number	Outfall Location
Domestic Sewage	001	Muddy Creek (R.M. 23)

**PLANT TYPE AND LOCATION:**

3 cell lagoon sewage treatment plant located 1 1/2 miles west of Halsey off hwy 228 (T 14S, R 4W, Sec. 2, W.M.)

**RECEIVING SYSTEM INFORMATION:**

Basin: Willamette  
Subbasin: Middle Willamette  
Stream: Muddy Creek  
Hydro Code: 22H-MUDM 23.0D  
County: Linn

EPA REFERENCE NO: OR-002239-0

Issued in response to Application No. 999366 received December 4, 1986.

This permit is issued based on the land use findings in the permit record.

\_\_\_\_\_  
Fred Hansen, Director

\_\_\_\_\_  
Date

### PERMITTED ACTIVITIES

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

	<u>Page</u>
Schedule A - Waste Disposal Limitations not to be Exceeded...	2-3
Schedule B - Minimum Monitoring and Reporting Requirements...	4-5
Schedule C - Compliance Conditions and Schedules.....	5
Schedule D - Special Conditions.....	6
General Conditions.....	Attached

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

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

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Page 2 of 6 Pages

SCHEDULE A

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

a. Outfall Number 001

- (1) June 1 - October 31: No discharge to state waters is permitted.
- (2) November 1 - April 30:

<u>Parameter</u>	<u>Average Effluent Concentrations</u>		<u>Monthly Average lb/day</u>	<u>Weekly Average lb/day</u>	<u>Daily Maximum lbs</u>
	<u>Monthly</u>	<u>Weekly</u>			
BOD	40 mg/l	45 mg/l	63	72	126
TSS	50 mg/l	80 mg/l	79	128	158
FC per 100 ml	200	400			

(3) Other Parameters

Limitations

pH (year-round) Shall be within the range 6.0-9.0

Average dry weather flow to the treatment facility (Mass discharge limitations based on 0.190 MGD) 0.096 MGD

b. Outfall Number 002 (spray irrigation) June 1 - October 31

- (1) No discharge to state waters is permitted. All wastewater shall be distributed on land for dissipation by evapotranspiration and controlled seepage by following sound irrigation practices so as to prevent:
  - a. Prolonged ponding of waste on the ground surface;
  - b. Surface runoff or subsurface drainage through drainage tile;
  - c. The creation of odors, fly and mosquito breeding and other nuisance conditions; and
  - d. The overloading of land with nutrients or organics.
- (2) Prior to land application of the treated wastewater, it shall receive at least the equivalent of secondary treatment and disinfection to reduce fecal coliform to 200 organisms/100 ml on a monthly average, with no sample to exceed 400 organisms/100 ml.
- (3) Unless approved otherwise in writing by the Department, a deep-rooted, permanent grass cover shall be maintained on the land disposal area at all times and be periodically cut to insure maximum evapotranspiration and protect the site from erosion.

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Page 3 of 6 Pages

2. Waste Discharge Limitations not to be Exceeded After Attainment of Operational Level as Required by Schedule C, Condition 1.e. of this Permit.

a. Outfall Number 001

- (1) May 1 - October 31: No discharge to public waters
- (2) November 1 - April 30:

<u>Parameter</u>	<u>Average Effluent Concentrations</u>		<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Daily Maximum</u>
	<u>Monthly</u>	<u>Weekly</u>	<u>lb/day</u>	<u>lb/day</u>	<u>lbs</u>
BOD	30 mg/l	45 mg/l	99	149	198
TSS	35 mg/l	53 mg/l	115	174	230
FC per 100 ml	200	400			

(3) Other Parameters

Limitations

pH (year-round)

Shall be within the range  
6.0-9.0

No discharge to Muddy Creek is permitted when either the effluent BOD concentration in mg/l, divided by the dilution factor of the receiving stream exceeds 0.48 or a minimum stream flow of 75 CFS is measured.

Average dry weather flow  
to the treatment facility  
(Mass discharge limitations  
based on 0.394 MGD)

0.197 MGD

BOD & TSS removal efficiency

Shall not be less than 65  
percent monthly average

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

The allowable mixing zone shall be that portion of Muddy Creek 25 feet wide and beginning 10 feet upstream and extending 100 feet downstream from the point of discharge to Muddy Creek.



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Page 4 of 6 Pages

SCHEDULE B

1. Minimum Monitoring and Report Requirements  
(unless otherwise approved in writing by the Department)

a. Influent

<u>Item or Parameter</u>	<u>Minimum Frequency</u>	<u>Type of Sample</u>
Total Flow (MGD)	Daily	Continuous recording
Flow Meter Calibration	2/year	Verification
BOD-5	2/month	Composite <sup>1</sup>
TSS	2/month	Composite <sup>1</sup>
ph	3/week	Grab

b. Outfall Number 001 (sewage treatment plant outfall) when discharging.

<u>Item or Parameter</u>	<u>Minimum Frequency</u>	<u>Type of Sample</u>
Total Flow (MGD)	Daily	Continuous Recording
Flow Meter Calibration	2/Year	Verification
BOD-5	2/month	Composite <sup>1</sup>
TSS	2/month	Composite <sup>1</sup>
pH	3/week	Grab
Fecal Coliform	Monthly	Grab
Quantity Chlorine Used	Daily	Measurement
Chlorine Residual	Daily	Grab
Average Percent Removed (BOD and TSS)	Monthly	Calculation

c. Outfall Number 002 (spray irrigation) when discharging

<u>Item or Parameter</u>	<u>Minimum Frequency</u>	<u>Type of Sample</u>
Total Flow (GPD)	Daily	Measurement
BOD-5	Monthly	Grab
TSS	Monthly	Grab
pH	Weekly	Grab
Chlorine residual	Daily	Grab
Fecal Coliform	Monthly	Grab

<sup>1</sup>Grab samples to be taken until construction of the upgraded or improved sewage collection, treatment and disposal facility is complete as required by Schedule C, Condition 1.c. of this permit.

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Page 5 of 6 Pages

d. Other Parameters (when discharging to Muddy Creek)

<u>Item or Parameter</u>	<u>Minimum Frequency</u>	<u>Type of Sample</u>
Creek Flow (MGD)	Daily	Measurement <sup>2</sup>
BOD Dilution Factor	2/month	Calculation <sup>3</sup>

<sup>2</sup>Creek flow measurement to commence upon completion of facilities as required by Schedule C, Condition 1.c. of this permit.

<sup>3</sup>The equation to be used for the BOD dilution factor is

$$\frac{(\text{Effluent BOD}_5 \text{ Concentration}) \times (\text{Effluent Flow, MGD})}{\text{Creek Flow, MGD}}$$

Monitoring reports (DMRs) shall include a record of the location, quantity and method of use of all sludge removed from the treatment facility and a record of all applicable equipment breakdowns and bypassing.

2. Reporting Procedures

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

SCHEDULE C

Compliance Conditions and Schedules

1. The permittee is required to make necessary improvements and/or upgrade the sewage collection, treatment and disposal facilities in order to achieve compliance with the effluent limitations specified in Schedule A, Condition 2, in accordance with the following:
  - a. By no later than February 28, 1989, the permittee shall submit complete engineering plans and specifications for construction of necessary improvements. In addition, the permittee shall submit with the engineering plans and specifications an on-going inflow and infiltration correction and maintenance program and schedule for Department review and approval.
  - b. By no later than May 31, 1989, the permittee shall award construction bids for completion of necessary improvements. Progress reports are required at 6 month intervals from award of bid.
  - c. By no later than October 31, 1989, the permittee shall complete construction of the necessary improvements.

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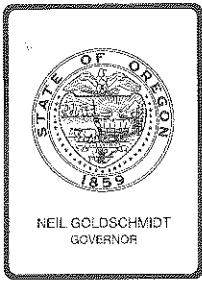
- d. By no later than October 31, 1989 the permittee shall implement an approved inflow and infiltration (I/I) correction and maintenance program to remove a minimum of 25% of excessive I/I as identified in the September 1988 Facility Plan over a three year period. An annual report shall be submitted to the Department by September 1 of each year which details sewer collection maintenance activities that have been done in the previous year and outlines those activities planned for the following year.
  - e. By no later than February 1, 1990, the permittee shall attain operational level of the facilities to meet permit limits.
2. The permittee is expected to meet the compliance dates which have been established in this schedule. Either prior to or no later than 14 days following any lapsed compliance date, the permittee shall submit to the Department a notice of compliance or noncompliance with the established schedule. The Director may revise a schedule of compliance if he determines good and valid cause resulting from events over which the permittee has little or no control.

#### SCHEDULE D

##### Special Conditions

1. The permittee shall continue to operate a spray irrigation disposal program to the extent practicable within weather and soil conditions, to increase the holding capacity of the existing lagoon system until the plant is upgraded to provide for treatment and dry weather holding capacity as required by Schedule C, Condition 1 of this permit.
2. In the event the permittee finds it necessary to remove accumulated sludge solids from the lagoons, the permittee shall submit a sludge management plan developed in accordance with Oregon Administrative Rules, Chapter 340, Division 50 prior to removing sludge.

P36320W (CRW)



## Environmental Quality Commission

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

### REQUEST FOR COMMISSION ACTION

Agenda Item G, December 9, 1988, EQC Meeting

Request for Exceptions to OAR 340-41-026(2) (An EQC Policy Requiring Growth and Development Be Accommodated Within Existing Permitted Loads) by the City of Halsey, Oregon

#### ISSUE

Oregon regulations require that wastewater point source dischargers improve the level of treatment as growth occurs, so that total wasteloads to state waters do not increase. This anti-degradation policy allows for exceptions to be made by the Commission.

#### SUMMATION

The City of Halsey proposes to expand the sewage treatment facilities. The expansion and upgrade are necessary to eliminate inadequate treatment facilities and to allow reserve capacity for expected population growth over the next twenty years.

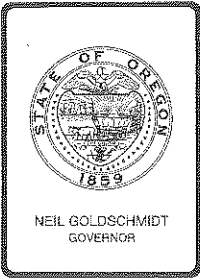
All reasonable alternative methods and levels of treatment were evaluated by Halsey as part of the facilities planning process. Environmental impacts and cost information were examined for each alternatives. The costs for alternative treatment facilities capable of meeting existing load limits exceed EPA construction grants guidelines for "affordable" treatment works.

The expected impact of increased wasteloads on existing water quality, the potential for violating water quality standards, and the impact on the beneficial uses of the receiving stream were evaluated. The Department determined that the requested wasteload increases could be granted without violating water quality standards or impairing beneficial uses.

#### DIRECTOR'S RECOMMENDATION

The Department recommends that the Commission grant the requested wasteload increase for the City of Halsey.

Tom Lucas:kjc  
WJ1230  
229-5415  
November 9, 1988



## 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. G, December 9, 1988, EQC Meeting

Request for Exceptions to OAR 340-41-026(2) (An EQC Policy Requiring Growth and Development be Accommodated Within Existing Permitted Loads) By the City of Halsey, Oregon.

### BACKGROUND

The City of Halsey currently operates a wastewater treatment facility which consists of two stabilization lagoons, a chlorination system and a temporary spray irrigation system. The facility, designed and constructed in 1969 to accommodate 20 years of growth, provides service to a population equivalent of 787. The current National Pollutant Discharge Elimination System (NPDES) Permit for the facility allows treated and disinfected effluent containing 30 milligrams per liter (mg/l) of Biochemical Oxygen Demand (BOD) and 50 mg/l of Total Suspended Solids (TSS) to be discharged into Muddy Creek at River Mile 23 in the wet weather months of November through April. No discharge is allowed in the dry weather months of May through October.

The City of Halsey's sewage treatment plant is in violation of the permit limits and is causing documented water quality problems. The residents of Halsey have moved forward to resolve these existing water quality concerns by applying for and receiving a EPA construction grant and approving a \$300,000 bond measure to provide matching funds for the EPA grant for preparation of engineering plans and for the necessary construction.

As part of the planning process required prior to issuance of an EPA grant and construction activities, Halsey prepared a wastewater facilities plan. The facilities plan evaluated all reasonable treatment and disposal alternatives. The evaluation considered the environmental impact, the capital and operating expenses associated with each possible alternative, and the reliability of each alternative. A twenty year planning period with population growth consistent with the adopted Comprehensive Land Use Plan was used in evaluating each alternative. The city's financial capability to construct and operate the proposed upgraded treatment plant was also analyzed.

After considering a variety of alternatives, Halsey has selected the cost effective treatment alternative that will meet all effluent concentration limits, and all instream protection standards, but that will exceed the currently permitted pounds per day limits for BOD and Total Suspended Solids (TSS) during winter discharges. All discharges will be during the wet weather period when streamflows are high and recreational use is low relative to the summer.

The Commission's policy is that growth is to be accommodated within existing permitted loadings, as stated in OAR 340-41-026: "In order to maintain the quality of waters in the State of Oregon, it is the policy of the EQC to require that growth and development be accommodated by increased efficiency and effectiveness of waste treatment and control such that future discharge loads from existing sources do not exceed presently allowed discharged loads unless otherwise specifically approved by the EQC." This policy recognizes that the assimilative capacity of rivers is limited and maintenance of water quality, while accommodating growth may require more stringent controls.

The City of Halsey has requested that an exception be made to allow for increased winter discharge loads.

The Halsey sewage treatment plant upgrade design is required to meet federal and state effluent standards, as well as numerous in-stream standards and limitations to protect water quality and the beneficial uses of the receiving stream. Growth and development are required to be accommodated within the permitted wasteloads for the existing Halsey treatment facility unless approved by the Environmental Quality Commission. These applicable effluent standards and in-stream standards are summarized in Attachment A. The full text of the standards is included in Attachment B.

A NPDES permit renewal has been drafted that includes both proposed interim effluent limitations for the existing system and proposed increased wasteload limits to be applicable upon completion of the improvements according to the specified compliance schedule. The draft permit was made available for public comment in accordance with public notification requirements for NPDES permits. A public hearing on the proposed permit and the load increase issue was held on November 17, 1988. Public comment will be summarized, evaluated and included as an addenda for this staff report prior to the EQC meeting on December 9, 1988. The proposed NPDES permit is included in Attachment C.

#### EVALUATION

After evaluating alternatives, the City of Halsey is proposing to increase the treatment capacity of the wastewater treatment system from the current permitted effluent discharge flow of 0.192 million gallons per day (MGD) to 0.394 MGD. This would increase the permitted discharge load limits from a total monthly average of 48 pounds per day biochemical oxygen demand (BOD) and 80 pounds per day total suspended solids (TSS) to 99 pounds and 164 pounds, respectively. Concentration limits would remain at 30 mg/l BOD and 50 mg/l TSS as required in the applicable water quality standards for the Willamette River Basin (Oregon Administrative Rule (OAR) 340-41-455(1)) for secondary treatment applicable to western Oregon lagoon systems. Attachment D summarizes the City of Halsey's request.

The proposed expansion of Halsey's sewage treatment facility is projected to accommodate: 1) a population growth of about 478 population equivalent expected by the year 2009; and 2) wet weather flows to the facility including infiltration and inflow (I/I) of extraneous flows into the collection system. Treatment of

the I/I rather than removal has been shown to be cost-effective in an I/I analysis conducted as part of the facility plan.

Evaluation Based On Criteria Discussed at November 3, 1988 EQC Work Session

The Department's staff report presented on November 3, 1988, (Attachment E) recommended that three factors be used to evaluate any request for a wasteload increase. A proposed wasteload increase would not be required to qualify under all three categories. However, all three factors should be considered in the Department's evaluation in addition to the study on water quality impact. In addition to considering these three factors, the Commission directed the Department to comprehensively evaluate the impact of any proposed wasteload increase on water quality and beneficial uses.

1. Are There Any Practical Alternatives To The Proposed Wasteload Increase?

The City of Halsey evaluated and analyzed four treatment alternatives to address the community's NPDES permit compliance problems. The alternatives and the associated costs are presented in Attachment F.

Alternatives 1 and 2 would ensure that the city stays within the currently permitted mass load limits. However, the cost of these alternatives makes them prohibitively burdensome when compared to the cost of Alternative 4, which was chosen by the City. Alternative 2 is the least costly treatment alternative which will not result in mass load increases. However, this alternative would cost homeowners \$12 more in monthly sewer charges. The monthly cost of Alternative 2 is \$36 or about 2.5 percent of the median household income. EPA guidelines recommend that sewer user fees not exceed 1.75 percent of the median household income. The proposed least cost alternative (with load increase) will cost homeowners in Halsey \$24/month, which is about 1.7 percent of the median household income. This is barely affordable using the EPA "affordability" criteria; yet the Halsey residents are willing to pay this. A project which would result in a "no load increase" in mass discharges will clearly burden the Halsey community financially.

2. Is The Increase In Wasteload At This Discharge Point Due To Relocating Existing Wasteloads?

This factor is not relevant to the expansion and upgrade as the Halsey sewage treatment facility. Inflow and infiltration (I/I) of water into the collection system, and additional growth for a population equivalent of 478 by the year 2009, are the basis for the waste load increase by Halsey. Analysis of the I/I in Halsey's collection system showed that removing I/I from the system is not cost-effective. To insure that the structural integrity of Halsey's collection system is maintained, the Department has requested the City of Halsey to submit an ongoing I/I reduction and collection system maintenance program for review and approval. An approved 3-year I/I reduction program will be incorporated into the city's NPDES permit compliance schedule. The city will finance this program outside the federal grant.

3. Are There Environmental Trade-offs That Outweigh The Benefits Of Restricting Wasteload Increases?

The sewage treatment lagoons currently serving Halsey residents are not large enough to hold all the dry weather period sewage flows. This results in summertime discharges into Muddy Creek causing a violation of the City's NPDES Permit. The inadequate lagoon storage capacity also causes high sewage flows during winter months to be inadequately treated due to reduced detention time. This results in the discharge of less than secondary treatment quality effluent into Muddy Creek. For example, the monthly average BOD removal efficiency of the lagoons fell below 50% (required removal efficiency is 85%) for the months of March and December 1987. This, coupled with more than three times the current design flows in these months, resulted in an average mass discharge increase of 37% above the permit limit. The Department reviewed the Discharge Monitoring Reports (DMRs) for the period November 1986, through July 1988. During this period, eleven violations of the monthly average BOD and TSS concentration and mass discharge limits occurred. The proposed project is needed to improve water quality in Muddy Creek by the construction of the expanded three-cell stabilization lagoon which will provide adequate storage for six months. The project will result in the elimination of the present discharge of inadequately treated sewage effluent to Muddy Creek and enable treatment of effluent to meet the proposed NPDES permit requirements.

4. What Will Be The Impact Of The Proposed Wasteload On Water Quality In Muddy Creek?

The current and requested mass discharge limits are shown in Attachment G. An analysis was done based on worst case assumptions (198 lbs/day BOD, 15° C, 0.5 mg/l dissolved oxygen for waste assimilation), to determine the minimum stream flow necessary for the proposed effluent discharge to have negligible effect on instream dissolved oxygen. This analysis resulted in the conclusion that a minimum instream flow of 75 cubic feet per second (cfs) or 48.50 MGD is appropriate and necessary to provide adequate dilution for the proposed daily maximum discharge load. This dilution requirement corresponds to a dilution factor of 0.48 as indicated in the draft permit. This would insure that the water quality standard of a minimum of 95% of saturation for dissolved oxygen for Muddy Creek will be maintained even at warmer temperatures. The proposed mass load increases translate to a contribution of about 7.7 percent BOD and 0.19 percent TSS above existing background levels outside the mixing zone.

Based on water quality data for the Calapooia River which is a similar, adjacent stream, the Department would expect fecal coliform concentrations in Muddy Creek to exceed standards during the winter high flow period. High levels of fecal coliform are common in winter for most Oregon streams and can be attributed, in general, to failing septic tanks, agricultural activities, and sewage by-passing. The Department has no data, however, that would associate high fecal coliform levels to a sewage treatment plant such as that proposed by the City of Halsey. In fact, the treated effluent



from the sewage treatment plant will itself meet the water quality standard. In addition, the proposed plan will address infiltration and inflow and by-passing will be prevented. Therefore, the Department believes the proposed load increase will not contribute to fecal coliform problems in Muddy Creek. The Department also analyzed other water quality standards relative to the proposed increased loading request. As demonstrated in Attachment G, winter stream flows in Muddy Creek will be in excess of flows necessary to provide adequate dilution. This will insure that the discharged organic loads cause no nuisance conditions nor impair beneficial uses in Muddy Creek.

RECOMMENDATION

The Director recommends that the Commission grant the requested mass load increases to the City of Halsey, and that the Department modify the NPDES permit as appropriate, based on the following findings:

1. The expected impact on water quality will be minimal, and will be offset by the elimination of summer discharges to public waters. There will be no impairment of beneficial uses or water quality standards violations outside the mixing zones.
2. The cost of complying with the existing mass load discharge limits would be unacceptably high.

*Mike Hansen*  
for  
Fred Hansen  
Director

WJ1278  
FKA Dzata:kjc  
229-6750  
November 9, 1988

Attachments:

- A. Summary of Applicable Water Quality Standards
- B. Text of CFR 40 Part 133; OAR 340-41-455; OAR 340-41-026
- C. Proposed NPDES permit for Halsey
- D. Discharge Limits - City of Halsey
- E. "Proposed Criteria for Consideration of Increased Loadings Due to Expansions of Existing Sewage Treatment Plants or Industrial Sources", November 3, 1988.
- F. Treatment Alternatives and Associated Costs - City of Halsey
- G. Evaluation of Proposed Discharge Load From the City of Halsey Sewage Treatment Facility
- H. Map of Portion of Willamette River Basin

Applicable Water Quality Standards  
for City of Halsey

All of the following standards apply to the Halsey sewage treatment facility. Where federal and state standards conflict, the most stringent applies. The following regulation descriptions are not the complete text of the regulations, but rather summarize the portions of interest. The full text of the regulations are included in Attachment B.

Federal Standards

CFR 40 Part 133 - Municipal sewage treatment plants are required to meet the equivalent of secondary treatment. For lagoons operating in Western Oregon, these effluent standards not to be exceeded are:

Biochemical oxygen demand:	30 mg/l, thirty day average
(BOD)	45 mg/l, seven day average
	60 mg/l, daily maximum
Total suspended solids:	50 mg/l, thirty day average
(TSS)	75 mg/l, seven day average
	100 mg/l, daily maximum

Minimum percent removal of BOD and TSS: 85%, monthly average, unless otherwise allowed by the Department. In no case may the percent removal be less than 65%.

The EPA adopted revisions to the secondary treatment regulations in September 1984 whereby an "treatment equivalent to secondary treatment" may be allowable for certain lagoon and trickling filter systems on a case-by-case basis. Treatment systems eligible for consideration for "equivalent secondary treatment" must demonstrate that the "standard" secondary treatment limitations are exceeded even with proper operation and maintenance of the system; a trickling filter or lagoon is used as the principal process; the treatment works provides significant biological treatment such that at least a 30-day average of 65 percent removal of BOD<sub>5</sub> is achieved, and water quality will not be adversely impacted. For qualifying facilities, the following equivalent secondary limits may be applied:

45 mg/l BOD<sub>5</sub> monthly average  
65 mg/l BOD<sub>5</sub> weekly average  
65% BOD<sub>5</sub> removal

45 mg/l TSS monthly average, except where an adjustment has been approved for lagoons.  
65 mg/l TSS weekly average, except where an adjustment has been approved for lagoons.  
65% TSS removal.

Oregon has applied the case-by-case "equivalent secondary treatment" definition to two facilities on an interim basis until such time as the facilities need to upgrade to accommodate growth. The higher BOD<sub>5</sub> limits are not proposed for Halsey, however a percent removal less than 85% is appropriate for lagoon systems which have alternate approved TSS concentration limits of either 50 mg/l or 85 mg/l monthly average and where the influent concentration following a cost-effective I/I analysis will be less than 333 mg/l TSS.

### Oregon Regulations

OAR 340-41-455(1)(a),(g),(h) - New or modified municipal sewage treatment plants in the Willamette River Basin except the Tualatin River Subbasin are required to meet the following effluent discharge standards to public waters:

May 1 through October 31:

Biochemical oxygen demand: 10 mg/l, monthly average  
Total suspended solids: 10 mg/l, monthly average

or equivalent control such as land application of treated effluent.

November 1 through April 30:

Minimum of secondary treatment

Positive protection to prevent the discharge of raw or inadequately treated sewage shall be provided.

Treated sewage wastes shall be disinfected to an equivalent to thorough mixing with sufficient chlorine to provide a residual of at least 1 part per million after 60 minutes of contact time.

OAR 340-41-455(1)(f) - New or modified municipal sewage treatment plants must discharge to streams providing adequate dilution. The effluent BOD concentration in mg/l, divided by the dilution factor (ratio of receiving stream flow to effluent flow) shall not exceed one. [Example - if the effluent BOD is 30 mg/l, then the flow in the receiving stream must be at least 30 times greater than the effluent flow.]

OAR 340-41-445 - No wastes may be discharged that cause violations of water quality standards, outside of a mixing zone of initial dilution designated by the Department. These water quality parameters for which standards have been set include: dissolved oxygen as a percent of maximum theoretical concentration (% saturation); temperature increase; turbidity; pH; fecal coliform bacteria; dissolved gases that could interfere with beneficial uses; total dissolved solids; any conditions that are deleterious to fish or other aquatic life or that affect the potability of drinking water; aesthetic conditions offensive to human senses; radioisotope concentrations; and toxic substances.

OAR 340-41-445(4) - Mixing zones for discharges may be established. The mixing zone shall be as small as possible, and water within the mixing zone must be free of acutely toxic materials, materials that cause nuisance

conditions such as floating debris and scum, and must minimize adverse effects on aquatic life and other beneficial uses. No discharges are allowed that will threaten public health.

OAR 340-41-026 - Growth and development must be accommodated within existing permitted loads, unless otherwise authorized by the Commission.

## § 133.10:

816, Pub. L. 92-500; 91 Stat. 1567, Pub. L. 95-217; 95 Stat. 1623, Pub. L. 97-117.

Source: 49 FR 37006, Sept. 20, 1984, unless otherwise noted.

## § 133.100 Purpose.

This part provides information on the level of effluent quality attainable through the application of secondary or equivalent treatment.

## § 133.101 Definitions.

Terms used in this part are defined as follows:

(a) "*7-day average.*" The arithmetic mean of pollutant parameter values for samples collected in a period of 7 consecutive days.

(b) "*30-day average.*" The arithmetic mean of pollutant parameter values of samples collected in a period of 30 consecutive days.

(c) "*Act.*" The Clean Water Act (33 U.S.C. 1251 *et seq.*, as amended).

(d) "*BOD.*" The five day measure of the pollutant parameter biochemical oxygen demand (BOD).

(e) "*CBOD<sub>5</sub>.*" The five day measure of the pollutant parameter carbonaceous biochemical oxygen demand (CBOD<sub>5</sub>).

(f) "*Effluent concentrations consistently achievable through proper operation and maintenance.*" (1) For a given pollutant parameter, the 95th percentile value for the 30-day average effluent quality achieved by a treatment works in a period of at least two years, excluding values attributable to upsets, bypasses, operational errors, or other unusual conditions, and (2) a 7-day average value equal to 1.5 times the value derived under paragraph (f)(1) of this section.

(g) "*Facilities eligible for treatment equivalent to secondary treatment.*" Treatment works shall be eligible for consideration for effluent limitations described for treatment equivalent to secondary treatment (§ 133.105), if:

(1) The BOD<sub>5</sub> and SS effluent concentrations consistently achievable through proper operation and maintenance (§ 133.101(f)) of the treatment works exceed the minimum level of the effluent quality set forth in §§ 133.102(a) and 133.102(b),

## PART 133—SECONDARY TREATMENT REGULATION

## Sec.

- 133.100 Purpose.
- 133.101 Definitions.
- 133.102 Secondary treatment.
- 133.103 Special considerations.
- 133.104 Sampling and test procedures.
- 133.105 Treatment equivalent to secondary treatment.

**AUTHORITY:** Secs. 301(b)(1)(B), 304(d)(1), 304(d)(4), 308, and 501 of the Federal Water Pollution Control Act as amended by the Federal Water Pollution Control Act Amendments of 1972, the Clean Water Act of 1977, and the Municipal Wastewater Treatment Construction Grant Amendments of 1981; 33 U.S.C. 1311(b)(1)(B), 1314(d) (1) and (4), 1318, and 1361; 86 Stat.

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(2) A trickling filter or waste stabilization pond is used as the principal process, and

(3) The treatment works provide significant biological treatment of municipal wastewater.

(h) "mg/l." Milligrams per liter.

(i) "NPDES." National Pollutant Discharge Elimination System.

(j) "Percent removal." A percentage expression of the removal efficiency across a treatment plant for a given pollutant parameter, as determined from the 30-day average values of the raw wastewater influent pollutant concentrations to the facility and the 30-day average values of the effluent pollutant concentrations for a given time period.

(k) "Significant biological treatment." The use of an aerobic or anaerobic biological treatment process in a treatment works to consistently achieve a 30-day average of a least 65 percent removal of BOD<sub>5</sub>.

(l) "SS." The pollutant parameter total suspended solids.

(m) "Significantly more stringent limitation" means BOD<sub>5</sub> and SS limitations necessary to meet the percent removal requirements of at least 5 mg/l more stringent than the otherwise applicable concentration-based limitations (e.g., less than 25 mg/l in the case of the secondary treatment limits for BOD<sub>5</sub> and SS), or the percent removal limitations in §§ 133.102 and 133.105, if such limits would, by themselves, force significant construction or other significant capital expenditure.

(n) "State Director" means the chief administrative officer of any State or interstate agency operating an "approved program," or the delegated representative of the State Director.

[49 FR 37006, Sept. 20, 1984; 49 FR 40405, Oct. 16, 1984, as amended at 50 FR 23387, June 3, 1985]

§ 133.102 Secondary treatment.

The following paragraphs describe the minimum level of effluent quality attainable by secondary treatment in terms of the parameters--BOD<sub>5</sub>, SS and pH. All requirements for each parameter shall be achieved except as provided for in §§ 133.103 and 133.105.

(a) BOD<sub>5</sub>.

(1) The 30-day average shall not exceed 30 mg/l.

(2) The 7-day average shall not exceed 45 mg/l.

(3) The 30-day average percent removal shall not be less than 85 percent.

(4) At the option of the NPDES permitting authority, in lieu of the parameter BOD<sub>5</sub> and the levels of the effluent quality specified in paragraphs (a)(1), (a)(2) and (a)(3), the parameter CBOD<sub>5</sub> may be substituted with the following levels of the CBOD<sub>5</sub> effluent quality provided:

(i) The 30-day average shall not exceed 25 mg/l.

(ii) The 7-day average shall not exceed 40 mg/l.

(iii) The 30-day average percent removal shall not be less than 85 percent.

(b) SS. (1) The 30-day average shall not exceed 30 mg/l.

(2) The 7-day average shall not exceed 45 mg/l.

(3) The 30-day average percent removal shall not be less than 85 percent.

(c) pH. The effluent values for pH shall be maintained within the limits of 6.0 to 9.0 unless the publicly owned treatment works demonstrates that: (1) Inorganic chemicals are not added to the waste stream as part of the treatment process; and (2) contributions from industrial sources do not cause the pH of the effluent to be less than 6.0 or greater than 9.0.

[49 FR 37006, Sept. 20, 1984; 49 FR 40405, Oct. 16, 1984]

§ 133.103 Special considerations.

(a) Combined sewers. Treatment works subject to this part may not be capable of meeting the percentage removal requirements established under §§ 133.102(a)(3) and 133.102(b)(3), or §§ 133.105(a)(3) and 133.105(b)(3) during wet weather where the treatment works receive flows from combined sewers (i.e., sewers which are designed to transport both storm water and sanitary sewage). For such treatment works, the decision must be made on a case-by-case basis as to whether any attainable percentage re-

removal level can be defined, and if so, what the level should be.

(b) *Industrial wastes.* For certain industrial categories, the discharge to navigable waters of BOD<sub>5</sub> and SS permitted under sections 301(b)(1)(A)(i), (b)(2)(E) or 306 of the Act may be less stringent than the values given in §§ 133.102(a)(1), 133.102(b)(1), 133.105(b)(1) and 133.105(e)(1)(i). In cases when wastes would be introduced from such an industrial category into a publicly owned treatment works, the values for BOD<sub>5</sub> and SS in §§ 133.102(a)(1), 133.102(b)(1), 133.105(b)(1), and 133.105(e)(1)(i) may be adjusted upwards provided that: (1) The permitted discharge of such pollutants, attributable to the industrial category, would not be greater than that which would be permitted under sections 301(b)(1)(A)(i), 301(b)(2)(E) or 306 of the Act if such industrial category were to discharge directly into the navigable waters, and (2) the flow or loading of such pollutants introduced by the industrial category exceeds 10 percent of the design flow or loading of the publicly owned treatment works. When such an adjustment is made, the values for BOD<sub>5</sub> or SS in §§ 133.102(a)(2), 133.102(a)(4)(ii), § 133.102(b)(2), 133.105(a)(2), 133.105(b)(2), and 133.105(e)(1)(ii) should be adjusted proportionately.

(c) *Waste stabilization ponds.* The Regional Administrator, or, if appropriate, State Director subject to EPA approval, is authorized to adjust the minimum levels of effluent quality set forth in § 133.105 (b)(1), (b)(2), and (b)(3) for treatment works subject to this part, to conform to the SS concentrations achievable with waste stabilization ponds, provided that: (1) Waste stabilization ponds are the principal process used for secondary treatment; and (2) operation and maintenance data indicate that the SS values specified in § 133.105 (b)(1), (b)(2), and (b)(3) cannot be achieved. The term "SS concentrations achievable with waste stabilization ponds" means a SS value, determined by the Regional Administrator, or, if appropriate, State Director subject to EPA approval, which is equal to the effluent concen-

tration achieved 90 percent of the time within a State or appropriate contiguous geographical area by waste stabilization ponds that are achieving the levels of effluent quality for BOD<sub>5</sub> specified in § 133.105(a)(1). [cf. 43 FR 552791.]

(d) *Less concentrated influent wastewater for separate sewers.* The Regional Administrator or, if appropriate, State Director is authorized to substitute either a lower percent removal requirement or a mass loading limit for the percent removal requirements set forth in §§ 133.102(a)(3), 133.102(a)(4)(iii), 133.102(b)(3), 102.105(a)(3), 133.105(b)(3) and 133.105(e)(1)(iii) provided that the permittee satisfactorily demonstrates that: (1) The treatment works is consistently meeting, or will consistently meet, its permit effluent concentration limits but its percent removal requirements cannot be met due to less concentrated influent wastewater, (2) to meet the percent removal requirements, the treatment works would have to achieve significantly more stringent limitations than would otherwise be required by the concentration-based standards, and (3) the less concentrated influent wastewater is not the result of excessive I/I. The determination of whether the less concentrated wastewater is the result of excessive I/I will use the definition of excessive I/I in 40 CFR 35.2005(b)(16) plus the additional criterion that inflow is nonexcessive if the total flow to the POTW (i.e., wastewater plus inflow plus infiltration) is less than 275 gallons per capita per day.

[49 FR 37006, Sept. 20, 1984, as amended at 50 FR 23387, June 3, 1985; 50 FR 36880, Sept. 10, 1985]

§ 133.104 Sampling and test procedures.

(a) Sampling and test procedures for pollutants listed in this part shall be in accordance with guidelines promulgated by the Administrator in 40 CFR Part 136.

(b) Chemical oxygen demand (COD) or total organic carbon (TOC) may be substituted for BOD<sub>5</sub> when a long-term BOD:COD or BOD:TOC correlation has been demonstrated.

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§ 133.105 Treatment equivalent to secondary treatment.

by OMB and assigned control number 2040-0051.)

This section describes the minimum level of effluent quality attainable by facilities eligible for treatment equivalent to secondary treatment (§ 133.101(g)) in terms of the parameters—BOD<sub>5</sub>, SS and pH. All requirements for the specified parameters in paragraphs (a), (b) and (c) of this section shall be achieved except as provided for in § 133.103, or paragraphs (d), (e) or (f) of this section.

(e) CBOD<sub>5</sub> limitations:

(1) Where data are available to establish CBOD<sub>5</sub> limitations for a treatment works subject to this section, the NPDES permitting authority may substitute the parameter CBOD<sub>5</sub> for the parameter BOD<sub>5</sub>. In §§ 133.105(a)(1), 133.105(a)(2) and 133.105(a)(3), on a case-by-case basis provided that the levels of CBOD<sub>5</sub> effluent quality are not less stringent than the following:

(a) BOD<sub>5</sub>. (1) The 30-day average shall not exceed 45 mg/l.

(i) The 30-day average shall not exceed 40 mg/l.

(2) The 7-day average shall not exceed 65 mg/l.

(ii) The 7-days average shall not exceed 60 mg/l.

(3) The 30-day average percent removal shall not be less than 65 percent.

(iii) The 30-day average percent removal shall not be less than 65 percent.

(b) SS. Except where SS values have been adjusted in accordance with § 133.103(c):

(2) Where data are available, the parameter CBOD<sub>5</sub> may be used for effluent quality limitations established under paragraph (d) of this section. Where concurrent BOD effluent data are available, they must be submitted with the CBOD data as a part of the approval process outlined in paragraph (d) of this section.

(1) The 30-day average shall not exceed 45 mg/l.

(2) The 7-day average shall not exceed 65 mg/l.

(3) The 30-day average percent removal shall not be less than 65 percent.

(c) pH. The requirements of § 133.102(c) shall be met.

(f) Permit adjustments. Any permit adjustment made pursuant to this part may not be any less stringent than the limitations required pursuant to § 133.105(a)-(e). Furthermore, permitting authorities shall require more stringent limitations when adjusting permits if: (1) For existing facilities the permitting authority determines that the 30-day average and 7-day average BOD<sub>5</sub> and SS effluent values that could be achievable through proper operation and maintenance of the treatment works, based on an analysis of the past performance of the treatment works, would enable the treatment works to achieve more stringent limitations, or

(d) Alternative State requirements. Except as limited by paragraph (f) of this section, and after notice and opportunity for public comment, the Regional Administrator, or, if appropriate, State Director subject to EPA approval, is authorized to adjust the minimum levels of effluent quality set forth in paragraphs (a)(1), (a)(2), (b)(1) and (b)(2) of this section for trickling filter facilities and in paragraphs (a)(1) and (a)(2) of this section for waste stabilization pond facilities, to conform to the BOD<sub>5</sub> and SS effluent concentrations consistently achievable through proper operation and maintenance (§ 133.101(f)) by the median (50th percentile) facility in a representative sample of facilities within a State or appropriate contiguous geographical area that meet the definition of facilities eligible for treatment equivalent to secondary treatment (§ 133.101(g)).

(2) For new facilities, the permitting authority determines that the 30-day average and 7-day average BOD<sub>5</sub> and SS effluent values that could be achievable through proper operation and maintenance of the treatment works, considering the design capability of the treatment process and geographical and climatic conditions, would enable the treatment works to achieve more stringent limitations.

(The information collection requirements contained in this rule have been approved



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solved chemical substances, toxic materials, radioactivity, turbidities, color, odor, and other deleterious factors at the lowest possible levels.

(2) No wastes shall be discharged and no activities shall be conducted which either alone or in combination with other wastes or activities will cause violation of the following standards in the waters of the Willamette River Basin:

**(a) Dissolved oxygen (DO):**

(A) Multnomah Channel and main stem Willamette River from mouth to the Willamette Falls at Oregon City, river mile 26.6: The DO concentrations shall not be less than 5 mg/l.

(B) Main stem Willamette River from the Willamette Falls to Newberg, river mile 50: The DO concentrations shall not be less than 6 mg/l.

(C) Main stem Willamette River from Newberg to Salem, river mile 85: The DO concentrations shall not be less than 7 mg/l.

(D) Main stem Willamette River from Salem to confluence of Coast and Middle Forks, river mile 187: The DO concentrations shall not be less than 90% of saturation.

**(E) All other Willamette Basin streams:**

(i) Salmonid fish producing waters: The DO concentration shall not be less than 90% of saturation at seasonal low or less than 95% of saturation in spawning areas during spawning, incubation, hatching, and fry stages of salmonid fishes.

(ii) Non-Salmonid fish producing waters: The DO concentration shall not be less than 6 mg/l.

(F) Columbia River (river mile 86 to 120): The DO concentration shall not be less than 90% of saturation.

**(b) Temperature:**

(A) Multnomah Channel and the main stem Willamette River from mouth to Newberg, river mile 50: 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 70° F. or greater; or more than 0.5° F. increase due to a single-source discharge when receiving water temperatures are 69.5° F. or less; or more than 2° F. increase due to all sources combined when stream temperatures are 68° F. or less, except for specifically limited duration activities which may be authorized by DEQ under such conditions as DEQ and the Department of Fish and Wildlife may prescribe and which are necessary to accommodate legitimate uses or activities where temperatures in excess of this standard are unavoidable and all practical preventive techniques have been applied to minimize temperature rises. The Director shall hold a public hearing when a request for an exception to the temperature standard for a planned activity or discharge will in all probability adversely affect the beneficial uses.

(B) Willamette River from Newberg to confluence of Coast and Middle Forks, river mile 187: 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 64° F. or greater; or more than 0.5° F. increase due to a single-source discharge when receiving water temperatures are 63.5° F. or less; or more than 2° F. increase due to all sources combined when stream temperatures are 62° F. or less, except for specifically limited duration activities which may be authorized by DEQ under such conditions as DEQ and the Department of Fish and Wildlife may prescribe and

**Willamette Basin**

**Beneficial Water Uses to be Protected**

**340-41-442** Water quality in the Willamette River Basin (see Figures 1 and 7) shall be managed to protect the recognized beneficial uses as indicated in Table 6.

Stat. Auth.: ORS Ch. 468  
Hist.: DEQ 128, f. & cf. 1-21-77

**Water Quality Standards Not to be Exceeded (To be Adopted Pursuant to ORS 468.735 and Enforceable Pursuant to ORS 468.720, 468.990, and 468.992)**

**340-41-445 (1)** Notwithstanding the water quality standards contained below, the highest and best practicable treatment and/or control of wastes, activities, and flows shall in every case be provided so as to maintain dissolved oxygen and overall water quality at the highest possible levels and water temperatures, coliform bacteria concentrations, dis-

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which are necessary to accommodate legitimate uses or activities where temperatures in excess of this standard are unavoidable and all practical preventive techniques have been applied to minimize temperature rises. The Director shall hold a public hearing when a request for an exception to the temperature standard for a planned activity or discharge will in all probability adversely affect the beneficial uses.

(C) All other Willamette Basin streams:

(i) Salmonid fish 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, except for specifically limited duration activities which may be authorized by DEQ under such conditions as DEQ and the Department of Fish and Wildlife may prescribe and which are necessary to accommodate legitimate uses or activities where temperatures in excess of this standard are unavoidable and all practical preventive techniques have been applied to minimize temperature rises. The Director shall hold a public hearing when a request for an exception to the temperature standard for a planned activity or discharge will in all probability adversely affect the beneficial uses.

(ii) Non-Salmonid fish 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 64° F. or greater; or more than 0.5° F. increase due to a single-source discharge when receiving water temperatures are 63.5° F. or less; or more than 2° F. increase due to all sources combined when stream temperatures are 62° F. or less, except for specifically limited duration activities which may be authorized by DEQ under such conditions as DEQ and the Department of Fish and Wildlife may prescribe and which are necessary to accommodate legitimate uses or activities where temperatures in excess of this standard are unavoidable and all practical preventive techniques have been applied to minimize temperature rises. The Director shall hold a public hearing when a request for an exception to the temperature standard for a planned activity or discharge will in all probability adversely affect the beneficial uses.

(D) Columbia River: 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 68° F. or greater; or more than 0.5° F. increase due to a single-source discharge when receiving water temperatures are 67.5° F. or less; or more than 2° F. increase due to all sources combined when stream temperatures are 66° F. or less, except for specifically limited duration activities which may be authorized by DEQ under such conditions as DEQ and the Department of Fish and Wildlife may prescribe and which are necessary to accommodate legitimate uses or activities where temperatures in excess of this standard are unavoidable and all practical preventive techniques have been applied to minimize temperature rises. The Director shall hold a public hearing when a request for an exception to the temperature standard for a planned activity or discharge will in all probability adversely affect the beneficial uses.

(c) Turbidity (Jackson Turbidity Units, JTU): No more than a 10 percent cumulative increase in natural stream turbidities shall be allowed, as measured relative to a control point immediately upstream of the turbidity causing activity.

However, limited duration activities necessary to address an emergency or to accommodate essential dredging, construction or other legitimate activities and which cause the standard to be exceeded may be authorized provided all practicable turbidity control techniques have been applied and one of the following has been granted:

(A) Emergency activities: Approval coordinated by DEQ with the Department of Fish and Wildlife under conditions they may prescribe to accommodate response to emergencies or to protect public health and welfare.

(B) Dredging, Construction or other Legitimate Activities: Permit or certification authorized under terms of Section 401 or 404 (Permits and Licenses, Federal Water Pollution Control Act) or OAR 141-85-100 et seq. (Removal and Fill Permits, Division of State Lands), with limitations and conditions governing the activity set forth in the permit or certificate.

(d) pH (hydrogen ion concentration): pH values shall not fall outside the following ranges:

(A) Columbia River: 7.0 to 8.5.

(B) All other basin waters: 6.5 to 8.5.

(e) Organisms of the coliform group where associated with fecal sources (MPN or equivalent MF using a representative number of samples):

(A) Main stem Willamette River (river miles 0 to 187) and Multnomah Channel: A log mean of 200 fecal coliform per 100 milliliters based on a minimum of 5 samples in a 30-day period with no more than 10 percent of the samples in the 30-day period exceeding 400 per 100 ml.

(B) All other Willamette Basin streams: A log mean of 200 fecal coliform per 100 milliliters based on a minimum of 5 samples in a 30-day period with no more than 10 percent of the samples in the 30-day period exceeding 400 per 100 ml.

(C) Columbia River:

(i) Upstream from Highway 5 bridge between Portland and Vancouver (river mile 106.5): A log mean of 200 fecal coliform per 100 milliliters based on a minimum of 5 samples in a 30-day period with no more than 10 percent of the samples in the 30-day period exceeding 400 per 100 ml.

(ii) Downstream from Highway 5 bridge between Portland and Vancouver (river miles 0 to 106.5): A log mean of 200 fecal coliform per 100 milliliters based on a minimum of 5 samples in a 30-day period with no more than 10 percent of the samples in the 30-day period exceeding 400 per 100 ml.

(f) Bacterial pollution or other conditions deleterious to waters used for domestic purposes, livestock watering, irrigation, bathing, or shellfish propagation, or otherwise injurious to public health shall not be allowed.

(g) The liberation of dissolved gases, such as carbon dioxide, hydrogen sulfide, or other gases, in sufficient quantities to cause objectionable odors or to be deleterious to fish or other aquatic life, navigation, recreation, or other reasonable uses made of such waters shall not be allowed.

(h) The development of fungi or other growths having a deleterious effect on stream bottoms, fish or other aquatic life, or which are injurious to health, recreation, or industry shall not be allowed.

(i) The creation of tastes or odors or toxic or other conditions that are deleterious to fish or other aquatic life or

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affect the potability of drinking water or the palatability of fish or shellfish shall not be allowed.

(j) The formation of appreciable bottom or sludge deposits or the formation of any organic or inorganic deposits deleterious to fish or other aquatic life or injurious to public health, recreation, or industry shall not be allowed.

(k) Objectionable discoloration, scum, oily slick or floating solids, or coating of aquatic life with oil films shall not be allowed.

(l) Aesthetic conditions offensive to the human senses of sight, taste, smell, or touch shall not be allowed.

(m) Radioisotope concentrations shall not exceed maximum permissible concentrations (MPC's) in drinking water, edible fishes or shellfishes, wildlife, irrigated crops, livestock and dairy products, or pose an external radiation hazard.

(n) The concentration of total dissolved gas relative to atmospheric pressure at the point of sample collection shall not exceed one hundred and ten percent (110%) of saturation, except when stream flow exceeds the 10-year, 7-day average flood. However, for Hatchery receiving waters and waters of less than 2 feet in depth, the concentration of total dissolved gas relative to atmospheric pressure at the point of sample collection shall not exceed one hundred and five percent (105%) of saturation.

(o) **Total Dissolved Solids:** Guide concentrations listed below shall not be exceeded unless otherwise specifically authorized by DEQ upon such conditions as it may deem necessary to carry out the general intent of this plan and to protect the beneficial uses set forth in rule 340-41-442:

(A) Columbia River . . . . . 500 mg/l

(B) Willamette River & Tributaries . . . . . 100.0 mg/l

(p) **Toxic Substances:**

(A) Toxic substances shall not be introduced above natural background levels in the waters of the state in amounts, concentrations, or combinations which may be harmful, may chemically change to harmful forms in the environment, or may bioaccumulate to levels that adversely affect public health, safety, or welfare; aquatic life; or other designated beneficial uses.

(B) Levels of toxic substances shall not exceed the most recent criteria values for organic and inorganic pollutants established by EPA and published in *Quality Criteria for Water* (1986). A list of the criteria is presented in Table 20.

(C) The criteria in paragraph (B) of this subsection shall apply unless data from scientifically valid studies demonstrate that the most sensitive designated beneficial uses will not be adversely affected by exceeding a criterion or that a more restrictive criterion is warranted to protect beneficial uses, as accepted by the Department on a site specific basis. Where no published EPA criteria exist for a toxic substance, public health advisories and other published scientific literature may be considered and used, if appropriate, to set guidance values.

(D) Bio-assessment studies such as laboratory bioassays or instream measurements of indigenous biological communities, shall be conducted, as the Department deems necessary, to monitor the toxicity of complex effluents, other suspected discharges or chemical substances without numeric criteria, to aquatic life. These studies, properly conducted in accordance with standard testing procedures, may be considered as scientifically valid data for the purposes of paragraph (C) of this subsection. If toxicity occurs,

the Department shall evaluate and implement measures necessary to reduce toxicity on a case-by-case basis.

(3) Where the natural quality parameters of waters of the Willamette River Basin are outside the numerical limits of the above assigned water quality standards, the natural water quality shall be the standard.

(4) **Mixing zones:**

(a) The Department may allow a designated portion of a receiving water to serve as a zone of initial dilution for waste waters and receiving waters to mix thoroughly and this zone will be defined as a mixing zone.

(b) The Department may suspend all or part of the water quality standards, or set less restrictive standards, in the defined mixing zone, provided that the following conditions are met:

(A) The water within the mixing zone shall be free of:

(i) Materials in concentrations that will cause acute (96HLC50) toxicity to aquatic life. Acute toxicity is measured as the lethal concentration that causes 50 percent mortality of organisms within a 96-hour test period.

(ii) Materials that will settle to form objectionable deposits.

(iii) Floating debris, oil, scum, or other materials that cause nuisance conditions.

(iv) Substances in concentrations that produce deleterious amounts of fungal or bacterial growths.

(B) The water outside the boundary of the mixing zone shall:

(i) Be free of materials in concentrations that will cause chronic (sublethal) toxicity. Chronic toxicity is measured as the concentration that causes long-term sublethal effects, such as significantly impaired growth or reproduction in aquatic organisms, during a testing period based on test species life cycle. Procedures and end points will be specified by the Department in waste water discharge permits.

(ii) Meet all other water quality standards under normal annual low flow conditions.

(c) The limits of the mixing zone shall be described in the waste water discharge permit. In determining the location, surface area, and volume of a mixing zone area, the Department may use appropriate mixing zone guidelines to assess the biological, physical, and chemical character of receiving waters, and effluent, and the most appropriate placement of the outfall, to protect instream water quality, public health, and other beneficial uses. Based on receiving water and effluent characteristics, the Department shall define a mixing zone in the immediate area of a waste water discharge to:

(A) Be as small as feasible;

(B) Avoid overlap with any other mixing zones to the extent possible and be less than the total stream width as necessary to allow passage of fish and other aquatic organisms;

(C) Minimize adverse effects on the indigenous biological community especially when species are present that warrant special protection for their economic importance, tribal significance, ecological uniqueness, or for other similar reasons as determined by the Department;

(D) Not threaten public health;

(E) Minimize adverse effects on other designated beneficial uses outside the mixing zone.

(d) The Department may request the applicant of a permitted discharge for which a mixing zone is required, to

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submit all information necessary to define a mixing zone, such as:

- (A) Type of operation to be conducted;
- (B) Characteristics of effluent flow rates and composition;
- (C) Characteristics of low flows of receiving waters;
- (D) Description of potential environmental effects;
- (E) Proposed design for outfall structures.

(e) The Department may, as necessary, require mixing zone monitoring studies and/or bioassays to be conducted to evaluate water quality or biological status within and outside the mixing zone boundary.

(f) The Department may change mixing zone limits or require the relocation of an outfall if it determines that the water quality within the mixing zone adversely affects any existing beneficial uses in the receiving waters.

(5) Testing methods: The analytical testing methods for determining compliance with the water quality standards contained in this rule shall be in accordance with the most recent edition of *Standard Methods for the Examination of Water and Waste Water* published jointly by the American Public Health Association, American Water Works Association, and Water Pollution Control Federation, unless the Department has published an applicable superseding method, in which case testing shall be in accordance with the superseding method; provided, however, that testing in accordance with an alternative method shall comply with this rule if the Department has published the method or has approved the method in writing.

[Publications: The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468

Hist.: DEQ 128, f. & cf. 1-21-77; DEQ 1-1980, f. & cf. 1-9-80; DEQ 18-1987, f. & cf. 9-4-87

**Minimum Design Criteria for Treatment and Control of Wastes**

340-41-455 Subject to the implementation program set forth in rule 340-41-120, prior to discharge of any wastes from any new or modified facility to any waters of the Willamette River Basin, such wastes shall be treated and controlled in facilities designed in accordance with the following minimum criteria (In designing treatment facilities, average conditions and a normal range of variability are generally used in establishing design criteria. A facility once completed and placed in operation should operate at or near the design limit most of the time, but may operate below the design criteria limit at times due to variables which are unpredictable or uncontrollable. This is particularly true for biological treatment facilities. The actual operating limits are intended to be established by permit pursuant to ORS 468, 740 and recognize that the actual performance level may at times be less than the design criteria.):

(1) Sewage wastes:

(a) Willamette River and tributaries except Tualatin River Subbasin:

(A) During periods of low stream flows (approximately May 1 to October 31): Treatment resulting in monthly average effluent concentrations not to exceed 10 mg/l of BOD and 10 mg/l of SS or equivalent control.

(B) During the period of high stream flows (approximately November 1 to April 30): A minimum of secondary

treatment or equivalent control and unless otherwise specifically authorized by the Department, operation of all waste treatment and control facilities at maximum practical efficiency and effectiveness so as to minimize waste discharges to public waters.

(b) Main stem Tualatin River from mouth to Gaston (river mile 0 to 65):

(A) During periods of low stream flows (approximately May 1 to October 31): Treatment resulting in monthly average effluent concentrations not to exceed 10 mg/l of BOD and 10 mg/l of SS or equivalent control.

(B) During the period of high stream flows (approximately November 1 to April 30): Treatment resulting in monthly average effluent concentrations not to exceed 20 mg/l of BOD and 20 mg/l of SS or equivalent control.

(c) Main stem Tualatin River above Gaston (river mile 65) and all tributaries to the Tualatin River: Treatment resulting in monthly average effluent concentrations not to exceed 5 mg/l of BOD and 5 mg/l of SS or equivalent control.

(d) Tualatin River Subbasin: The dissolved oxygen level in the discharged effluents shall not be less than 6 mg/l.

(e) Main stem Columbia River:

(A) During summer (May 1 to October 31): Treatment resulting in monthly average effluent concentrations not to exceed 20 mg/l of BOD and 20 mg/l of SS or equivalent control.

(B) During winter (November 1 to April 30): A minimum of secondary treatment or equivalent control and unless otherwise specifically authorized by the Department, operation of all waste treatment and control facilities at maximum practicable efficiency and effectiveness so as to minimize waste discharges to public waters.

(f) Effluent BOD concentrations in mg/l, divided by the dilution factor (ratio of receiving stream flow to effluent flow) shall not exceed one (1) unless otherwise specifically approved by the Environmental Quality Commission.

(g) Sewage wastes shall be disinfected, after treatment, equivalent to thorough mixing with sufficient chlorine to provide a residual of at least 1 part per million after 60 minutes of contact time unless otherwise specifically authorized by permit.

(h) Positive protection shall be provided to prevent bypassing raw or inadequately treated sewage to public waters unless otherwise approved by the Department where elimination of inflow and infiltration would be necessary but not presently practicable.

(i) More stringent waste treatment and control requirements may be imposed where special conditions may require.

(2) Industrial wastes:

(a) After maximum practicable inplant control, a minimum of secondary treatment or equivalent control (reduction of suspended solids and organic material where present in significant quantities, effective disinfection where bacterial organisms of public health significance are present, and control of toxic or other deleterious substances).

(b) Specific industrial waste treatment requirements shall be determined on an individual basis in accordance with the provisions of this plan, applicable federal requirements, and the following:

(A) The uses which are or may likely be made of the receiving stream;

(B) The size and nature of flow of the receiving stream:

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(C) The quantity and quality of wastes to be treated; and  
(D) The presence or absence of other sources of pollution on the same watershed.

(c) Where industrial, commercial, or agricultural effluents contain significant quantities of potentially toxic elements, treatment requirements shall be determined utilizing appropriate bioassays.

(d) Industrial cooling waters containing significant heat loads shall be subjected to offstream cooling or heat recovery prior to discharge to public waters.

(e) Positive protection shall be provided to prevent bypassing of raw or inadequately treated industrial wastes to any public waters.

(f) Facilities shall be provided to prevent and contain spills of potentially toxic or hazardous materials and a positive program for containment and cleanup of such spills should they occur shall be developed and maintained.

Stat. Auth.: ORS Ch. 468  
Hist.: DEQ 128, f. & ef. 1-21-77

**Special Policies and Guidelines**

340-41-470 (1) In order to preserve the existing high quality water for municipal water supplies and recreation, it is the policy of the EQC to prohibit any further waste discharges to the waters of:

(a) The Clackamas River Subbasin;

(b) The McKenzie River Subbasin above the Hayden Bridge (river mile 15);

(c) The North Santiam River Subbasin.

(2) The Environmental Quality Commission shall investigate, together with any other affected state agencies, the means of maintaining at least existing minimum flow during the summer low flow period.

Stat. Auth.: ORS Ch. 468  
Hist.: DEQ 128, f. & ef. 1-21-77

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Policies and Guidelines Generally Applicable to All Basins

340-41-026 (1)(a) Existing high quality waters which exceed those levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water shall be maintained and protected unless the Environmental Quality Commission chooses, after full satisfaction of the intergovernmental coordination and public participation provisions of the continuing planning process, to lower water quality for necessary and justifiable economic or social development. The Director or his designee may allow lower water quality on a short-term basis in order to respond to emergencies or to otherwise protect public health and welfare. In no event, however, may degradation of water quality interfere with or become injurious to the beneficial uses of water within surface waters of the following areas:

- (A) National Parks;
- (B) National Wild and Scenic Rivers;
- (C) National Wildlife Refuges;
- (D) State Parks.

(b) Point source discharges shall follow policies and guidelines (2), (3), and (4), and nonpoint source activities shall follow guidelines (5), (6), (7), (8), and (9).

(2) In order to maintain the quality of waters in the State of Oregon, it is the policy of the EQC to require that growth and development be accommodated by increased efficiency and effectiveness of waste treatment and control such that measurable future discharged waste loads from existing sources do not exceed presently allowed discharged loads unless otherwise specifically approved by the EQC.

(3) For any new waste sources, alternatives which utilize reuse or disposal with no discharge to public waters shall be given highest priority for use wherever practicable. New source discharges may be approved by the Department if no measurable adverse impact on water quality or beneficial uses will occur. Significant or large new sources must be approved by the Environmental Quality Commission.

(4) No discharges of wastes to lakes or reservoirs shall be allowed without specific approval of the EQC.

(5) Log handling in public waters shall conform to current EQC policies and guidelines.

(6) Sand and gravel removal operations shall be conducted pursuant to a permit from the Division of State Lands and separated from the active flowing stream by a water-tight berm wherever physically practicable. Recirculation and reuse of process water shall be required wherever practicable. Discharges, when allowed, or seepage or leakage losses to public waters shall not cause a violation of water quality standards or adversely affect legitimate beneficial uses.

(7) Logging and forest management activities shall be conducted in accordance with the Oregon Forest Practices Act so as to minimize adverse effects on water quality.

(8) Road building and maintenance activities shall be conducted in a manner so as to keep waste materials out of public waters and minimize erosion of cut banks, fills, and road surfaces.

(9) In order to improve controls over nonpoint sources of pollution, federal, state, and local resource management agencies will be encouraged and assisted to coordinate planning and implementation of programs to regulate or control runoff, erosion, turbidity, stream temperature, stream flow, and the withdrawal and use of irrigation water on a basin-wide approach so as to protect the quality and beneficial uses

PRELIMINARY

Expiration Date: 12-31-93  
Permit Number:  
File Number: 36320  
Page 1 of 6 Pages

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

WASTE DISCHARGE PERMIT

Department of Environmental Quality  
811 Southwest Sixth Avenue, Portland, OR 97204  
Telephone: (503) 229-5696

Issued pursuant to ORS 468.740 and The Federal Clean Water Act

ISSUED TO:

City of Halsey  
P.O. Box 35  
Halsey, OR 97348

SOURCES COVERED BY THIS PERMIT:

Type of Waste	Outfall Number	Outfall Location
Domestic Sewage	001	Muddy Creek (R.M. 23)

PLANT TYPE AND LOCATION:

3 cell lagoon sewage treatment plant located 1 1/2 miles west of Halsey off hwy 228 (T 14S, R 4W, Sec. 2, W.M.)

RECEIVING SYSTEM INFORMATION:

Basin: Willamette  
Subbasin: Middle Willamette  
Stream: Muddy Creek  
Hydro Code: 22H-MUDM 23.0D  
County: Linn

EPA REFERENCE NO: OR-002239-0

Issued in response to Application No. 999366 received December 4, 1986.

This permit is issued based on the land use findings in the permit record.

Fred Hansen, Director

Date

PERMITTED ACTIVITIES

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

	Page
Schedule A - Waste Disposal Limitations not to be Exceeded...	2-3
Schedule B - Minimum Monitoring and Reporting Requirements...	4-5
Schedule C - Compliance Conditions and Schedules.....	5
Schedule D - Special Conditions.....	6
General Conditions.....	Attached

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

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

**SCHEDULE A**

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

a. Outfall Number 001

- (1) June 1 - October 31: No discharge to state waters is permitted.
- (2) November 1 - April 30:

<u>Parameter</u>	<u>Average Effluent Concentrations</u>		<u>Monthly Average lb/day</u>	<u>Weekly Average lb/day</u>	<u>Daily Maximum lbs</u>
	<u>Monthly</u>	<u>Weekly</u>			
BOD	40 mg/l	45 mg/l	63	72	126
TSS	50 mg/l	80 mg/l	79	128	158
FC per 100 ml	200	400			

- (3) Other Parameters Limitations
- pH (year-round) Shall be within the range 6.0-9.0
- Average dry weather flow to the treatment facility (Mass discharge limitations based on 0.190 MGD) 0.096 MGD

b. Outfall Number 002 (spray irrigation) June 1 - October 31

- (1) No discharge to state waters is permitted. All wastewater shall be distributed on land for dissipation by evapotranspiration and controlled seepage by following sound irrigation practices so as to prevent:
  - a. Prolonged ponding of waste on the ground surface;
  - b. Surface runoff or subsurface drainage through drainage tile;
  - c. The creation of odors, fly and mosquito breeding and other nuisance conditions; and
  - d. The overloading of land with nutrients or organics.
- (2) Prior to land application of the treated wastewater, it shall receive at least the equivalent of secondary treatment and disinfection to reduce fecal coliform to 200 organisms/100 ml on a monthly average, with no sample to exceed 400 organisms/100 ml.
- (3) Unless approved otherwise in writing by the Department, a deep-rooted, permanent grass cover shall be maintained on the land disposal area at all times and be periodically cut to insure maximum evapotranspiration and protect the site from erosion.



2. Waste Discharge Limitations not to be Exceeded After Attainment of Operational Level as Required by Schedule C, Condition 1.e. of this Permit.

a. Outfall Number 001

- (1) May 1 - October 31: No discharge to public waters
- (2) November 1 - April 30:

<u>Parameter</u>	<u>Average Effluent Concentrations</u>		<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Daily Maximum</u>
	<u>Monthly</u>	<u>Weekly</u>	<u>lb/day</u>	<u>lb/day</u>	<u>lbs</u>
BOD	30 mg/l	45 mg/l	99	149	198
TSS	50 mg/l	80 mg/l	164	246	328
FC per 100 ml	200	400			

(3) Other Parameters

Limitations

pH (year-round)

Shall be within the range 6.0-9.0

No discharge to Muddy Creek is permitted when the effluent BOD concentration in mg/l, divided by the dilution factor of the receiving stream exceeds 0.48 or a minimum stream flow of 75 CFS is measured.

Average dry weather flow to the treatment facility (Mass discharge limitations based on 0.394 MGD)

0.197 MGD

BOD & TSS removal efficiency

Shall not be less than 85 percent monthly average

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

The allowable mixing zone shall be that portion of Muddy Creek 25 feet wide and beginning 10 feet upstream and extending 50 feet downstream from the point of discharge to Muddy Creek.

SCHEDULE B

1. Minimum Monitoring and Report Requirements  
(unless otherwise approved in writing by the Department)

a. Influent

<u>Item or Parameter</u>	<u>Minimum Frequency</u>	<u>Type of Sample</u>
Total Flow (MGD)	Daily	Continuous recording
Flow Meter Calibration	2/year	Verification
BOD-5	2/month	Composite <sup>1</sup>
TSS	2/month	Composite <sup>1</sup>
ph	3/week	Grab

b. Outfall Number 001 (sewage treatment plant outfall) when discharging.

<u>Item or Parameter</u>	<u>Minimum Frequency</u>	<u>Type of Sample</u>
Total Flow (MGD)	Daily	Continuous Recording
Flow Meter Calibration	2/Year	Verification
BOD-5	2/month	Composite <sup>1</sup>
TSS	2/month	Composite <sup>1</sup>
pH	3/week	Grab
Fecal Coliform	Monthly	Grab
Quantity Chlorine Used	Daily	Measurement
Chlorine Residual	Daily	Grab
Average Percent Removed (BOD and TSS)	Monthly	Calculation

c. Outfall Number 002 (spray irrigation) when discharging

<u>Item or Parameter</u>	<u>Minimum Frequency</u>	<u>Type of Sample</u>
Total Flow (GPD)	Daily	Measurement
BOD-5	Monthly	Grab
TSS	Monthly	Grab
pH	Weekly	Grab
Chlorine residual	Daily	Grab
Fecal Coliform	Monthly	Grab

<sup>1</sup>Grab samples to be taken until construction of the upgraded or improved sewage collection, treatment and disposal facility is complete as required by Schedule C, Condition 1.c. of this permit.

d. Other Parameters (when discharging to Muddy Creek)

<u>Item or Parameter</u>	<u>Minimum Frequency</u>	<u>Type of Sample</u>
Creek Flow (MGD)	Daily	Measurement <sup>2</sup>
BOD Dilution Factor	2/month	Calculation <sup>3</sup>

<sup>2</sup>Creek flow measurement to commence upon completion of facilities as required by Schedule C, Condition 1.c. of this permit.

<sup>3</sup>The equation to be used for the BOD dilution factor is

$$\frac{(\text{Effluent BOD}_5 \text{ Concentration}) \times (\text{Effluent Flow, MGD})}{\text{Creek Flow, MGD}}$$

Monitoring reports (DMRs) shall include a record of the location, quantity and method of use of all sludge removed from the treatment facility and a record of all applicable equipment breakdowns and bypassing.

2. Reporting Procedures

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

**SCHEDULE C**

Compliance Conditions and Schedules

1. The permittee is required to make necessary improvements and/or upgrade the sewage collection, treatment and disposal facilities in order to achieve compliance with the effluent limitations specified in Schedule A, Condition 2, in accordance with the following:
  - a. By no later than February 28, 1989, the permittee shall submit complete engineering plans and specifications for construction of necessary improvements. In addition, the permittee shall submit with the engineering plans and specifications an on-going inflow and infiltration correction and maintenance program and schedule for Department review and approval.
  - b. By no later than May 31, 1989, the permittee shall award construction bids for completion of necessary improvements. Progress reports are required at 6 month intervals from award of bid.
  - c. By no later than October 31, 1989, the permittee shall complete construction of the necessary improvements.

- d. By no later than October 31, 1989 the permittee shall implement an approved inflow and infiltration (I/I) correction and maintenance program to remove a minimum of 25% of excessive I/I as identified in the September 1988 Facility Plan over a three year period. An annual report shall be submitted to the Department by September 1 of each year which details sewer collection maintenance activities that have been done in the previous year and outlines those activities planned for the following year.
  - e. By no later than February 1, 1990, the permittee shall attain operational level of the facilities to meet permit limits.
2. The permittee is expected to meet the compliance dates which have been established in this schedule. Either prior to or no later than 14 days following any lapsed compliance date, the permittee shall submit to the Department a notice of compliance or noncompliance with the established schedule. The Director may revise a schedule of compliance if he determines good and valid cause resulting from events over which the permittee has little or no control.

#### SCHEDULE D

##### Special Conditions

1. The permittee shall continue to operate a spray irrigation disposal program to the extent practicable within weather and soil conditions, to increase the holding capacity of the existing lagoon system until the plant is upgraded to provide for treatment and dry weather holding capacity as required by Schedule C, Condition 1 of this permit.
2. In the event the permittee finds it necessary to remove accumulated sludge solids from the lagoons, the permittee shall submit a sludge management plan developed in accordance with Oregon Administrative Rules, Chapter 340, Division 50 prior to removing sludge.

P36320W (CRW)

**DISCHARGE LIMITS**  
City of Halsey

	Current Permitted Discharge of <u>0.192 MGD</u> (Nov. 1 to Apr. 30)	Requested Permitted Discharge of <u>0.394 MGD</u> (Nov. 1 to Apr. 30)
	Monthly average effluent concentrations	30 mg/l BOD 50 mg/l TSS
Monthly average mass loading	48 lbs/day BOD 80 lbs/day TSS	99 lbs/day BOD 164 lbs/day TSS
Daily maximum mass loading	96 lbs BOD 160 lbs TSS	198 lbs BOD 328 lbs TSS

TO: Environmental Quality Commission                      DATE: November 3, 1988

FROM: Fred Hansen, Director

SUBJECT: Proposed Criteria for Consideration of Increased Loadings Due to  
Expansions of Existing Sewage Treatment Plants or Industrial  
Sources.

#### BACKGROUND

Oregon Administrative Rule (OAR) 340-41-026(2) states: "In order to maintain the quality of waters in the State of Oregon, it is the policy of the EQC to require that growth and development be accommodated by increased efficiency and effectiveness of waste treatment and control such that measurable future discharged waste loads from existing sources do not exceed presently allowed discharged loads unless otherwise specifically approved by the EQC."

This policy statement was adopted by the Commission in January, 1977, and is one of two basic components of the Department's current water quality management strategy as it relates to the control of point source discharges. The second component is reflected in the minimum design criteria for treatment and control of wastes as stated in Oregon Administrative Rule (OAR) 340-41. These criteria are specific for each of Oregon's nineteen river basins and specify the minimum treatment design levels for both sewage treatment plants and industrial waste water sources. The treatment levels for sewage treatment plants, in part, state specific numerical criteria. For industrial sources, on the other hand, the criteria require highest and best practicable treatment and control which means that, as technology improves with time, the criteria become more stringent.

When developed, the minimum design criteria were designed to assure that projected growth during the twenty year planning period would not result in any additional waste loadings to the state's waters.

The regulations also provide that wherever minimum design criteria for waste treatment and control facilities set forth in the rules are more stringent than applicable federal standards and treatment levels currently being provided (emphasis provided), upgrading to the more stringent requirements will be deferred until it is necessary to expand or otherwise modify or replace the existing treatment facilities. (OAR 340-41-120(3)(c))

This water quality management strategy has been extremely beneficial to the protection of Oregon's water quality. It has forced the advance of treatment technology which might not have otherwise occurred. It recognizes

Memo to Environmental Quality Commission  
November 3, 1988

that Oregon's water bodies have a finite capacity to assimilate wastes and still meet water quality standards. Consequently, it has helped preserve the remaining, unused assimilative capacity of Oregon's rivers and streams by minimizing the increase of discharges into them. The strategy, however, inherently causes disparities that, over time, have become more glaring. First, because the strategy is not triggered for existing facilities until there is a need to upgrade or expand, some facilities still are only required to meet the minimum treatment level required by the Federal government.

The second disparity arises when a new sewage source is proposed for discharge. The new source may only be required to meet the basin's numerical standard for sewage treatment plants if adequate stream flow is available and uses will be protected. Theoretically, the new source could be located next to an existing source that, because of expansions due to growth, has had to progressively increase its level of treatment resulting in effluent limits much more stringent than the basin standard required of the new source.

Historically, the Department always evaluates the potential effects on water quality from proposed new or expanded sources. This evaluation, among other things, considers the dilution capabilities of the receiving stream and, in conjunction with the water quality management strategy discussed above, has represented the basic approach to controlling wastewater discharges from point sources. Admittedly, it is more of a technology-based approach than a strict water quality approach. However, it is not intended to allow loads to increase to the carrying capacity of the streams.

### ISSUES

1. As discussed above, application of this strategy can create some disparities or inequities between adjacent or similar sources. The Department does not believe that rules can be written that could anticipate the potential disparities and eliminate them from arising. Consequently, the Commission will continue to be faced with requests from sources to allow increased loadings. The issue then seems to be what criteria should be used in arriving at the decisions. A list of proposed criteria is attached as Attachment A.
2. Should new municipal sources be allowed only to meet the numerical minimum design criteria if a similar source along the same river system has been forced by the strategy to meet much more stringent treatment requirements? To be comparable to the approach for new industrial sources, it may be more appropriate for new municipal sources to meet treatment requirements equivalent to the highest level currently being required on that water body.
3. To what extent should the Commission involve itself in permit issuance decisions? In most permit actions, the Commission's role is to act as an appeal board. When the strategy was adopted, the Department did not

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envision that the Commission would be faced with very many requests. In fact, the Department referred only those requests to the Commission that were considered significant and dealt with the rest through the regular permit issuance procedure. The Department believes that strict application of the strategy currently required by the rules will force many minor decisions to the Commission for action. We do not believe it is a good use of Commission time to consider routine requests nor effective use of Department staff time in preparing Commission staff reports on these routine requests. We recommend that the Commission limit its review and required approval to those requests from principal dischargers as defined by EPA criteria. A list of the principal dischargers is attached as Attachment B.

DIRECTOR'S RECOMMENDATION

The Director recommends that:

1. The Commission recognize the criteria stated in Attachment A as the basis for considering requests for increased loadings under OAR 30-41-026(2).
2. The Commission direct the Department to proceed to rule-making to:
  - a. Change the minimum design criteria so that new municipal sewage treatment plants must meet the most stringent treatment requirements currently imposed on other sources discharging into the same water body.
  - b. Limit the sources for which the Commission would review requests for increased loadings to those defined as principal dischargers by EPA and DEQ.

Richard J. Nichols:kjc  
229-5324



**PROPOSED CRITERIA FOR CONSIDERATION OF INCREASED LOADINGS DUE TO  
EXPANSIONS OF EXISTING SEWAGE TREATMENT PLANTS AND INDUSTRIAL  
SOURCES**

1. Practicality of options to increased loads. The review of alternatives to increased loads concludes that there are no practicable alternatives. Obviously, practicability is not easily defined and must consider costs, available technology, public concerns, and other issues such as the environmental consequences of not requiring more stringent controls. An example: A sewage treatment plant currently discharges at a level of 10 mg/l each for BOD-5 and total suspended solids (TSS) on a monthly average. Growth has caused the plant to reach its capacity and the city proposes to double the size of the plant. Summer effluent irrigation is not possible because of steep slopes. Improved treatment over 10/10 would require expensive treatment technology. The receiving stream is large and has ample assimilative capacity for additional waste loadings.
  
2. Increased loading from an existing treatment plant is due to: the extension of sewers to an existing development served by on-site systems that currently cause a health hazard or groundwater contamination; the reduction of existing total loads discharged by eliminating raw sewage by-passes; or the construction of a regional plant to replace several smaller, less-efficient sewage treatment plants. In some cases, a particular sewage treatment plant may be asked to serve additional areas outside its existing service area to eliminate a water quality or public health concern. An example of this situation would be the City of Gresham which is extending sewers into mid-Multnomah County to eliminate the use of cesspools for waste disposal as required by the Environmental Quality Commission. The Commission allowed Gresham to retain its effluent concentration limits rather than provide a higher degree of treatment when serving mid-Multnomah County. In another case, a city's sewerage system is overtaxed with extraneous water, causing the sewer system to frequently by-pass raw waste and the plant to operate inefficiently. The excess water in the system resulted from combined sanitary and storm sewers, and groundwater infiltration due to leaky sewers. To address such a problem, the City of North Bend improved its sewer system and is expanding its plant. They are being allowed to maintain their effluent concentration limits. Finally, a plant may be selected to serve as a regional facility to replace a number of nearby smaller plants that are less efficient and would otherwise need to expand. The expanded sewage treatment plant at Roseburg is a case where this has happened. The upgrade of the Roseburg plant required a higher summer treatment level to meet the Umpqua Basin treatment and effluent dilution criteria. However, they were given higher winter permitted load limits for the larger plant flow while retaining secondary treatment during the wet weather season.

3. Environmental trade-offs may outweigh the benefits of restricting seasonal increased loadings. In some cases, there may be environmental advantages to allowing an increased loading to a particular stream. In addition, there may be undesirable environmental effects to the "no increase" alternative. Some examples:
- a. Philomath had an old conventional sewage treatment system that discharged reasonably well-treated effluent to the Marys River year-round. The new plant is a lagoon system that stores effluent through the summer so that no discharge occurs during the critical water quality period. Thus, loadings to the river are increased in the winter, but the flows in the Marys River are much greater at that time and the impacts significantly less.
  - b. Some smaller cities have few resources available to properly operate and maintain a mechanical sewage treatment plant. In such situations, it may be preferable to allow expansion of their present lagoon system resulting in increased loads during the wet weather period rather than requiring them to install a more efficient mechanical facility that cannot be reliably operated and maintained. An example would be the small sewage treatment plant at Henley School outside of Klamath Falls. The school district invariably seems to fail to put in the time and resources to properly operate and maintain its mechanical sewage treatment plant. Consequently, the plant frequently malfunctions and discharges much poorer effluent quality than would have been discharged by a lagoon which requires less operation and maintenance.
  - c. Although energy considerations have seemed to dim in most peoples' minds, it should still be a high priority with DEQ. While mechanical plants can achieve much better treatment than other less "high tech" systems, they do consume greater amounts of energy compared to lagoons and other "low tech" systems. In places where land is abundant and water quality considerations are not a concern because of ample dilution, low energy systems should be preferable.
  - d. High tech treatment systems also can generate secondary environmental problems that should be seriously considered. Large volumes of sludge is one example of a secondary problem that can be generated by installation of more sophisticated sewage treatment technology. In many areas west of the Cascade Mountains, the sludges may be difficult to dispose of, especially during the winter and spring, and may be of greater potential threat to public health and the environment than by allowing increased effluent loadings to the river during periods of high flow.

## ATTACHMENT B

## OREGON MAJOR INDUSTRIAL PERMITS AS OF APRIL 1, 1988

NAME	LOCATION	REF. NO.	TYPE
Chevron Chemical Company	St. Helens	OR000163-5	Fertilizer
Dee Forest Products, Inc.	Dee	OR000186-4	Hardboard
Evanite Hardboard, Inc.	Corvallis	OR000029-9	Hardboard
Georgia Pacific Corp.	Toledo	OR000134-1	Pulp&Paper
International Paper Co.	Gardiner	OR000022-1	Pulp&Paper
James River II, Inc.	Wauna	OR000079-5	Pulp&Paper
James River II, Inc.	West Linn	OR000078-7	Pulp&Paper
Northwest Aluminum	The Dalles	OR000170-8	Aluminum
Ore-Ida Corporation	Ontario	OR000240-2	Potatoes
Oregon Metallurgical	Albany	OR000171-1	Titanium
Pennwalt Corporation	Portland	OR000159-7	Chlorine
Pope & Talbot Pulp	Halsey	OR000107-4	Pulp&Paper
Portland General Electric	Prescott	OR002345-1	Nuc. Power
Reynolds Metals	Troutdale	OR000006-0	Aluminum
Rhone-Poulenc, Inc.	Portland	OR000174-1	Pesticide
Smurfit Newsprint	Newberg	OR000055-8	Pulp&Paper
Smurfit Newsprint	Oregon City	OR000056-6	Pulp&Paper
Teledyne Wah Chang Albany	Albany	OR000111-2	Zirconium
Tillamook County Creamery	Tillamook	OR000014-1	Cheese
Weyerhaeuser Company	North Bend	OR000211-9	Pulp&Paper
Weyerhaeuser Company	Klamath Falls	OR000254-2	Wood Prod.
Weyerhaeuser Company	Springfield	OR000051-5	Pulp&Paper
Willamette Industries	Albany	OR000044-2	Pulp&Paper
DELETIONS	- Hanna Mining and Nickel	OR000162-7	(Closed)
ADDITIONS	- Dee Forest Products, Inc.	OR000186-4	(Re-opened)

MAJOR MUNICIPAL INSPECTION SCHEDULE -- FY89  
July 1988 - June 1989

Source	EPA Reference No.	1st Quarter			2nd Quarter			3rd Quarter			4th Quarter		
		J	A	S	O	N	D	J	F	M	A	M	J
Albany, City of	CR-002880-1												
Ashland, City of	CR-002625-5												
Astoria, City of	CR-002756-1												
Clackamas Co. Svc. Dist. #1	CR-002622-1												
Coos Bay, City of #1	CR-002357-4												
Coos Bay, City of #2	CR-002358-2												
Corvallis, City of	CR-002636-1												
Cottage Grove, City of	CR-002055-9												
Grants Pass, City of	CR-002884-3												
Gresham, City of	CR-002613-1												
Hood River, City of	CR-002078-8												
Klamath Falls, City of	CR-002630-1												
La Grande, City of	CR-002046-0												
Isleton, City of	CR-002081-8												
McMinnville, City of	CR-002619-1												
Medford, City of	CR-002626-3												
MWD	CR-003122-4												
Newberg, City of	CR-002025-7												

ATTACHMENT B (Continued)

MAJOR MUNICIPAL INSPECTION SCHEDULE -- FY89  
July 1988 - June 1989

Source	EPA Reference No.	1st Quarter			2nd Quarter			3rd Quarter			4th Quarter		
		J	A	S	O	N	D	J	F	M	A	M	J
North Bend, City of	CR-002336-1												
Oak Lodge Svc. Dist.	CR-002514-0												
Rendleton, City of	CR-002639-5												
Portland, City of (Col. Blvd)	CR-002690-5												
Portland, City of (Troy Ct.)	CR-002689-1												
REA (Roseburg)	CR-002258-6												
Salem, City of (Willow Lake)	CR-002640-9												
South Suburban Svc. Dist.	CR-002387-6												
St. Helens, City of	CR-002387-6												
The Dalles, City of	CR-002066-4												
Tillamook, City of	CR-002066-4												
Tri-City Svc. Dist. (Oregon City)	CR-002829-1												
U.S.A. (Durham)	CR-002811-8												
U.S.A. (Forest Grove)	CR-002016-8												
U.S.A. (Rock Creek)	CR-002977-7												
U.S.A. (Westside)	CR-002334-5												
Woodburn, City of	CR-002000-1												

ATTACHMENT B (Continued)

COST COMPARISON OF ALTERNATIVES  
City of Halsey

<u>Alternative Description</u>	<u>Total Capital Cost</u>	<u>Annual Operations &amp; Maintenance Cost</u>	<u>Annual Cost/ House- hold</u>	<u>Monthly Charge/ House- hold</u>
1. Lagoon system, winter discharge, summer spray irrigation, 75% I/I reduction.	Total        \$1,098,890 EPA Cost    \$ 531,878 City Cost    \$ 567,012	\$50,311	\$490	\$41.00
2. Lagoon system with effluent polishing using intermittent sand filter	Total        \$693,420 EPA Cost    \$233,353 City Cost    \$460,067	\$43,384	\$418	\$36.00
3. Lagoon system, winter discharge, summer spray irrigation, 25% I/I reduction	Total        \$694,275 EPA Cost    \$233,353 City Cost    \$460,922	\$60,766	\$461	\$38.00
4. Lagoon system, winter discharge, summer holding	Total        \$449,920 EPA Cost    \$233,353 City Cost    \$216,567	\$34,957	\$283	\$24.00

Evaluation of Proposed Load Increases on  
Muddy Creek from the City of Halsey's Sewage Treatment Plant

The Water Quality Planning Section evaluated the proposed discharge load of treated sewage effluent between November 1 and April 30, the winter wet weather discharge period. Insufficient stream flow due to summer irrigation uses prevents the Department from permitting Halsey to discharge between May 1 and October 31, so the evaluation was limited to the winter wet weather period only.

Although limited winter wet weather stream flow data are available for Muddy Creek, it is known that the creek can overtop its banks during certain periods of intense rainfall. Therefore, to evaluate the appropriateness of the proposed discharge load on water quality, the minimum stream flow necessary for the proposed treated effluent discharge to have a negligible effect on instream dissolved oxygen was calculated.

Worst case assumptions were used in the analysis to determine the needed minimum stream flow at design flow and assuming the discharge of the proposed daily maximum BOD<sub>5</sub> effluent concentration. Because limited water quality data is available for Muddy Creek, several assumptions included Calapooia River water quality conditions. The Muddy Creek features are similar to the Calapooia and it lies within a similar drainage area.

The assumptions used in the analysis included:

1. The permitted maximum daily waste load could be as high as 198 lbs BOD<sub>5</sub> at design. This value is based on a BOD<sub>5</sub> concentration of 60 mg/l (two times the proposed secondary effluent criteria of 30 mg/l monthly average) at design flow.
2. The stream water temperature in November and April could reach a high of 15° C. At this temperature dissolved oxygen at 100 percent saturation equates to 10.15 mg/l dissolved oxygen. At these warmer water temperatures, less dissolved oxygen is saturated in water compared to cooler water temperatures. The water quality standard of a minimum of 95 percent dissolved oxygen for Muddy Creek translates to an instream dissolved oxygen concentration standard of 9.65 mg/l at this temperature. Thus, even at warmer temperatures, approximately 0.5 mg/l dissolved oxygen may be available to assimilate waste.
3. Under these worst case situations, a minimum stream flow of 75 cfs would assure that if the maximum daily BOD<sub>5</sub> was fully exerted, the instream dissolved oxygen standard would be maintained. If the dissolved oxygen concentration upstream of the proposed discharge was less than 10.15 mg/l at 15° C (95% saturation), the proposed discharge load would not add to any potential in-stream dissolved oxygen concerns, even under maximum permitted discharge loadings. The relationship of a

minimum stream flow of 75 cfs to the proposed discharge flow and daily maximum BOD<sub>5</sub> equates to a dilution factor of 0.48.

4. This minimum stream flow calculation assumes that the oxygen demand of 60 mg/l BOD<sub>5</sub> is fully exerted. Potential oxygen demand due to ammonia is assumed to be part of the 60 mg/l daily maximum BOD<sub>5</sub>. Stabilization ponds are capable of some nitrogen removal during the summer months. In addition, winter stream conditions do not promote nitrification (oxygen demand by bacteria in the conversion of ammonia to nitrate unless water temperatures are high). In order for discharges to be allowed during the November 1 through April 1 period, Halsey's permit requires a minimum stream flow of 75 cfs or a dilution factor of 0.48. This requirement would allow Halsey to discharge a volume of treated effluent under the design flow of 0.394 mgd or of higher quality than 60 mg/l BOD<sub>5</sub> if stream flows are less than 75 cfs, as long as the dilution factor is not exceeded. In addition, Halsey's permit requires installation of a staff gauge and regular stream flow monitoring during the discharge period.

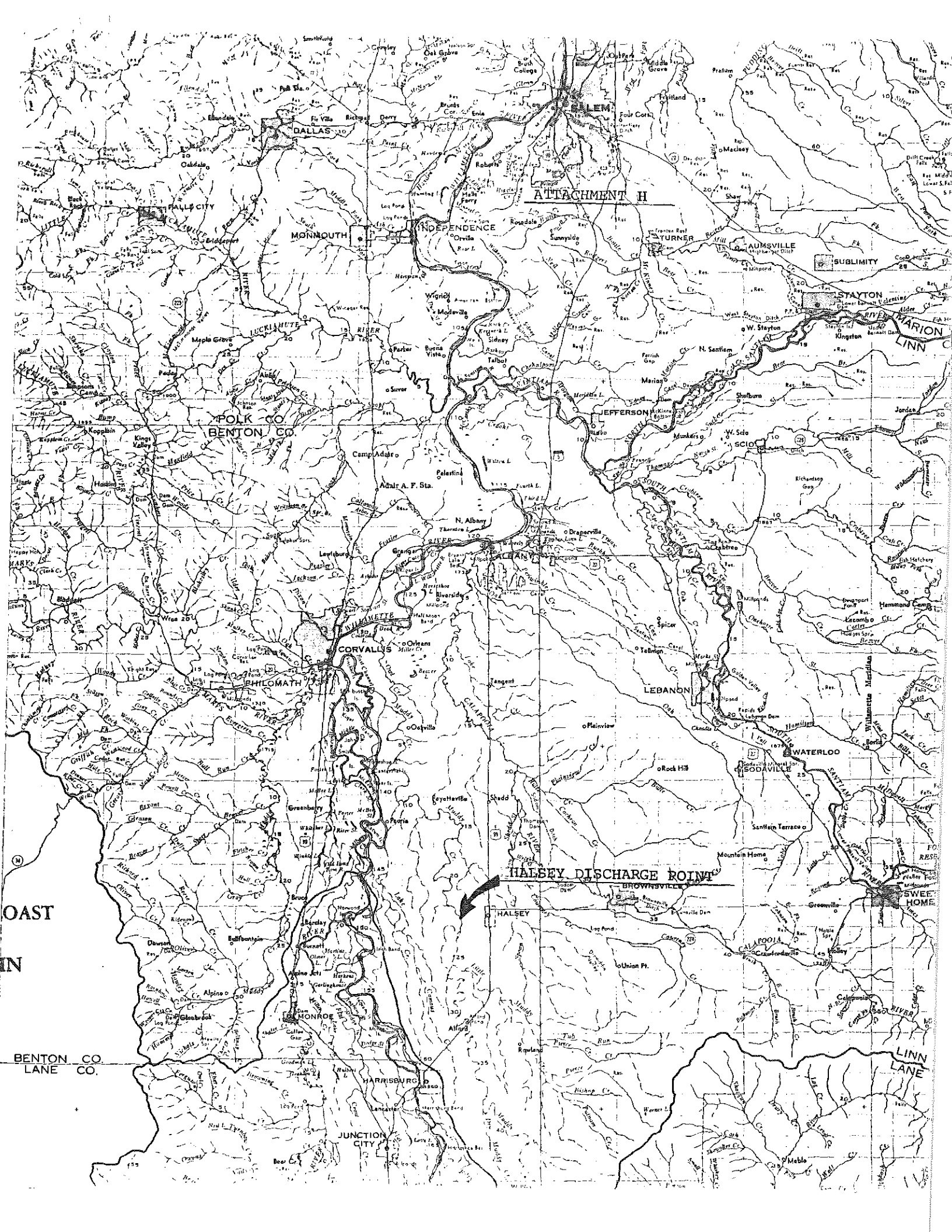
In addition to the evaluation of the proposed discharge with respect to dissolved oxygen, several other parameters were evaluated. This evaluation concludes that:

1. Review of water quality data for fecal coliform bacteria in the Calapooia River indicates that the concentrations of fecal coliform routinely exceed concentrations identified in the standard during winter months. In practice, these exceedances do not occur during the recreation season and are not be considered to significantly affect beneficial uses. High levels of fecal coliform are common in many streams in Oregon during high runoff events probably due to discharges from failing septic tank systems and other poorly controlled nonpoint sources. Since there are no fecal coliform data available for Muddy Creek, and Muddy Creek features are similar to the Calapooia, we would expect similar high fecal coliform densities in Muddy Creek during the winter months. The Department has no data that would associate these high fecal coliform concentrations with a point source such as the Halsey sewage treatment plant. The proposed expansion and upgrade of the Halsey plant would insure that the effluent discharged to Muddy Creek would not violate fecal coliform standards. The beneficial use of contact recreation does not appear to be impaired due to fecal coliform from the discharge by Halsey. Effluent from the upgraded sewage treatment facility would provide adequate treatment and disinfection such that the treated effluent itself will meet in-stream water quality standards for fecal coliform bacteria. The Department believes that the system proposed by Halsey will, if anything, reduce fecal coliform levels in Muddy Creek.
2. Nutrient loads of phosphorus and ammonia should not result in nuisance algal growth due to physical limitations during the winter discharge period.
3. To prevent chlorine toxicity to trout which use the Muddy Creek for passage, the chlorine residual should not exceed 0.11 mg/l chlorine in the mixing zone. At a minimum stream flow of 75 cfs, this calculates



to an effluent chlorine residual of 1.3 mg/l or 4.4 lbs. Dechlorination is not needed to achieve this concentration. During the review of engineering plans and specifications for the proposed improvements, the Department will ensure that the treatment facility's chlorine contact chamber is designed to meet the fecal coliform bacterial standard with levels of chlorine below 1 mg/l effluent chlorine residual.

4. Using effluent conductivity data collected during a mixing zone evaluation of Halsey's existing discharge, an effluent concentration of 600 mg/l total dissolved solids (TDS) can be calculated. At permitted flows, the TDS load would be 2000 lbs/day. The instream concentration of TDS would increase by 5 mg/l. No instream data on TDS is available; however, estimates of the 5 mg/l increase can be compared to the Willamette Basin total dissolved solids guideline of 100 mg/l using Calapooia water quality data. The reported median TDS concentration for the Calapooia is 93 mg/l. Thus, Muddy Creek water quality as a result of the proposed Halsey discharge may approach the guideline concentration of 100 mg/l TDS.
5. Instream temperature should not be affected by the proposed discharge. Pond effluent temperature should be similar to ambient stream temperatures during the proposed discharge period.



ATTACHMENT H

HALSEY DISCHARGE POINT  
BROWNSVILLE



OAST

IN

BENTON CO.  
LANE CO.

LINN  
LANE



## Environmental Quality Commission

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

### REQUEST FOR COMMISSION ACTION

Agenda Item H, December 9, 1988, EQC Meeting

Request for Exception to OAR 340-41-026(2) (An EQC Policy Requiring Growth and Development Be Accommodated Within Existing Permitted Loads) by the City of Adair Village, Oregon

#### ISSUE

Oregon regulations require that existing wastewater point source dischargers improve the level of treatment as growth occurs, so that total wasteloads to state waters do not increase. This anti-degradation policy allows for exceptions to be made by the Commission, on a case-by-case basis. The City of Adair Village has requested a wasteload increase.

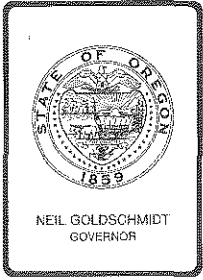
#### SUMMATION

- ✓ The City of Adair Village is proposing to expand its existing sewage treatment facilities. This expansion and upgrade is necessary to eliminate inadequate treatment facilities and to allow reserve capacity for expected population growth over the next twenty years.
- ✓ All reasonable alternative methods and levels of treatment were evaluated as part of the facilities planning process. Environmental impacts and cost information were examined for each alternative.
- ✓ The expected impact of increased wasteloads on existing water quality, the potential for violating water quality standards, and the impact on the beneficial uses of the receiving stream were evaluated. The Department determined that the requested wasteload increase could be granted without violating water quality standards or impairing beneficial uses.
- ✓ The cost of constructing, operating and maintaining the new treatment facilities were determined for each alternative treatment method. The costs for the treatment facilities capable of meeting existing load limits were prohibitively high, and far exceed EPA construction grants guidelines for "affordable" treatment works.

#### DIRECTOR'S RECOMMENDATION

The Department recommends that the Commission grant the requested wasteload increase for the City of Adair Village.

Tom Lucas:kjc  
WJ1285  
229-5415  
November 9, 1988



## 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, December 9, 1988, EQC Meeting

Request for Exceptions to OAR 340-41-026(2) (An EQC Policy Requiring Growth and Development be Accommodated Within Existing Permitted Loads) By the City of Adair Village.

### BACKGROUND

The City of Adair Village has an existing sewage treatment plant operating in violation of its permit limits, causing documented water quality problems. Adair Village is addressing these water quality concerns by applying for and receiving an EPA construction grant and a Community Development Block Grant (CDBG) for planning and construction.

As required prior to EPA grant issuance and construction activities, Adair Village prepared a wastewater facilities plan. This plan evaluated all reasonable treatment and disposal alternatives for environmental impact, capital and operating expenses, and reliability. A twenty year planning period with population growth consistent with the adopted Comprehensive Land Use Plan was used in evaluating each alternative. The City's financial capability to construct and operate an upgraded treatment plant was also analyzed.

The new Adair Village sewage treatment plant design is required to meet federal and state effluent standards, as well as numerous in-stream standards and limitations to protect water quality and the beneficial uses for the Willamette River (the proposed receiving stream). Growth and development are required to be accommodated within the permitted wasteloads for the existing Adair Village treatment facility, unless otherwise approved by the Environmental Quality Commission. These applicable effluent standards and in-stream standards are summarized in Attachment A. The full text of the standards is included in Attachment B.

Adair Village has selected the cost effective treatment alternative that will meet all effluent concentration limits, other treatment requirements such as proper disinfection, and will meet all in-stream protection standards at full design flows. However, the proposed alternative will exceed the currently permitted pounds per day limits for Biochemical Oxygen Demand (BOD) and Total Suspended Solids (TSS) during winter discharges. The proposed increases in winter discharges will be mitigated by eliminating all discharges to public waters during the summer, when receiving streams are more sensitive to pollutant loads. All discharges will be during the wet weather period when streamflows are high and recreational use is low.

The Commission's policy is stated in OAR 340-41-026: "In order to maintain the quality of waters in the State of Oregon, it is the policy of the EQC to require that growth and development be accommodated by increased efficiency and effectiveness of waste treatment and control such that future discharge loads from existing sources do not exceed presently allowed discharged loads unless otherwise specifically approved by the EQC." Adair Village has requested that the Commission grant an exception to allow for increased winter discharge loads.

A proposed NPDES permit renewal has been drafted that includes the proposed increased wasteload limits to be applicable upon completion of the improvements. The permit draft was made available for public comment in accordance with public notification requirements for NPDES permits. A public hearing on the proposed permit and load increase issue was held November 17, 1988. Public comment will be summarized, evaluated and included as an addenda for this staff report prior to the EQC meeting on December 9, 1988. The proposed NPDES permit is included in Attachment C.

#### EVALUATION

Adair Village, located ten miles north of Corvallis, has a population of 530. Its sewage treatment plant was originally built in 1958. It discharges to Bowers Slough, a tributary of the Willamette River. (See Attachment D)

The plant effluent is discharged year round to Bowers Slough. Summer flows in Bowers Slough are minimal to non-existent, except for the treatment plant effluent. Stream flows do not provide the minimum dilution required to prevent nuisance and potential public health concerns. A water quality survey of Bowers Slough upstream and downstream of the discharge point showed a violation of the dissolved oxygen standard downstream. Because of permit violations and the inadequate receiving stream, DEQ directed Adair Village to upgrade its sewage treatment plant and relocate the discharge point to an acceptable receiving stream by March 1, 1990.

The proposed new sewage treatment facility will provide capacity to serve the population equivalent of approximately 970 (880 residents, 90 population equivalent from schools, offices, commercial development). The projected population was determined based on a 2.33%/year increase over the next twenty years, which is consistent with the adopted and acknowledged Adair Village Comprehensive Plan. The new treatment lagoons will provide for summer storage of wastewater, and winter discharge to the Willamette River.

#### Evaluation Based On Criteria Discussed At November 3, 1988 Work Session

The Department's staff report presented on November 3, 1988 (Attachment E) recommended that three factors be used to evaluate any request for a wasteload increase. A proposed wasteload increase would not be required to qualify under all three categories. However, all three factors should be considered in the Department's evaluation. In addition to considering these three factors, the Commission directed the Department to comprehensively evaluate the impact of any proposed wasteload increase on water quality and beneficial uses.

1. Are There Any Practical Alternatives To The Proposed Wasteload Increase?

There are several treatment options that are capable of meeting the current mass load requirements, using readily available technology. The principal and significant disadvantage of these alternatives is the very high cost, which renders them prohibitively expensive to City residents. The alternatives considered are briefly described and associated costs shown in Attachment F.

For small communities, the cost of providing basic collection and treatment of sewage is becoming increasingly expensive. The treatment alternative proposed by Adair Village which includes a load increase will result in a cost to each household of \$35/month, or \$421/year. The least cost treatment alternative capable of meeting the existing load limits (no load increase) would cost approximately \$63/month, or \$750/year for each household. This compares to Portland's monthly charge of \$8.65, Salem's \$11.00/month, and Tangent's (population about the same as Adair Village) \$17.00/month.

The financial capability of each community to afford a sewerage project is evaluated by the Department prior to EPA grant award. Using EPA guidelines, it is recommended but not required that no project cost more than 1.75% of median household income. The chosen alternative, which includes a load increase, will cost each resident on average 2.3% of median household income. The least cost alternative capable of meeting the no load increase requirement would be about 4.1% of median household income, far beyond what is considered an "affordable" project.

2. Is The Increase In Wasteload At This Discharge Point Due To Relocating Existing Wasteloads?

This factor is not relevant to expansion and upgrade at the Adair Village sewage treatment facility. The load increases that are being requested are largely to accommodate future growth, rather than to serve existing wasteloads from failing septic tanks or other existing sources not currently reaching the sewage treatment plant. Prudent planning of public services requires that capacity be provided to accommodate reasonable growth. This planning is also required as part of developing a comprehensive land use plan under Oregon land use planning laws and regulations, and as part of the EPA grants program. The projected population growth for Adair Village is consistent with the adopted and acknowledged comprehensive land use plan for Adair Village.

3. Are There Environmental Trade-Offs That Outweigh The Benefits Of Restricting Wasteload Increases?

The proposed project will result in a significant improvement in water quality. The most significant impact will occur when the discharge to Bowers Slough is eliminated, and relocated to the Willamette River where adequate dilution for this discharge is available. A second improvement will result from the elimination of summer discharges to the Willamette

River system, when flows are lower and public use of the river is much greater.

The existing and proposed mass load limits are shown in Attachment G. The proposed BOD wasteloads will be slightly less than existing limits on an annual basis (a 4% decrease), but will be concentrated in the winter months (November 1 through April 30) with no discharge allowed during the other six months. The proposed TSS wasteloads will increase by about 37% on an annual basis.

4. What Will Be The Impact Of The Proposed Wasteload On Water Quality?

As described in more detail in Attachment H, the effects of the proposed wasteloads on water quality in the Willamette River were evaluated using actual existing measured water quality near the proposed discharge point and proposed maximum allowed daily discharges. Extreme worst case conditions in the Willamette River were used to determine whether further evaluation was needed. That is, if the analysis using extreme worst case conditions showed no impact on water quality, then one can be confident that there will be no impact under all conditions. The following parameters were evaluated: dissolved oxygen (which is affected by BOD); total dissolved solids; temperature; fecal coliform bacteria; and potential for nuisance algal growth.

Even using the extreme worst case condition, the proposed discharge is expected to have no measurable effect on the Willamette River beyond a small mixing zone (twenty-five foot radius of the point of discharge). The proposed discharge will therefore have no impact on beneficial uses in the Willamette River.

The impact on dissolved oxygen saturation is calculated at the worst to be a drop of 0.11%. This calculated decrease is considered negligible and is within the reporting error for dissolved oxygen analyses. Willamette River water quality data collected at Albany, immediately downstream, shows the dissolved oxygen standard is met 95% of the time during winter discharge periods (November through April), based on 60 samples over a ten year period (a minimum of 90% of saturation for dissolved oxygen is required). Some minor exceedances of water quality standards are common, and may indicate a natural variation in water quality. EPA guidance for assessing water quality suggests that at least 25% of the samples must exceed the standard before beneficial uses are considered not supported. Based on this guidance, the Department concludes that the Willamette River at Albany is not water quality limited for dissolved oxygen. Further, the negligible decrease in dissolved oxygen as a result of the requested increased loading is not expected to cause further exceedances of the dissolved oxygen standard.

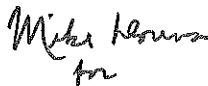
The proposed sewage treatment facility would provide positive disinfection such that the treated effluent itself will meet in-stream water quality standards for fecal coliform bacteria. In addition, the proposed sewer system upgrade will eliminate the one existing raw sewage bypass point.

As with almost every stream in Oregon, fecal coliform levels in the Willamette River sometimes exceed water quality standards in the winter. Sources of fecal coliform can be run-off from agricultural activities, failing septic tanks, and untreated sewage bypassed from overloaded sewers. The proposal from Adair Village would provide adequate treatment and disinfection, and will eliminate the one raw sewage bypass point. The Department believes the system proposed by Adair Village will, if anything, reduce fecal coliform levels in the Willamette River.

RECOMMENDATION

The Director recommends that the Commission grant the requested mass load increase to the City of Adair Village, based on the following findings:

1. The expected impact on water quality will not be measurable beyond a small mixing zone, and will be offset by the elimination of all summer discharges to public waters. There will be no impairment of beneficial uses or water quality standards violations outside of a small mixing zone.
2. The cost of complying with the existing mass load discharge limits would be unreasonably high.

  
for  
Fred Hansen  
Director

BA Burton:kjc  
229-5398  
WJ1281  
Attachments:

- A. Summary of Applicable Water Quality Standards
- B. Text of CFR 40 Part 133, OAR 340-41-455, OAR 340-41-026
- C. Proposed NPDES permit for Adair Village
- D. Map of Portion of Willamette River Basin
- E. "Proposed Criteria for Consideration of Increased Loadings Due to Expansions of Existing Sewage Treatment Plants or Industrial Sources", November 3, 1988.
- F. Treatment Alternatives and Associated Costs - City of Adair Village
- G. Discharge Limits - City of Adair Village
- H. Evaluation of the Impact on Water Quality From the Proposed Discharge Load From the City of Adair Village Sewage Treatment Facility



Applicable Water Quality Standards  
for Adair Village

All of the following standards apply to the new Adair Village sewage treatment facility. Where standards conflict, the most stringent applies. The following regulation descriptions are not the complete text of the regulations, but rather summarize the portions of interest. The full text of the regulations are included in Attachment B.

Federal Standards

CFR 40 Part 133 - Municipal sewage treatment plants are required to meet the equivalent of secondary treatment. For lagoons operating in Western Oregon, these effluent standards not to be exceeded are:

Biochemical oxygen demand: (BOD)	30 mg/l, thirty day average
	45 mg/l, seven day average
	60 mg/l, daily maximum
Total suspended solids: (TSS)	50 mg/l, thirty day average
	75 mg/l, seven day average
	100 mg/l, daily maximum

Minimum percent removal of BOD and TSS: 85%, monthly average, unless otherwise allowed by the Department. In no case may the percent removal be less than 65%.

The EPA adopted revisions to the secondary treatment regulations in September 1984 whereby an "treatment equivalent to secondary treatment" may be allowable for certain lagoon and trickling filter systems on a case-by-case basis. Treatment systems eligible for consideration for "equivalent secondary treatment" must demonstrate that the "standard" secondary treatment limitations are exceeded even with proper operation and maintenance of the system; a trickling filter or lagoon is used as the principal process; the treatment works provides significant biological treatment such that at least a 30-day average of 65 percent removal of BOD<sub>5</sub> is achieved, and water quality will not be adversely impacted. For qualifying facilities, the following equivalent secondary limits may be applied:

45 mg/l BOD<sub>5</sub> monthly average  
65 mg/l BOD<sub>5</sub> weekly average  
65% BOD<sub>5</sub> removal

45 mg/l TSS monthly average, except where an adjustment has been approved for lagoons.  
65 mg/l TSS weekly average, except where an adjustment has been approved for lagoons.  
65% TSS removal.

Oregon has applied the case-by-case "equivalent secondary treatment" definition to two facilities on an interim basis until such time as the facilities need to upgrade to accommodate growth. The higher BOD<sub>5</sub> limits are not proposed for Adair Village, however a percent removal less than 85% is appropriate for lagoon systems which have alternate approved TSS concentration limits of either 50 mg/l or 85 mg/l monthly average and where the influent concentration following a cost-effective I/I analysis will be less than 333 mg/l TSS.

### Oregon Regulations

OAR 340-41-455(1)(a),(g),(h) - New or modified municipal sewage treatment plants in the Willamette River Basin except the Tualatin River Subbasin are required to meet the following effluent discharge standards to public waters:

May 1 through October 31:

Biochemical oxygen demand: 10 mg/l, monthly average  
Total suspended solids: 10 mg/l, monthly average

or equivalent control such as land application of treated effluent.

November 1 through April 30:

Minimum of secondary treatment

Positive protection to prevent the discharge of raw or inadequately treated sewage shall be provided.

Treated sewage wastes shall be disinfected to an equivalent to thorough mixing with sufficient chlorine to provide a residual of at least 1 part per million after 60 minutes of contact time.

OAR 340-41-455(1)(f) - New or modified municipal sewage treatment plants must discharge to streams providing adequate dilution. The effluent BOD concentration in mg/l, divided by the dilution factor (ratio of receiving stream flow to effluent flow) shall not exceed one. [Example - if the effluent BOD is 30 mg/l, then the flow in the receiving stream must be at least 30 times greater than the effluent flow.]

OAR 340-41-445 - No wastes may be discharged that cause violations of water quality standards, outside of a mixing zone of initial dilution designated by the Department. These water quality parameters for which standards have been set include: dissolved oxygen as a percent of maximum theoretical concentration (% saturation); temperature increase; turbidity; pH; fecal coliform bacteria; dissolved gases that could interfere with beneficial uses; total dissolved solids; any conditions that are deleterious to fish or other aquatic life or that affect the potability of drinking water; aesthetic conditions offensive to human senses; radioisotope concentrations; and toxic substances.

OAR 340-41-445(4) - Mixing zones for discharges may be established. The mixing zone shall be as small as possible, and water within the mixing zone must be free of acutely toxic materials, materials that cause nuisance conditions such as floating debris and scum, and must minimize adverse

effects on aquatic life and other beneficial uses. No discharges are allowed that will threaten public health.

OAR 340-41-026 - Growth and development must be accommodated within existing permitted loads, unless otherwise authorized by the Commission.

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816, Pub. L. 92-500; 91 Stat. 1567, Pub. L. 95-217; 95 Stat. 1623, Pub. L. 97-117.

SOURCE: 49 FR 37006, Sept. 20, 1984, unless otherwise noted.

## § 133.100 Purpose.

This part provides information on the level of effluent quality attainable through the application of secondary or equivalent treatment.

## § 133.101 Definitions.

Terms used in this part are defined as follows:

(a) "7-day average." The arithmetic mean of pollutant parameter values for samples collected in a period of 7 consecutive days.

(b) "30-day average." The arithmetic mean of pollutant parameter values of samples collected in a period of 30 consecutive days.

(c) "Act." The Clean Water Act (33 U.S.C. 1251 *et seq.*, as amended).

(d) "BOD." The five day measure of the pollutant parameter biochemical oxygen demand (BOD).

(e) "CBOD<sub>5</sub>." The five day measure of the pollutant parameter carbonaceous biochemical oxygen demand (CBOD<sub>5</sub>).

(f) "Effluent concentrations consistently achievable through proper operation and maintenance." (1) For a given pollutant parameter, the 95th percentile value for the 30-day average effluent quality achieved by a treatment works in a period of at least two years, excluding values attributable to upsets, bypasses, operational errors, or other unusual conditions, and (2) a 7-day average value equal to 1.5 times the value derived under paragraph (f)(1) of this section.

(g) "Facilities eligible for treatment equivalent to secondary treatment." Treatment works shall be eligible for consideration for effluent limitations described for treatment equivalent to secondary treatment (§ 133.105), if:

(1) The BOD<sub>5</sub> and SS effluent concentrations consistently achievable through proper operation and maintenance (§ 133.101(f)) of the treatment works exceed the minimum level of the effluent quality set forth in §§ 133.102(a) and 133.102(b),

## PART 133—SECONDARY TREATMENT REGULATION

## Sec.

133.100 Purpose.

133.101 Definitions.

133.102 Secondary treatment.

133.103 Special considerations.

133.104 Sampling and test procedures.

133.105 Treatment equivalent to secondary treatment.

**AUTHORITY:** Secs. 301(b)(1)(B), 304(d)(1), 304(d)(4), 308, and 501 of the Federal Water Pollution Control Act as amended by the Federal Water Pollution Control Act Amendments of 1972, the Clean Water Act of 1977, and the Municipal Wastewater Treatment Construction Grant Amendments of 1981; 33 U.S.C. 1311(b)(1)(B), 1314(d) (1) and (4), 1318, and 1361; 86 Stat.

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(2) A trickling filter or waste stabilization pond is used as the principal process, and

(3) The treatment works provide significant biological treatment of municipal wastewater.

(h) "mg/l." Milligrams per liter.

(i) "NPDES." National Pollutant Discharge Elimination System.

(j) "Percent removal." A percentage expression of the removal efficiency across a treatment plant for a given pollutant parameter, as determined from the 30-day average values of the raw wastewater influent pollutant concentrations to the facility and the 30-day average values of the effluent pollutant concentrations for a given time period.

(k) "Significant biological treatment." The use of an aerobic or anaerobic biological treatment process in a treatment works to consistently achieve a 30-day average of a least 65 percent removal of BOD<sub>5</sub>.

(l) "SS." The pollutant parameter total suspended solids.

(m) "Significantly more stringent limitation" means BOD<sub>5</sub> and SS limitations necessary to meet the percent removal requirements of at least 5 mg/l more stringent than the otherwise applicable concentration-based limitations (e.g., less than 25 mg/l in the case of the secondary treatment limits for BOD<sub>5</sub> and SS), or the percent removal limitations in §§ 133.102 and 133.105, if such limits would, by themselves, force significant construction or other significant capital expenditure.

(n) "State Director" means the chief administrative officer of any State or interstate agency operating an "approved program," or the delegated representative of the State Director.

[49 FR 37006, Sept. 20, 1984; 49 FR 40405, Oct. 16, 1984, as amended at 50 FR 23387, June 3, 1985]

§ 133.102 Secondary treatment.

The following paragraphs describe the minimum level of effluent quality attainable by secondary treatment in terms of the parameters—BOD<sub>5</sub>, SS and pH. All requirements for each parameter shall be achieved except as provided for in §§ 133.103 and 133.105.

(a) BOD<sub>5</sub>.

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(1) The 30-day average shall not exceed 30 mg/l.

(2) The 7-day average shall not exceed 45 mg/l.

(3) The 30-day average percent removal shall not be less than 85 percent.

(4) At the option of the NPDES permitting authority, in lieu of the parameter BOD<sub>5</sub> and the levels of the effluent quality specified in paragraphs (a)(1), (a)(2) and (a)(3), the parameter CBOD<sub>5</sub> may be substituted with the following levels of the CBOD<sub>5</sub> effluent quality provided:

(i) The 30-day average shall not exceed 25 mg/l.

(ii) The 7-day average shall not exceed 40 mg/l.

(iii) The 30-day average percent removal shall not be less than 85 percent.

(b) SS. (1) The 30-day average shall not exceed 30 mg/l.

(2) The 7-day average shall not exceed 45 mg/l.

(3) The 30-day average percent removal shall not be less than 85 percent.

(c) pH. The effluent values for pH shall be maintained within the limits of 6.0 to 9.0 unless the publicly owned treatment works demonstrates that: (1) Inorganic chemicals are not added to the waste stream as part of the treatment process; and (2) contributions from industrial sources do not cause the pH of the effluent to be less than 6.0 or greater than 9.0.

[49 FR 37006, Sept. 20, 1984; 49 FR 40405, Oct. 16, 1984]

§ 133.103 Special considerations.

(a) Combined sewers. Treatment works subject to this part may not be capable of meeting the percentage removal requirements established under §§ 133.102(a)(3) and 133.102(b)(3), or §§ 133.105(a)(3) and 133.105(b)(3) during wet weather where the treatment works receive flows from combined sewers (i.e., sewers which are designed to transport both storm water and sanitary sewage). For such treatment works, the decision must be made on a case-by-case basis as to whether any attainable percentage re-

removal level can be defined, and if so, what the level should be.

(b) *Industrial wastes.* For certain industrial categories, the discharge to navigable waters of BOD<sub>5</sub> and SS permitted under sections 301(b)(1)(A)(i), (b)(2)(E) or 306 of the Act may be less stringent than the values given in §§ 133.102(a)(1), 133.102(a)(4)(i), 133.102(b)(1), 133.105(a)(1), 133.105(b)(1) and 133.105(e)(1)(i). In cases when wastes would be introduced from such an industrial category into a publicly owned treatment works, the values for BOD<sub>5</sub> and SS in §§ 133.102(a)(1), 133.102(a)(4)(i), 133.102(b)(1), 133.105(a)(1), 133.105(b)(1), and 133.105(e)(1)(i) may be adjusted upwards provided that: (1) The permitted discharge of such pollutants, attributable to the industrial category, would not be greater than that which would be permitted under sections 301(b)(1)(A)(i), 301(b)(2)(E) or 306 of the Act if such industrial category were to discharge directly into the navigable waters, and (2) the flow or loading of such pollutants introduced by the industrial category exceeds 10 percent of the design flow or loading of the publicly owned treatment works. When such an adjustment is made, the values for BOD<sub>5</sub> or SS in §§ 133.102(a)(2), 133.102(a)(4)(ii), § 133.102(b)(2), 133.105(a)(2), 133.105(b)(2), and 133.105(e)(1)(ii) should be adjusted proportionately.

(c) *Waste stabilization ponds.* The Regional Administrator, or, if appropriate, State Director subject to EPA approval, is authorized to adjust the minimum levels of effluent quality set forth in § 133.105 (b)(1), (b)(2), and (b)(3) for treatment works subject to this part, to conform to the SS concentrations achievable with waste stabilization ponds, provided that: (1) Waste stabilization ponds are the principal process used for secondary treatment; and (2) operation and maintenance data indicate that the SS values specified in § 133.105 (b)(1), (b)(2), and (b)(3) cannot be achieved. The term "SS concentrations achievable with waste stabilization ponds" means a SS value, determined by the Regional Administrator, or, if appropriate, State Director subject to EPA approval, which is equal to the effluent concen-

tration achieved 90 percent of the time within a State or appropriate contiguous geographical area by waste stabilization ponds that are achieving the levels of effluent quality for BOD<sub>5</sub> specified in § 133.105(a)(1). [cf. 43 FR 55279].

(d) *Less concentrated influent wastewater for separate sewers.* The Regional Administrator or, if appropriate, State Director is authorized to substitute either a lower percent removal requirement or a mass loading limit for the percent removal requirements set forth in §§ 133.102(a)(3), 133.102(a)(4)(iii), 133.102(b)(3), 102.105(a)(3), 133.105(b)(3) and 133.105(e)(1)(iii) provided that the permittee satisfactorily demonstrates that: (1) The treatment works is consistently meeting, or will consistently meet, its permit effluent concentration limits but its percent removal requirements cannot be met due to less concentrated influent wastewater, (2) to meet the percent removal requirements, the treatment works would have to achieve significantly more stringent limitations than would otherwise be required by the concentration-based standards, and (3) the less concentrated influent wastewater is not the result of excessive I/I. The determination of whether the less concentrated wastewater is the result of excessive I/I will use the definition of excessive I/I in 40 CFR 35.2005(b)(16) plus the additional criterion that inflow is nonexcessive if the total flow to the POTW (i.e., wastewater plus inflow plus infiltration) is less than 275 gallons per capita per day.

[49 FR 37006, Sept. 20, 1984, as amended at 50 FR 23387, June 3, 1985; 50 FR 36880, Sept. 10, 1985]

#### § 133.104 Sampling and test procedures.

(a) Sampling and test procedures for pollutants listed in this part shall be in accordance with guidelines promulgated by the Administrator in 40 CFR Part 136.

(b) Chemical oxygen demand (COD) or total organic carbon (TOC) may be substituted for BOD<sub>5</sub> when a long-term BOD:COD or BOD:TOC correlation has been demonstrated.

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§ 133.105 Treatment equivalent to secondary treatment.

by OMB and assigned control number 2040-0051.)

This section describes the minimum level of effluent quality attainable by facilities eligible for treatment equivalent to secondary treatment (§ 133.101(g)) in terms of the parameters—BOD<sub>5</sub>, SS and pH. All requirements for the specified parameters in paragraphs (a), (b) and (c) of this section shall be achieved except as provided for in § 133.103, or paragraphs (d), (e) or (f) of this section.

(a) *BOD<sub>5</sub>*. (1) The 30-day average shall not exceed 45 mg/l.

(2) The 7-day average shall not exceed 65 mg/l.

(3) The 30-day average percent removal shall not be less than 65 percent.

(b) *SS*. Except where SS values have been adjusted in accordance with § 133.103(c):

(1) The 30-day average shall not exceed 45 mg/l.

(2) The 7-day average shall not exceed 65 mg/l.

(3) The 30-day average percent removal shall not be less than 65 percent.

(c) *pH*. The requirements of § 133.102(c) shall be met.

(d) *Alternative State requirements*. Except as limited by paragraph (f) of this section, and after notice and opportunity for public comment, the Regional Administrator, or, if appropriate, State Director subject to EPA approval, is authorized to adjust the minimum levels of effluent quality set forth in paragraphs (a)(1), (a)(2), (b)(1) and (b)(2) of this section for trickling filter facilities and in paragraphs (a)(1) and (a)(2) of this section for waste stabilization pond facilities, to conform to the BOD<sub>5</sub> and SS effluent concentrations consistently achievable through proper operation and maintenance (§ 133.101(f)) by the median (50th percentile) facility in a representative sample of facilities within a State or appropriate contiguous geographical area that meet the definition of facilities eligible for treatment equivalent to secondary treatment (§ 133.101(g)).

(The information collection requirements contained in this rule have been approved

(e) *CBOD<sub>5</sub>* limitations:

(1) Where data are available to establish CBOD<sub>5</sub> limitations for a treatment works subject to this section, the NPDES permitting authority may substitute the parameter CBOD<sub>5</sub> for the parameter BOD<sub>5</sub>. In §§ 133.105(a)(1), 133.105(a)(2) and 133.105(a)(3), on a case-by-case basis provided that the levels of CBOD<sub>5</sub> effluent quality are not less stringent than the following:

(i) The 30-day average shall not exceed 40 mg/l.

(ii) The 7-days average shall not exceed 60 mg/l.

(iii) The 30-day average percent removal shall not be less than 65 percent.

(2) Where data are available, the parameter CBOD<sub>5</sub> may be used for effluent quality limitations established under paragraph (d) of this section. Where concurrent BOD effluent data are available, they must be submitted with the CBOD data as a part of the approval process outlined in paragraph (d) of this section.

(f) *Permit adjustments*. Any permit adjustment made pursuant to this part may not be any less stringent than the limitations required pursuant to § 133.105(a)-(e). Furthermore, permitting authorities shall require more stringent limitations when adjusting permits if: (1) For existing facilities the permitting authority determines that the 30-day average and 7-day average BOD<sub>5</sub> and SS effluent values that could be achievable through proper operation and maintenance of the treatment works, based on an analysis of the past performance of the treatment works, would enable the treatment works to achieve more stringent limitations, or

(2) For new facilities, the permitting authority determines that the 30-day average and 7-day average BOD<sub>5</sub> and SS effluent values that could be achievable through proper operation and maintenance of the treatment works, considering the design capability of the treatment process and geographical and climatic conditions, would enable the treatment works to achieve more stringent limitations.

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solved chemical substances, toxic materials, radioactivity, turbidities, color, odor, and other deleterious factors at the lowest possible levels.

(2) No wastes shall be discharged and no activities shall be conducted which either alone or in combination with other wastes or activities will cause violation of the following standards in the waters of the Willamette River Basin:

(a) Dissolved oxygen (DO):

(A) Multnomah Channel and main stem Willamette River from mouth to the Willamette Falls at Oregon City, river mile 26.6: The DO concentrations shall not be less than 5 mg/l.

(B) Main stem Willamette River from the Willamette Falls to Newberg, river mile 50: The DO concentrations shall not be less than 6 mg/l.

(C) Main stem Willamette River from Newberg to Salem, river mile 85: The DO concentrations shall not be less than 7 mg/l.

(D) Main stem Willamette River from Salem to confluence of Coast and Middle Forks, river mile 187: The DO concentrations shall not be less than 90% of saturation.

(E) All other Willamette Basin streams:

(i) Salmonid fish producing waters: The DO concentration shall not be less than 90% of saturation at seasonal low or less than 95% of saturation in spawning areas during spawning, incubation, hatching, and fry stages of salmonid fishes.

(ii) Non-Salmonid fish producing waters: The DO concentration shall not be less than 6 mg/l.

(F) Columbia River (river mile 86 to 120): The DO concentration shall not be less than 90% of saturation.

(b) Temperature:

(A) Multnomah Channel and the main stem Willamette River from mouth to Newberg, river mile 50: 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 70° F. or greater; or more than 0.5° F. increase due to a single-source discharge when receiving water temperatures are 69.5° F. or less; or more than 2° F. increase due to all sources combined when stream temperatures are 68° F. or less, except for specifically limited duration activities which may be authorized by DEQ under such conditions as DEQ and the Department of Fish and Wildlife may prescribe and which are necessary to accommodate legitimate uses or activities where temperatures in excess of this standard are unavoidable and all practical preventive techniques have been applied to minimize temperature rises. The Director shall hold a public hearing when a request for an exception to the temperature standard for a planned activity or discharge will in all probability adversely affect the beneficial uses.

(B) Willamette River from Newberg to confluence of Coast and Middle Forks, river mile 187: 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 64° F. or greater; or more than 0.5° F. increase due to a single-source discharge when receiving water temperatures are 63.5° F. or less; or more than 2° F. increase due to all sources combined when stream temperatures are 62° F. or less, except for specifically limited duration activities which may be authorized by DEQ under such conditions as DEQ and the Department of Fish and Wildlife may prescribe and

Willamette Basin

Beneficial Water Uses to be Protected

340-41-442 Water quality in the Willamette River Basin (see Figures 1 and 7) shall be managed to protect the recognized beneficial uses as indicated in Table 6.

Stat. Auth.: ORS Ch. 468

Hist.: DEQ 128, f. & cf. 1-21-77

Water Quality Standards Not to be Exceeded (To be Adopted Pursuant to ORS 468.735 and Enforceable Pursuant to ORS 468.720, 468.990, and 468.992)

340-41-445 (1) Notwithstanding the water quality standards contained below, the highest and best practicable treatment and/or control of wastes, activities, and flows shall in every case be provided so as to maintain dissolved oxygen and overall water quality at the highest possible levels and water temperatures, coliform bacteria concentrations, dis-



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which are necessary to accommodate legitimate uses or activities where temperatures in excess of this standard are unavoidable and all practical preventive techniques have been applied to minimize temperature rises. The Director shall hold a public hearing when a request for an exception to the temperature standard for a planned activity or discharge will in all probability adversely affect the beneficial uses.

(C) All other Willamette Basin streams:

(i) Salmonid fish 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, except for specifically limited duration activities which may be authorized by DEQ under such conditions as DEQ and the Department of Fish and Wildlife may prescribe and which are necessary to accommodate legitimate uses or activities where temperatures in excess of this standard are unavoidable and all practical preventive techniques have been applied to minimize temperature rises. The Director shall hold a public hearing when a request for an exception to the temperature standard for a planned activity or discharge will in all probability adversely affect the beneficial uses.

(ii) Non-Salmonid fish 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 64° F. or greater, or more than 0.5° F. increase due to a single-source discharge when receiving water temperatures are 63.5° F. or less; or more than 2° F. increase due to all sources combined when stream temperatures are 62° F. or less, except for specifically limited duration activities which may be authorized by DEQ under such conditions as DEQ and the Department of Fish and Wildlife may prescribe and which are necessary to accommodate legitimate uses or activities where temperatures in excess of this standard are unavoidable and all practical preventive techniques have been applied to minimize temperature rises. The Director shall hold a public hearing when a request for an exception to the temperature standard for a planned activity or discharge will in all probability adversely affect the beneficial uses.

(D) Columbia River: 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 68° F. or greater, or more than 0.5° F. increase due to a single-source discharge when receiving water temperatures are 67.5° F. or less; or more than 2° F. increase due to all sources combined when stream temperatures are 66° F. or less, except for specifically limited duration activities which may be authorized by DEQ under such conditions as DEQ and the Department of Fish and Wildlife may prescribe and which are necessary to accommodate legitimate uses or activities where temperatures in excess of this standard are unavoidable and all practical preventive techniques have been applied to minimize temperature rises. The Director shall hold a public hearing when a request for an exception to the temperature standard for a planned activity or discharge will in all probability adversely affect the beneficial uses.

(c) Turbidity (Jackson Turbidity Units, JTU): No more than a 10 percent cumulative increase in natural stream turbidities shall be allowed, as measured relative to a control point immediately upstream of the turbidity causing activity. However, limited duration activities necessary to address an emergency or to accommodate essential dredging, construction or other legitimate activities and which cause the standard to be exceeded may be authorized provided all practicable turbidity control techniques have been applied and one of the following has been granted:

(A) Emergency activities: Approval coordinated by DEQ with the Department of Fish and Wildlife under conditions they may prescribe to accommodate response to emergencies or to protect public health and welfare.

(B) Dredging, Construction or other Legitimate Activities: Permit or certification authorized under terms of Section 401 or 404 (Permits and Licenses, Federal Water Pollution Control Act) or OAR 141-85-100 et seq. (Removal and Fill Permits, Division of State Lands), with limitations and conditions governing the activity set forth in the permit or certificate.

(d) pH (hydrogen ion concentration): pH values shall not fall outside the following ranges:

(A) Columbia River: 7.0 to 8.5.

(B) All other basin waters: 6.5 to 8.5.

(e) Organisms of the coliform group where associated with fecal sources (MPN or equivalent MF using a representative number of samples):

(A) Main stem Willamette River (river miles 0 to 187) and Multnomah Channel: A log mean of 200 fecal coliform per 100 milliliters based on a minimum of 5 samples in a 30-day period with no more than 10 percent of the samples in the 30-day period exceeding 400 per 100 ml.

(B) All other Willamette Basin streams: A log mean of 200 fecal coliform per 100 milliliters based on a minimum of 5 samples in a 30-day period with no more than 10 percent of the samples in the 30-day period exceeding 400 per 100 ml.

(C) Columbia River:

(i) Upstream from Highway 5 bridge between Portland and Vancouver (river mile 106.5): A log mean of 200 fecal coliform per 100 milliliters based on a minimum of 5 samples in a 30-day period with no more than 10 percent of the samples in the 30-day period exceeding 400 per 100 ml.

(ii) Downstream from Highway 5 bridge between Portland and Vancouver (river miles 0 to 106.5): A log mean of 200 fecal coliform per 100 milliliters based on a minimum of 5 samples in a 30-day period with no more than 10 percent of the samples in the 30-day period exceeding 400 per 100 ml.

(f) Bacterial pollution or other conditions deleterious to waters used for domestic purposes, livestock watering, irrigation, bathing, or shellfish propagation, or otherwise injurious to public health shall not be allowed.

(g) The liberation of dissolved gases, such as carbon dioxide, hydrogen sulfide, or other gases, in sufficient quantities to cause objectionable odors or to be deleterious to fish or other aquatic life, navigation, recreation, or other reasonable uses made of such waters shall not be allowed.

(h) The development of fungi or other growths having a deleterious effect on stream bottoms, fish or other aquatic life, or which are injurious to health, recreation, or industry shall not be allowed.

(i) The creation of tastes or odors or toxic or other conditions that are deleterious to fish or other aquatic life or

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affect the potability of drinking water or the palatability of fish or shellfish shall not be allowed.

(j) The formation of appreciable bottom or sludge deposits or the formation of any organic or inorganic deposits deleterious to fish or other aquatic life or injurious to public health, recreation, or industry shall not be allowed.

(k) Objectionable discoloration, scum, oily sleek or floating solids, or coating of aquatic life with oil films shall not be allowed.

(l) Aesthetic conditions offensive to the human senses of sight, taste, smell, or touch shall not be allowed.

(m) Radioisotope concentrations shall not exceed maximum permissible concentrations (MPC's) in drinking water, edible fishes or shellfishes, wildlife, irrigated crops, livestock and dairy products, or pose an external radiation hazard.

(n) The concentration of total dissolved gas relative to atmospheric pressure at the point of sample collection shall not exceed one hundred and ten percent (110%) of saturation, except when stream flow exceeds the 10-year, 7-day average flood. However, for Hatchery receiving waters and waters of less than 2 feet in depth, the concentration of total dissolved gas relative to atmospheric pressure at the point of sample collection shall not exceed one hundred and five percent (105%) of saturation.

(o) **Total Dissolved Solids:** Guide concentrations listed below shall not be exceeded unless otherwise specifically authorized by DEQ upon such conditions as it may deem necessary to carry out the general intent of this plan and to protect the beneficial uses set forth in rule 340-41-442:

- (A) Columbia River . . . . . 500 mg/l
- (B) Willamette River & Tributaries . . . . . 100.0 mg/l

(p) **Toxic Substances:**

(A) Toxic substances shall not be introduced above natural background levels in the waters of the state in amounts, concentrations, or combinations which may be harmful, may chemically change to harmful forms in the environment, or may bioaccumulate to levels that adversely affect public health, safety, or welfare; aquatic life; or other designated beneficial uses.

(B) Levels of toxic substances shall not exceed the most recent criteria values for organic and inorganic pollutants established by EPA and published in *Quality Criteria for Water* (1986). A list of the criteria is presented in Table 20.

(C) The criteria in paragraph (B) of this subsection shall apply unless data from scientifically valid studies demonstrate that the most sensitive designated beneficial uses will not be adversely affected by exceeding a criterion or that a more restrictive criterion is warranted to protect beneficial uses, as accepted by the Department on a site specific basis. Where no published EPA criteria exist for a toxic substance, public health advisories and other published scientific literature may be considered and used, if appropriate, to set guidance values.

(D) Bio-assessment studies such as laboratory bioassays or instream measurements of indigenous biological communities, shall be conducted, as the Department deems necessary, to monitor the toxicity of complex effluents, other suspected discharges or chemical substances without numeric criteria, to aquatic life. These studies, properly conducted in accordance with standard testing procedures, may be considered as scientifically valid data for the purposes of paragraph (C) of this subsection. If toxicity occurs,

the Department shall evaluate and implement measures necessary to reduce toxicity on a case-by-case basis.

(3) Where the natural quality parameters of waters of the Willamette River Basin are outside the numerical limits of the above assigned water quality standards, the natural water quality shall be the standard.

(4) **Mixing zones:**

(a) The Department may allow a designated portion of a receiving water to serve as a zone of initial dilution for waste waters and receiving waters to mix thoroughly and this zone will be defined as a mixing zone.

(b) The Department may suspend all or part of the water quality standards, or set less restrictive standards, in the defined mixing zone, provided that the following conditions are met:

(A) The water within the mixing zone shall be free of:

(i) Materials in concentrations that will cause acute (96HLC50) toxicity to aquatic life. Acute toxicity is measured as the lethal concentration that causes 50 percent mortality of organisms within a 96-hour test period.

(ii) Materials that will settle to form objectionable deposits.

(iii) Floating debris, oil, scum, or other materials that cause nuisance conditions.

(iv) Substances in concentrations that produce deleterious amounts of fungal or bacterial growths.

(B) The water outside the boundary of the mixing zone shall:

(i) Be free of materials in concentrations that will cause chronic (sublethal) toxicity. Chronic toxicity is measured as the concentration that causes long-term sublethal effects, such as significantly impaired growth or reproduction in aquatic organisms, during a testing period based on test species life cycle. Procedures and end points will be specified by the Department in waste water discharge permits.

(ii) Meet all other water quality standards under normal annual low flow conditions.

(c) The limits of the mixing zone shall be described in the waste water discharge permit. In determining the location, surface area, and volume of a mixing zone area, the Department may use appropriate mixing zone guidelines to assess the biological, physical, and chemical character of receiving waters, and effluent, and the most appropriate placement of the outfall, to protect instream water quality, public health, and other beneficial uses. Based on receiving water and effluent characteristics, the Department shall define a mixing zone in the immediate area of a waste water discharge to:

(A) Be as small as feasible;

(B) Avoid overlap with any other mixing zones to the extent possible and be less than the total stream width as necessary to allow passage of fish and other aquatic organisms;

(C) Minimize adverse effects on the indigenous biological community especially when species are present that warrant special protection for their economic importance, tribal significance, ecological uniqueness, or for other similar reasons as determined by the Department;

(D) Not threaten public health;

(E) Minimize adverse effects on other designated beneficial uses outside the mixing zone.

(d) The Department may request the applicant of a permitted discharge for which a mixing zone is required, to

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submit all information necessary to define a mixing zone, such as:

- (A) Type of operation to be conducted;
  - (B) Characteristics of effluent flow rates and composition;
  - (C) Characteristics of low flows of receiving waters;
  - (D) Description of potential environmental effects;
  - (E) Proposed design for outfall structures.
- (e) The Department may, as necessary, require mixing zone monitoring studies and/or bioassays to be conducted to evaluate water quality or biological status within and outside the mixing zone boundary.

(f) The Department may change mixing zone limits or require the relocation of an outfall if it determines that the water quality within the mixing zone adversely affects any existing beneficial uses in the receiving waters.

(5) Testing methods: The analytical testing methods for determining compliance with the water quality standards contained in this rule shall be in accordance with the most recent edition of *Standard Methods for the Examination of Water and Waste Water* published jointly by the American Public Health Association, American Water Works Association, and Water Pollution Control Federation, unless the Department has published an applicable superseding method, in which case testing shall be in accordance with the superseding method; provided, however, that testing in accordance with an alternative method shall comply with this rule if the Department has published the method or has approved the method in writing.

[Publications: The publication(s) referred to or incorporated by reference in this rule are available from the office of the Department of Environmental Quality.]

Stat. Auth.: ORS Ch. 468

Hist.: DEQ 128, f. & ef. 1-21-77; DEQ 1-1980, f. & ef. 1-9-80; DEQ 18-1987, f. & ef. 9-4-87

**Minimum Design Criteria for Treatment and Control of Wastes**

**340-41-455** Subject to the implementation program set forth in rule 340-41-120, prior to discharge of any wastes from any new or modified facility to any waters of the Willamette River Basin, such wastes shall be treated and controlled in facilities designed in accordance with the following minimum criteria (In designing treatment facilities, average conditions and a normal range of variability are generally used in establishing design criteria. A facility once completed and placed in operation should operate at or near the design limit most of the time, but may operate below the design criteria limit at times due to variables which are unpredictable or uncontrollable. This is particularly true for biological treatment facilities. The actual operating limits are intended to be established by permit pursuant to ORS 468.740 and recognize that the actual performance level may at times be less than the design criteria.):

- (1) Sewage wastes:
  - (a) Willamette River and tributaries except Tualatin River Subbasin:

(A) During periods of low stream flows (approximately May 1 to October 31): Treatment resulting in monthly average effluent concentrations not to exceed 10 mg/l of BOD and 10 mg/l of SS or equivalent control.

(B) During the period of high stream flows (approximately November 1 to April 30): A minimum of secondary

treatment or equivalent control and unless otherwise specifically authorized by the Department, operation of all waste treatment and control facilities at maximum practical efficiency and effectiveness so as to minimize waste discharges to public waters.

(b) Main stem Tualatin River from mouth to Gaston (river mile 0 to 65):

(A) During periods of low stream flows (approximately May 1 to October 31): Treatment resulting in monthly average effluent concentrations not to exceed 10 mg/l of BOD and 10 mg/l of SS or equivalent control.

(B) During the period of high stream flows (approximately November 1 to April 30): Treatment resulting in monthly average effluent concentrations not to exceed 20 mg/l of BOD and 20 mg/l of SS or equivalent control.

(c) Main stem Tualatin River above Gaston (river mile 65) and all tributaries to the Tualatin River: Treatment resulting in monthly average effluent concentrations not to exceed 5 mg/l of BOD and 5 mg/l of SS or equivalent control.

(d) Tualatin River Subbasin: The dissolved oxygen level in the discharged effluents shall not be less than 6 mg/l.

(e) Main stem Columbia River:

(A) During summer (May 1 to October 31): Treatment resulting in monthly average effluent concentrations not to exceed 20 mg/l of BOD and 20 mg/l of SS or equivalent control.

(B) During winter (November 1 to April 30): A minimum of secondary treatment or equivalent control and unless otherwise specifically authorized by the Department, operation of all waste treatment and control facilities at maximum practicable efficiency and effectiveness so as to minimize waste discharges to public waters.

(f) Effluent BOD concentrations in mg/l, divided by the dilution factor (ratio of receiving stream flow to effluent flow) shall not exceed one (1) unless otherwise specifically approved by the Environmental Quality Commission.

(g) Sewage wastes shall be disinfected, after treatment, equivalent to thorough mixing with sufficient chlorine to provide a residual of at least 1 part per million after 60 minutes of contact time unless otherwise specifically authorized by permit.

(h) Positive protection shall be provided to prevent bypassing raw or inadequately treated sewage to public waters unless otherwise approved by the Department where elimination of inflow and infiltration would be necessary but not presently practicable.

(i) More stringent waste treatment and control requirements may be imposed where special conditions may require.

(2) Industrial wastes:

(a) After maximum practicable inplant control, a minimum of secondary treatment or equivalent control (reduction of suspended solids and organic material where present in significant quantities, effective disinfection where bacterial organisms of public health significance are present, and control of toxic or other deleterious substances).

(b) Specific industrial waste treatment requirements shall be determined on an individual basis in accordance with the provisions of this plan, applicable federal requirements, and the following:

(A) The uses which are or may likely be made of the receiving stream;

(B) The size and nature of flow of the receiving stream:

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(C) The quantity and quality of wastes to be treated; and  
(D) The presence or absence of other sources of pollution on the same watershed.

(c) Where industrial, commercial, or agricultural effluents contain significant quantities of potentially toxic elements, treatment requirements shall be determined utilizing appropriate bioassays.

(d) Industrial cooling waters containing significant heat loads shall be subjected to offstream cooling or heat recovery prior to discharge to public waters.

(e) Positive protection shall be provided to prevent bypassing of raw or inadequately treated industrial wastes to any public waters.

(f) Facilities shall be provided to prevent and contain spills of potentially toxic or hazardous materials and a positive program for containment and cleanup of such spills should they occur shall be developed and maintained.

Stat. Auth.: ORS Ch. 468

Hist.: DEQ 128, f. & ef. 1-21-77

**Special Policies and Guidelines**

**340-41-470** (1) In order to preserve the existing high quality water for municipal water supplies and recreation, it is the policy of the EQC to prohibit any further waste discharges to the waters of:

(a) The Clackamas River Subbasin;

(b) The McKenzie River Subbasin above the Hayden Bridge (river mile 15);

(c) The North Santiam River Subbasin.

(2) The Environmental Quality Commission shall investigate, together with any other affected state agencies, the means of maintaining at least existing minimum flow during the summer low flow period.

Stat. Auth.: ORS Ch. 468

Hist.: DEQ 128, f. & ef. 1-21-77

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Policies and Guidelines Generally Applicable to All Basins  
340-41-026 (1)(a) Existing high quality waters which exceed those levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water shall be maintained and protected unless the Environmental Quality Commission chooses, after full satisfaction of the intergovernmental coordination and public participation provisions of the continuing planning process, to lower water quality for necessary and justifiable economic or social development. The Director or his designee may allow lower water quality on a short-term basis in order to respond to emergencies or to otherwise protect public health and welfare. In no event, however, may degradation of water quality interfere with or become injurious to the beneficial uses of water within surface waters of the following areas:

- (A) National Parks;
- (B) National Wild and Scenic Rivers;
- (C) National Wildlife Refuges;
- (D) State Parks.

(b) Point source discharges shall follow policies and guidelines (2), (3), and (4), and nonpoint source activities shall follow guidelines (5), (6), (7), (8), and (9).

(2) In order to maintain the quality of waters in the State of Oregon, it is the policy of the EQC to require that growth and development be accommodated by increased efficiency and effectiveness of waste treatment and control such that measurable future discharged waste loads from existing sources do not exceed presently allowed discharged loads unless otherwise specifically approved by the EQC.

(3) For any new waste sources, alternatives which utilize reuse or disposal with no discharge to public waters shall be given highest priority for use wherever practicable. New source discharges may be approved by the Department if no measurable adverse impact on water quality or beneficial uses will occur. Significant or large new sources must be approved by the Environmental Quality Commission.

(4) No discharges of wastes to lakes or reservoirs shall be allowed without specific approval of the EQC.

(5) Log handling in public waters shall conform to current EQC policies and guidelines.

(6) Sand and gravel removal operations shall be conducted pursuant to a permit from the Division of State Lands and separated from the active flowing stream by a water-tight berm wherever physically practicable. Recirculation and reuse of process water shall be required wherever practicable. Discharges, when allowed, or seepage or leakage losses to public waters shall not cause a violation of water quality standards or adversely affect legitimate beneficial uses.

(7) Logging and forest management activities shall be conducted in accordance with the Oregon Forest Practices Act so as to minimize adverse effects on water quality.

(8) Road building and maintenance activities shall be conducted in a manner so as to keep waste materials out of public waters and minimize erosion of cut banks, fills, and road surfaces.

(9) In order to improve controls over nonpoint sources of pollution, federal, state, and local resource management agencies will be encouraged and assisted to coordinate planning and implementation of programs to regulate or control runoff, erosion, turbidity, stream temperature, stream flow, and the withdrawal and use of irrigation water on a basin-wide approach so as to protect the quality and beneficial uses

Expiration Date: 11/30/93  
 Permit Number:  
 File Number: 500  
 Page 1 of 6 Pages

**PRELIMINARY**

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM**

**WASTE DISCHARGE PERMIT**

Department of Environmental Quality  
 811 Southwest Sixth Avenue, Portland, OR 97204  
 Telephone: (503) 229-5696

Issued pursuant to ORS 468.740 and The Federal Clean Water Act

**ISSUED TO:**

City of Adair Village  
 103 N.E. Wm. R. Carr Ave.  
 Corvallis, OR 97330

**SOURCES COVERED BY THIS PERMIT:**

Type of Waste	Outfall Number	Outfall Location
Domestic Waste	001	Bowers Slough* (R.M. 2.5)
Domestic Waste	001	Willamette River (R.M. 122)

**PLANT TYPE AND LOCATION:**

Municipal Sewage Treatment Plant  
 (Trickling Filter) located  
 next to the Benton County  
 (existing)  
 Two cell lagoon off of Ryals  
 Lane (proposed)

**RECEIVING SYSTEM INFORMATION:**

Basin: Willamette  
 Subbasin: Upper Willamette/Mary's/Calapooia  
 Stream: Bowers Slough\*  
 Willamette River  
 Hydro Code: 22E-BOWE 2.5D\*  
 22E--WILL 122D  
 County: Benton

\* Until January 1, 1990

**EPA REFERENCE NO:** OR-002339-6

Issued in response to Application No. 999472 received 7/29/86.

This permit is issued based on the land use findings in the permit record.

Fred Hansen, Director

Date

**PERMITTED ACTIVITIES**

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

	<u>Page</u>
Schedule A - Waste Disposal Limitations not to be Exceeded...	2-3
Schedule B - Minimum Monitoring and Reporting Requirements...	4
Schedule C - Compliance Conditions and Schedules.....	5
Schedule D - Special Conditions.....	6
General Conditions.....	Attached

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

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

**SCHEDULE A**

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

a. Outfall Number 001 (Sewage Treatment Plant Outfall)

<u>Parameter</u>	<u>Average Effluent Concentrations</u>		<u>Monthly Average lb/day</u>	<u>Weekly Average lb/day</u>	<u>Daily Maximum lbs</u>
	<u>Monthly</u>	<u>Weekly</u>			
Year Around:					
BOD	30 mg/l	45 mg/l	50.0	75.0	100.0
TSS	30 mg/l	45 mg/l	50.0	75.0	100.0
FC per 100 ml	200	400			

- b. Other Parameters Limitations
- pH (year around) Shall be within the range 6.0-9.0
  - Average dry weather flow to the treatment facility. (Basis for mass discharge limits) 0.200 MGD
  - BOD & TSS removal efficiency Shall not be less than 85 percent monthly average.

When, because of excessive infiltration or inflows, the total flow entering the treatment facility exceeds 0.300 MGD the percentage of BOD-5 and Suspended Solids removed by the treatment facility may be less than 85% and the pounds discharged may exceed the limits of Condition 1. During those periods the treatment facility shall be operated as efficiently as practicable and the amount of BOD-5 and Suspended Solids discharged shall not exceed a monthly average of 100.0 lbs/day each, or a daily maximum of 150 pounds each.

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

The allowable mixing zone is defined as that portion of Bowers Slough, beginning at the point of discharge and extending 100 feet downstream.

2. Waste Discharge Limitations Not to be Exceeded after Attainment of Operational Level as Required by Schedule C, Condition 1, of this Permit.

a. Outfall Number 001 (Sewage Treatment Plant Discharge)

(1) May 1 - October 31: No discharge to state waters is permitted.

(2) November 1 - April 30:

<u>Parameter</u>	<u>Average Effluent Concentrations</u>		<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Daily Maximum</u>
	<u>Monthly</u>	<u>Weekly</u>	<u>lb/day</u>	<u>lb/day</u>	<u>lbs</u>
BOD-5	30 mg/l	45 mg/l	80	120	160
TSS	50 mg/l	75 mg/l	133	200	267
FC/100 ml	200	400			

(3) Other parameters

Limitations

pH (year-round)

Shall be within the range 6.0 - 9.0

Average dry weather design flow to treatment facility. (Mass load is based on discharge flow of 0.318 mgd.)

0.090 MGD

BOD & TSS removal efficiency

Shall not be less than 85 percent monthly average.

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

The allowable mixing zone is defined as that portion of the Willamette River in a 25 foot radius from the point of discharge.



**SCHEDULE B**

1. Minimum Monitoring and Reporting Requirements  
(unless otherwise approved in writing by the Department)

a. Influent

<u>Item or Parameter</u>	<u>Minimum Frequency</u>	<u>Type of Sample</u>
Total Flow (mgd)	Daily	Continuous Recording
BOD-5	Two per Month	24-Hour Composite
TSS	Two per Month	24-Hour Composite
pH	Three per Week	Grab

b. Outfall Number 001 (sewage treatment plant outfall)

<u>Item or Parameter</u>	<u>Minimum Frequency</u>	<u>Type of Sample</u>
Total Flow (MGD)	Daily	Measurement
Quantity Chlorine Used	Daily	Measurement
Effluent Chlorine Residual	Daily	Grab
BOD-5	Two per Month	24-Hour Composite
TSS	Two per Month	24-Hour Composite
pH	Three per Week	Grab
Fecal Coliform	One per Week	Grab
Average Percent Removed (BOD & TSS)	Two per Month	Calculation
Flow Meter Calibration	One per Month	Verification

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

2. Reporting Procedures

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

**SCHEDULE C**

Compliance Conditions and Schedules

1. The permittee is required to eliminate all dry weather discharges to Bowers Slough and to make necessary facility improvements to achieve compliance with applicable water quality management policies, standards and treatment criteria set forth in Oregon Administrative Rules, Division 41, in accordance with the following:
  - a. By no later than February 1, 1989, the permittee shall submit preliminary engineering plans and specifications.
  - b. By no later than March 1, 1989, the permittee shall submit final engineering plans and specifications for construction of necessary improvements.
  - c. By no later than June 1, 1989, the permittee shall award construction bids for completion of necessary improvements.
  - d. By no later than January 1, 1990, the permittee shall complete construction of necessary improvements.
  - e. By no later than March 1, 1990, the permittee shall attain the necessary operational level to achieve compliance with the effluent limitations of this permit.
2. The permittee shall submit sludge management plans in accordance with Oregon State Department of Environmental Quality, Chapter 340, Division 50, "Land Application and Disposal of Sewage Treatment Plant Derived Products Including Septages" per the following schedule:

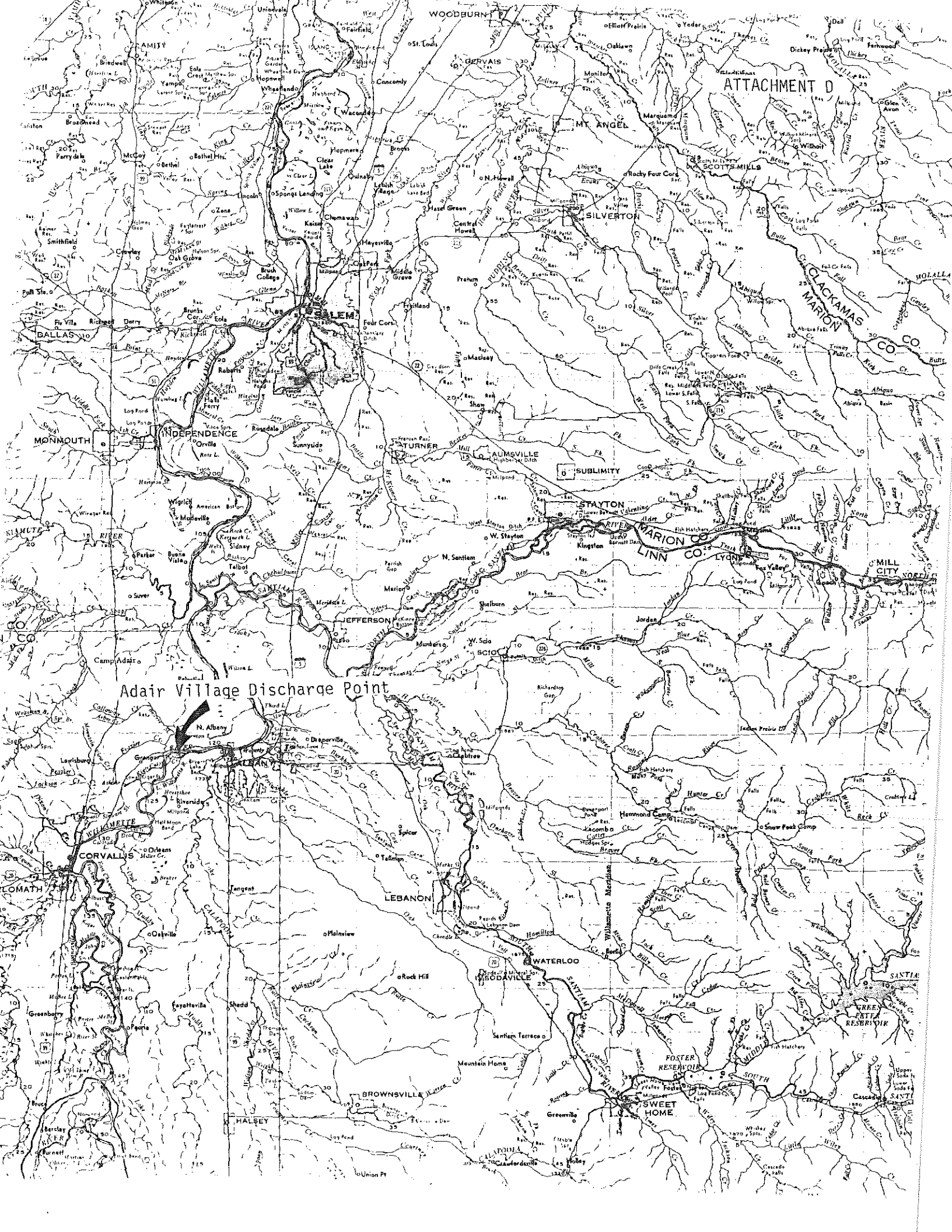
By no later than February 1, 1989, the permittee shall submit an interim sludge management plan for the existing facilities. Upon approval of the plan by the Department, the plan shall be implemented by the permittee until completion of facility improvements.
3. The permittee is expected to meet the compliance dates which have been established in this schedule. Either prior to or no later than 14 days following any lapsed compliance date, the permittee shall submit to the Department a notice of compliance or noncompliance with the established schedule. The Director may revise a schedule of compliance if he determines good and valid cause resulting from events over which the permittee has little or no control.

**SCHEDULE D**

Special Conditions

1. The permittee shall manage sludge in accordance with the Sludge Management Plan required by Schedule C, Condition 2 until existing treatment system is properly abandoned.
2. In the event the permittee finds it necessary to remove accumulated sludge solids from the lagoons, the permittee shall submit a sludge management plan developed in accordance with Oregon State Department of Environmental Quality, Chapter 340, Division 50, "Land Application and Disposal of Sewage Treatment Plant Sludge and Sludge Derived Products Including Septage" prior to removal of sludge from existing or new facilities.

P500W (kjc)



ATTACHMENT D

Adair Village Discharge Point





## Environmental Quality Commission

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

TO: Environmental Quality Commission DATE: November 3, 1988

FROM: Fred Hansen, Director

SUBJECT: Proposed Criteria for Consideration of Increased Loadings Due to Expansions of Existing Sewage Treatment Plants or Industrial Sources.

### BACKGROUND

Oregon Administrative Rule (OAR) 340-41-026(2) states: "In order to maintain the quality of waters in the State of Oregon, it is the policy of the EQC to require that growth and development be accommodated by increased efficiency and effectiveness of waste treatment and control such that measurable future discharged waste loads from existing sources do not exceed presently allowed discharged loads unless otherwise specifically approved by the EQC."

This policy statement was adopted by the Commission in January, 1977, and is one of two basic components of the Department's current water quality management strategy as it relates to the control of point source discharges. The second component is reflected in the minimum design criteria for treatment and control of wastes as stated in Oregon Administrative Rule (OAR) 340-41. These criteria are specific for each of Oregon's nineteen river basins and specify the minimum treatment design levels for both sewage treatment plants and industrial waste water sources. The treatment levels for sewage treatment plants, in part, state specific numerical criteria. For industrial sources, on the other hand, the criteria require highest and best practicable treatment and control which means that, as technology improves with time, the criteria become more stringent.

When developed, the minimum design criteria were designed to assure that projected growth during the twenty year planning period would not result in any additional waste loadings to the state's waters.

The regulations also provide that wherever minimum design criteria for waste treatment and control facilities set forth in the rules are more stringent than applicable federal standards and treatment levels currently being provided (emphasis provided), upgrading to the more stringent requirements will be deferred until it is necessary to expand or otherwise modify or replace the existing treatment facilities. (OAR 340-41-120(3)(c))

This water quality management strategy has been extremely beneficial to the protection of Oregon's water quality. It has forced the advance of treatment technology which might not have otherwise occurred. It recognizes that Oregon's water bodies have a finite capacity to assimilate wastes and

still meet water quality standards. Consequently, it has helped preserve the remaining, unused assimilative capacity of Oregon's rivers and streams by minimizing the increase of discharges into them. The strategy, however, inherently causes disparities that, over time, have become more glaring. First, because the strategy is not triggered for existing facilities until there is a need to upgrade or expand, some facilities still are only required to meet the minimum treatment level required by the Federal government.

The second disparity arises when a new sewage source is proposed for discharge. The new source may only be required to meet the basin's numerical standard for sewage treatment plants if adequate stream flow is available and uses will be protected. Theoretically, the new source could be located next to an existing source that, because of expansions due to growth, has had to progressively increase its level of treatment resulting in effluent limits much more stringent than the basin standard required of the new source.

Historically, the Department always evaluates the potential effects on water quality from proposed new or expanded sources. This evaluation, among other things, considers the dilution capabilities of the receiving stream and, in conjunction with the water quality management strategy discussed above, has represented the basic approach to controlling wastewater discharges from point sources. Admittedly, it is more of a technology-based approach than a strict water quality approach. However, it is not intended to allow loads to increase to the carrying capacity of the streams.

#### ISSUES

1. As discussed above, application of this strategy can create some disparities or inequities between adjacent or similar sources. The Department does not believe that rules can be written that could anticipate the potential disparities and eliminate them from arising. Consequently, the Commission will continue to be faced with requests from sources to allow increased loadings. The issue then seems to be what criteria should be used in arriving at the decisions. A list of proposed criteria is attached as Attachment A.
2. Should new municipal sources be allowed only to meet the numerical minimum design criteria if a similar source along the same river system has been forced by the strategy to meet much more stringent treatment requirements? To be comparable to the approach for new industrial sources, it may be more appropriate for new municipal sources to meet treatment requirements equivalent to the highest level currently being required on that water body.
3. To what extent should the Commission involve itself in permit issuance decisions? In most permit actions, the Commission's role is to act as an appeal board. When the strategy was adopted, the Department did not envision that the Commission would be faced with very many requests.

In fact, the Department referred only those requests to the Commission that were considered significant and dealt with the rest through the regular permit issuance procedure. The Department believes that strict application of the strategy currently required by the rules will force many minor decisions to the Commission for action. We do not believe it is a good use of Commission time to consider routine requests nor effective use of Department staff time in preparing Commission staff reports on these routine requests. We recommend that the Commission limit its review and required approval to those requests from principal dischargers as defined by EPA criteria. A list of the principal dischargers is attached as Attachment B.

DIRECTOR'S RECOMMENDATION

The Director recommends that:

1. The Commission recognize the criteria stated in Attachment A as the basis for considering requests for increased loadings under OAR 30-41-026(2).
2. The Commission direct the Department to proceed to rule-making to:
  - a. Change the minimum design criteria so that new municipal sewage treatment plants must meet the most stringent treatment requirements currently imposed on other sources discharging into the same water body.
  - b. Limit the sources for which the Commission would review requests for increased loadings to those defined as principal dischargers by EPA and DEQ.

Richard J. Nichols:kjc  
229-5324  
WJ1138

PROPOSED CRITERIA FOR CONSIDERATION OF INCREASED LOADINGS DUE TO  
EXPANSIONS OF EXISTING SEWAGE TREATMENT PLANTS AND INDUSTRIAL  
SOURCES

1. Practicality of options to increased loads. The review of alternatives to increased loads concludes that there are no practicable alternatives. Obviously, practicability is not easily defined and must consider costs, available technology, public concerns, and other issues such as the environmental consequences of not requiring more stringent controls. An example: A sewage treatment plant currently discharges at a level of 10 mg/l each for BOD-5 and total suspended solids (TSS) on a monthly average. Growth has caused the plant to reach its capacity and the city proposes to double the size of the plant. Summer effluent irrigation is not possible because of steep slopes. Improved treatment over 10/10 would require expensive treatment technology. The receiving stream is large and has ample assimilative capacity for additional waste loadings.
  
2. Increased loading from an existing treatment plant is due to: the extension of sewers to an existing development served by on-site systems that currently cause a health hazard or groundwater contamination; the reduction of existing total loads discharged by eliminating raw sewage by-passes; or the construction of a regional plant to replace several smaller, less-efficient sewage treatment plants. In some cases, a particular sewage treatment plant may be asked to serve additional areas outside its existing service area to eliminate a water quality or public health concern. An example of this situation would be the City of Gresham which is extending sewers into mid-Multnomah County to eliminate the use of cesspools for waste disposal as required by the Environmental Quality Commission. The Commission allowed Gresham to retain its effluent concentration limits rather than provide a higher degree of treatment when serving mid-Multnomah County. In another case, a city's sewerage system is overtaxed with extraneous water, causing the sewer system to frequently by-pass raw waste and the plant to operate inefficiently. The excess water in the system resulted from combined sanitary and storm sewers, and groundwater infiltration due to leaky sewers. To address such a problem, the City of North Bend improved its sewer system and is expanding its plant. They are being allowed to maintain their effluent concentration limits. Finally, a plant may be selected to serve as a regional facility to replace a number of nearby smaller plants that are less efficient and would otherwise need to expand. The expanded sewage treatment plant at Roseburg is a case where this has happened. The upgrade of the Roseburg plant required a higher summer treatment level to meet the Umpqua Basin treatment and effluent dilution criteria. However, they were given higher winter permitted load limits for the larger plant flow while retaining secondary treatment during the wet weather season.



3. Environmental trade-offs may outweigh the benefits of restricting seasonal increased loadings. In some cases, there may be environmental advantages to allowing an increased loading to a particular stream. In addition, there may be undesirable environmental effects to the "no increase" alternative. Some examples:
- a. Philomath had an old conventional sewage treatment system that discharged reasonably well-treated effluent to the Marys River year-round. The new plant is a lagoon system that stores effluent through the summer so that no discharge occurs during the critical water quality period. Thus, loadings to the river are increased in the winter, but the flows in the Marys River are much greater at that time and the impacts significantly less.
  - b. Some smaller cities have few resources available to properly operate and maintain a mechanical sewage treatment plant. In such situations, it may be preferable to allow expansion of their present lagoon system resulting in increased loads during the wet weather period rather than requiring them to install a more efficient mechanical facility that cannot be reliably operated and maintained. An example would be the small sewage treatment plant at Henley School outside of Klamath Falls. The school district invariably seems to fail to put in the time and resources to properly operate and maintain its mechanical sewage treatment plant. Consequently, the plant frequently malfunctions and discharges much poorer effluent quality than would have been discharged by a lagoon which requires less operation and maintenance.
  - c. Although energy considerations have seemed to dim in most peoples' minds, it should still be a high priority with DEQ. While mechanical plants can achieve much better treatment than other less "high tech" systems, they do consume greater amounts of energy compared to lagoons and other "low tech" systems. In places where land is abundant and water quality considerations are not a concern because of ample dilution, low energy systems should be preferable.
  - d. High tech treatment systems also can generate secondary environmental problems that should be seriously considered. Large volumes of sludge is one example of a secondary problem that can be generated by installation of more sophisticated sewage treatment technology. In many areas west of the Cascade Mountains, the sludges may be difficult to dispose of, especially during the winter and spring, and may be of greater potential threat to public health and the environment than by allowing increased effluent loadings to the river during periods of high flow.

## ATTACHMENT B

## OREGON MAJOR INDUSTRIAL PERMITS AS OF APRIL 1, 1988

NAME	LOCATION	REF. NO.	TYPE
Chevron Chemical Company	St. Helens	OR000163-5	Fertilizer
Dee Forest Products, Inc.	Dee	OR000186-4	Hardboard
Evanite Hardboard, Inc.	Corvallis	OR000029-9	Hardboard
Georgia Pacific Corp.	Toledo	OR000134-1	Pulp&Paper
International Paper Co.	Gardiner	OR000022-1	Pulp&Paper
James River II, Inc.	Wauna	OR000079-5	Pulp&Paper
James River II, Inc.	West Linn	OR000078-7	Pulp&Paper
Northwest Aluminum	The Dalles	OR000170-8	Aluminum
Ore-Ida Corporation	Ontario	OR000240-2	Potatoes
Oregon Metallurgical	Albany	OR000171-1	Titanium
Pennwalt Corporation	Portland	OR000159-7	Chlorine
Pope & Talbot Pulp	Halsey	OR000107-4	Pulp&Paper
Portland General Electric	Prescott	OR002345-1	Nuc. Power
Reynolds Metals	Troutdale	OR000006-0	Aluminum
Rhone-Poulenc, Inc.	Portland	OR000174-1	Pesticide
Smurfit Newsprint	Newberg	OR000055-8	Pulp&Paper
Smurfit Newsprint	Oregon City	OR000056-6	Pulp&Paper
Teledyne Wah Chang Albany	Albany	OR000111-2	Zirconium
Tillamook County Creamery	Tillamook	OR000014-1	Cheese
Weyerhaeuser Company	North Bend	OR000211-9	Pulp&Paper
Weyerhaeuser Company	Klamath Falls	OR000254-2	Wood Prod.
Weyerhaeuser Company	Springfield	OR000051-5	Pulp&Paper
Willamette Industries	Albany	OR000044-2	Pulp&Paper
DELETIONS	- Hanna Mining and Nickel	OR000162-7	(Closed)
ADDITIONS	- Dee Forest Products, Inc.	OR000186-4	(Re-opened)

MAJOR MUNICIPAL INSPECTION SCHEDULE -- FY89  
July 1988 - June 1989

Source	EPA Reference No.	1st Quarter			2nd Quarter			3rd Quarter			4th Quarter		
		J	A	S	O	N	D	J	F	M	A	M	J
Albany, City of	CR-002880-1												
Ashland, City of	CR-002625-5												
Astoria, City of	CR-002756-1												
Clackamas Co. Svc. Dist. #1	CR-002622-1												
Coos Bay, City of #1	CR-002357-4												
Coos Bay, City of #2	CR-002358-2												
Corvallis, City of	CR-002636-1												
Cottage Grove, City of	CR-002055-9												
Grants Pass, City of	CR-002884-3												
Gresham, City of	CR-002613-1												
Hood River, City of	CR-002078-8												
Klamath Falls, City of	CR-002630-1												
La Grande, City of	CR-002046-0												
Lebanon, City of	CR-002081-8												
McMinnville, City of	CR-002619-1												
Medford, City of	CR-002626-3												
MWC	CR-003122-4												
Newberg, City of	CR-002025-7												

ATTACHMENT B (Continued)

MAJOR MUNICIPAL INSPECTION SCHEDULE -- FY89  
July 1988 - June 1989

Source	EPA Reference No.	1st Quarter			2nd Quarter			3rd Quarter			4th Quarter		
		J	A	S	O	N	D	J	F	M	A	M	J
North Bend, City of	CR-002336-1												
Oak Lodge Svc. Dist.	CR-002614-0												
Perdleton, City of	CR-002639-5												
Portland, City of (Col. Blvd)	CR-002690-5												
Portland, City of (Thyon Cr.)	CR-002689-1												
REA (Roseburg)	CR-002258-6												
Salem, City of (Willow Lake)	CR-002640-9												
South Suburban Svc. Dist.	CR-002387-6												
St. Helens, City of	CR-002387-6												
The Dalles, City of	CR-002066-4												
Tillamook, City of	CR-002066-4												
Tri-City Svc. Dist. (Oregon City)	CR-002829-1												
U.S.A. (Durham)	CR-002811-8												
U.S.A. (Forest Grove)	CR-002016-8												
U.S.A. (Rock Creek)	CR-002977-7												
U.S.A. (Westside)	CR-002334-5												
Woodburn, City of	CR-002000-1												

ATTACHMENT B (Continued)

WJ557.2

**COST COMPARISON OF ALTERNATIVES**  
**City of Adair Village**

<u>Alternative Description</u>	<u>Total Capital Cost</u>	<u>Annual Operations &amp; Maintenance Cost</u>	<u>Annual Cost/ Household</u>	<u>Monthly Charge/ Household</u>
1. Lagoon System, winter holding/summer spray irrigation. No discharge.	<b>Total</b> \$2,072,000			
	EPA     --- \$1,010,000			
	CDBG    --- \$ 500,000	\$52,043	\$750/Year	\$63/Month
	Local    --- \$ 562,000			
2. Upgrade Existing Plant, add filtration, year round discharge to Willamette River.	<b>Total</b> \$1,634,000			
	EPA     --- \$ 614,000			
	CDBG    --- \$ 500,000	\$76,277	\$865/Year	\$72/Month
	Local    --- \$ 520,000			
3. Lagoon System, summer holding discharge to Willamette River. (Chosen Alternative)	<b>Total</b> \$1,310,190			
	EPA     --- \$ 569,166			
	CDBG    --- \$ 500,000	\$31,035	\$421/Year	\$35/Month
	Local    --- \$ 241,024			
4. Lagoon System, summer spray irrigation, winter discharge to Willamette River. (Some increase in load.)	<b>Total</b> \$1,328,235			
	EPA     --- \$ 592,889			
	CDBG    --- \$ 500,000	\$45,631	\$486/Year	\$40/Month
	Local    --- \$ 235,346			

Discharge Limits  
City of Adair Village

	Winter (Nov. 1-Apr. 30)		Summer (May 1-Oct. 31)	
	<u>BOD</u>	<u>TSS</u>	<u>BOD</u>	<u>TSS</u>
Existing Permitted Discharge Limits*				
Concentration (mg/l)	30	30	20	20
Dry weather flow: 0.200 MGD				
Pounds/day load				
Monthly average	50	50	33	33
Weekly average	75	75	50	50
Daily maximum	100	100	67	67
Discharge Limits Required Without Load Increase				
Concentration (mg/l)	30	50	10	10
Pounds/day load				
Monthly average	50	50	33	33
Weekly average	75	75	50	50
Daily maximum	100	100	67	67
Discharge Limits With Requested Load Increase				
Concentration (mg/l)	30	50	No discharge	
Wet weather flow: 0.318 MGD				
Pounds/day load				
Monthly average	80	133	0	0
Weekly average	120	200	0	0
Daily maximum	160	267	0	0
Discharge Limits With Reduced Load Increase				
Concentration (mg/l)	30	50	Discharge to spray irrigation	
Wet weather flow: 0.215 MGD				
Pounds/day load				
Monthly average	54	90	0	0
Weekly average	81	135	0	0
Daily maximum	108	180	0	0

\* These limits are based on the design of the existing sewage treatment plant. Since the plant is not able to meet these discharge standards, interim limits have been set in the proposed permit to be in effect until the new treatment plant is completed.

**Evaluation of the Impact on Water Quality  
From the Proposed Discharge Load From the  
City of Adair Village Sewage Treatment Facility**

The Department's Water Quality Planning Section analyzed the water quality effects of the proposed permitted load of Adair Village's treated effluent to the Willamette River at River Mile 122.

The last ten years of ambient water quality monitoring data collected between November 1 and April 30 for the Willamette River at Albany (River Mile 119). For this analysis, "worst case" temperature and flow levels for the Willamette River were used. This combination of maximum temperature and minimum flow is rare, and has not occurred in the last ten years, for the November 1 through April 30 period. For loads from the proposed treatment facility, "worst case" maximum permitted daily loads (at design year 2009) were used. For this worst case analysis, it was also assumed that the wasteload currently discharged to Bowers Slough (a tributary of the Willamette River) does not reach the Willamette River, and therefore the entire proposed wasteload will be an increase from zero load. The following parameters were used for the analysis:

Maximum observed temperature	15 degrees centigrade
Minimum observed flow	2500 cubic feet per second
Median river BOD-5	1.20 mg/l
Median river TSS	9.5 mg/l
Wet weather effluent flow	0.318 MGD
Daily maximum BOD - effluent	160 lbs/day
Daily maximum TSS - effluent	267 lbs/day
Fecal coliform bacteria	200/100 ml, monthly ave.

Dissolved oxygen levels

The proposed BOD-5 load could increase instream BOD a maximum of 0.01 mg/l, or 0.8% increase. This could effect a decrease of 0.11% dissolved oxygen under worst case conditions. Although measurable, this loss may be considered negligible and is within sampling error.

The dissolved oxygen standard for the mainstem Willamette River near Albany is 90% saturation (that is, the dissolved oxygen level must be at or above 90% of the maximum dissolved oxygen that the water can hold at a given temperature). Data reviewed for the winter period over the last ten years shows that the standard is met 95% of the time. Median dissolved oxygen was at 95% saturation.

EPA guidance for evaluating the water quality status of streams suggests that 25% or more of the samples collected must exceed the standard before beneficial uses are not considered supported. Based on this data and EPA guidance, the Department concludes that the Willamette River at Albany is not water quality limited for dissolved oxygen.

### Total dissolved solids

The maximum observed total dissolved solids in the Willamette River was 90 mg/l. This proposed discharge is calculated to contribute 0.02 mg/l total dissolved solids, which is not a measurable increase. The applicable Willamette Basin standard is 100 mg/l.

### Temperature

Temperature impacts should not be a problem. Effluent temperature from the ponds should be similar to ambient water temperature.

### Nuisance algal growth

Nutrient loads should not result in nuisance algal growth because of the dilution factor, and inherent limits in winter algal growth because of cold water temperatures and a lack of sunlight. The discharge will cease by April 30 each year. Stream flows are not expected to warm sufficiently for algal production until June.

### Fecal coliform bacteria

Water quality standards for fecal coliform bacteria are based on concentrations of bacteria cells per 100 milliliters (ml.). The Adair Village treatment facility is required to disinfect effluent prior to discharge. Permitted levels are the same as the in-stream standard for fecal coliform bacteria, and therefore can not cause water quality standards to be violated.

High fecal coliform bacteria levels are found in many Oregon streams in the winter, including the Willamette River. There are a number of possible sources of these bacteria, including non-point sources (such as from livestock), failing septic tank drainfields, and bypasses of raw or improperly treated sewage from municipal collection and treatment systems.

Fecal coliform bacteria in and of themselves are not of concern, but rather are used as an indicator organism showing the potential for the presence of disease causing organisms such as the hepatitis virus. With secondary treatment and adequate disinfection to permitted levels, no occurrences of viral infection have been found from municipal effluent. The proposed Adair Village project will eliminate the one existing point of bypassing (a pump station will be re-built, leaking sewers will be sealed). With the provision of secondary treatment and the elimination of all bypasses, fecal coliform bacteria from the Adair Village treatment facility are expected to have no impact on public health or beneficial uses.





## Environmental Quality Commission

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

### MEMORANDUM

To: Environmental Quality Commission  
From: Director  
Subject: Amendment to Item H, December 9, 1988, EQC Meeting

Request for Exception to OAR 340-41-026(2) (An EQC Policy Requiring Growth and Development Be Accommodated Within Existing Permitted Loads) by the City of Adair Village, Oregon.

### Purpose of Amendment

The purpose of this amendment is to provide the Commission with the Hearing Officer's report and summary and evaluation of public comment received on the City's request for increases in mass discharge limitations.

The request for an exception to the policy requiring growth and development be accommodated within existing allowable discharge loads, unless otherwise approved by the Commission, is a substantive permit issue requiring public notice. As part of the permit issuance process and in anticipation that a public hearing might be requested during the routine permit public notice procedure, the Department prepared a notice of hearing on the proposed National Pollutant Discharge Elimination System (NPDES) permit for the City of Adair Village (Attachment A).

The public hearing was held on November 17, 1988. Testimony from the City's engineer requested the record be held open beyond November 18 to provide additional comment on the draft permit. The summary and response to testimony includes the additional comments received.

### Evaluation

The Hearing Officer's report and summary and evaluation of public comment on the City's request for increases in mass discharge loads for its proposed expanded treatment facility is presented in Attachment B. This report includes copies of written testimony.

No objections to the proposed load increase were raised. Comments from the City and its engineer concerning the proposed increase elaborated on reasons they believe it is important that the Commission approve an exception to OAR 340-41-026(2) on December 9, 1988. The City has made a good faith effort to complete planning and financing to construct new facilities which will eliminate year-round discharges to Bowers Slough. The proposed lagoon


facility also will enable the City to eliminate effluent discharges during the summer low stream flow months.

Since the hearing dealt with any issue relative to the content of the proposed permit, there were comments and suggestions received at the hearing concerning other permit issues. The permit is proposed to be modified as shown in Attachment C and described below:

1. The City requested that the percent removal of BOD<sub>5</sub> and total suspended solids (TSS) specified in the permit be reduced from 85% to 65%. The Department believes that a reduction to 65% removal efficiency for TSS is reasonable, particularly considering the proposed treatment system is a lagoon. EPA effluent standards do allow 65% removal in cases such as that of Adair Village. If the Commission does not approve the proposed increase in loadings, however, this may be a moot issue. If the City is required to provide treatment consistent with current loadings, this may necessitate a removal efficiency of 85% or better. For BOD<sub>5</sub>, the Department believes that the current proposal can provide a removal efficiency of 85% and does not intend to reduce the proposed permit limitations to 65%.
2. The mixing zone for the existing facility discharge to Bowers Slough is modified in the interim to reflect the entire area where it is assumed water quality standards cannot be maintained. The Department recognizes that water quality standards are violated in Bowers Slough beyond the existing mixing zone. This is the primary reason for requiring the facility to be upgraded in accordance with Schedule C of the permit, Compliance Conditions and Schedules.
3. Minor "housekeeping" revisions are made to reflect the location and discharge points of the existing and proposed new treatment facility.

Director's Recommendation

The Director recommends that this report be appended to the staff report of Agenda Item H. Furthermore, it should be noted that no public comment was received objecting to the proposed increase. The Director recommends the Commission grant the requested wasteload increase for the City of Adair Village.

  
for  
Fred Hansen

Mary M. Halliburton:REF:kjc  
WJ1319  
229-5065  
December 5, 1988

Attachments: A. Public Hearing Notice  
B. Hearing Officer's Report Including Summary and Evaluation of  
Public Comment and Copies of Written Testimony.  
C. Revised Draft NPDES Permit

*Oregon Department of Environmental Quality*

# A CHANCE TO COMMENT ON...

WATER QUALITY WASTE DISCHARGE PERMITS

Date Prepared: 10/07/88

Notice Issued: 10/14/88

Comments Due: 11/18/88

**WHO ARE THE  
APPLICANTS**

City of Adair Village, STP  
City of Halsey, STP

**WHAT IS  
PROPOSED:**

Modification of National Pollutant Discharge Elimination System (NPDES) permit limitations to allow the Cities of Adair Village and Halsey to expand the capacities of their sewage treatment plants from 0.200 million gallons per day (MGD) to 0.318 MGD and 0.096 MGD to 0.394 MGD, respectively.

**WHAT ARE THE  
HIGHLIGHTS:**

The Cities each propose to construct additional treatment capacity to accommodate the wastewater loads of larger and growing populations in the two communities, and to resolve permit violations. The permitted monthly average biochemical oxygen demand (BOD) and total suspended solids (TSS) discharge limits for the expanded facilities would be increased only in the wet weather season of November 1 - April 30. The monthly average discharge load from the Adair Village system would be increased by 33 pounds per day BOD and 83 pounds per day TSS. Discharge of Adair Village's treated effluent to Bowers Slough would be eliminated. Treated and disinfected waste instead would be discharged to the Willamette River. The City of Halsey's discharge load to Muddy Creek would be increased by 51 pounds per day BOD and 84 pounds per day TSS. There will be no discharge during the low river flow period of May 1 through October 31 from either facility.

**HOW IS THE  
PUBLIC AFFECTED:**

There will be an increase in the amounts of BOD and TSS discharged to the Willamette River from the Adair Plant and to Muddy Creek from the Halsey Plant. However, no detrimental water quality effects of these increased discharges are predicted.

**HOW TO COMMENT:**

Public hearings have been scheduled for: City of Halsey at 2:00 p.m., and City of Adair Village at 6:00 p.m., on the following date and location:

Thursday, November 17  
Albany Armory  
George Miller, Room B  
104 SW 4th Avenue  
Albany, Oregon



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.

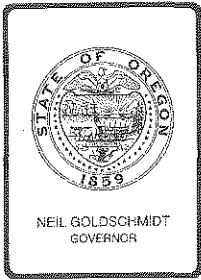
The public will have the opportunity to give oral or written testimony at these hearings.

Written comments should be presented to DEQ by Friday, November 18 at the following address:

Department of Environmental Quality  
Water Quality Division  
811 S.W. Sixth Avenue  
Portland, OR 97204  
Telephone: 229-6099

**WHAT IS THE  
NEXT STEP:**

After the public testimony has been received and evaluated, the proposed modifications will be revised as appropriate and will be presented to the Environmental Quality Commission for their consideration. The Commission may approve the increase, approve a modified proposal or deny the increase.



## Environmental Quality Commission

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

### MEMORANDUM

To: Environmental Quality Commission

From: Mary M. Halliburton, Hearings Officer *MMH*

Subject: Agenda Item H, December 9, 1988, EQC Meeting

Hearings Officer's Report on Proposed Modification of National Pollutant Discharge Elimination System (NPDES) Permit Limitations to Allow the City of Adair Village's Sewage Treatment Plant Discharge Loading to Increase to the Willamette River.

A public hearing was held Thursday, November 17, 1988 at the Albany Armory, 104 SW 4th Avenue, Albany, Oregon at 6:00 PM. The hearing was preceded by public notice issued October 14, 1988.

The hearings officer summarized the purpose of the hearing and reminded those present that the record will close at 5:00 PM, Friday, November 18. The Department at that time will summarize and respond to all written and oral comment for inclusion in the material the Environmental Quality Commission (EQC) will review at their December 9, 1988 EQC meeting.

In addition, those present were advised that if so desired, they may receive a copy of the EQC staff report, and summary and response to oral and written testimony.

A summary of the proposed modifications being considered for the City of Adair Village's wastewater treatment facility was presented by Ralph Funk, Permits Coordinator, DEQ. A question was raised at the end of the presentation as to where the proposed outfall is to be located. Steve Downs, Westech Engineering Inc., responded to the question noting that it will be downstream of the park and the City's water intake.

Following the presentation by Ralph Funk, the public hearing commenced. Those signed up to provide comment were called individually to provide comment. Two persons provided oral comment. Each supported the proposed increase in discharge to the Willamette River. A third individual who filled out a witness registration form decided not to comment.

In addition to the oral testimony, the Department received: (1) a letter dated October 21, 1988, from Gary Munsterman, Development Director of Benton County, supporting the proposed project, and (2) written response dated November 28, 1988, from the City's engineer in response to the draft NPDES permit. These letters, in addition to supplements to oral testimony, are shown in Attachment B1.

Hearings Officer's Report on Adair Village  
Page 2

Summary of Oral Testimony

James L. Ableman, Mayor, City of Adair Village. Mayor Ableman submitted a letter from Benton County in support of the proposed improvements for the City's wastewater treatment facility. The letter was made part of the record.

The City of Adair Village supports the project but has experienced delays on numerous occasions. On February 17, 1988, the City requested assistance from DEQ, response from the Department was not received until May 16, 1988 (At this point Mr. Ableman submitted both letters for the record). He also indicated that continued delays would adversely affect the City with respect to escalating costs, timely bidding of the project and loss of a \$500,000 OCD grant if not expended by February of 1990.

The City also spoke to the economics of the issue. The average sewer user with a \$60,000 home currently pays \$49.15/ month. This consists of a \$16/month service charge, \$4.75/month additional charge to balance budget and \$5.68/year per \$1,000 of assessed value to service the bond issue. Alternatives to the preferred option of staying within the current permit limits and land application of effluent would increase costs approximately \$200,000 and add an additional cost to the sewer users of \$7/month. As a result, user costs would rise to \$70/month. Mayor Ableman submitted for the record an article from the Corvallis Gazette Times which indicates the City's current ranking in Benton County.

Department's Response:

The Department acknowledges that the City of Adair Village has made a good faith effort to complete facility planning and arrange local financing to be eligible for construction grant award by September 30, 1988. The Department apologizes for not providing written response to the City's February request for guidance on future treatment criteria until May 1988. It unfortunately was assumed that the verbal phone communication with the City's engineer in March 1988 provided sufficient guidance on lagoon seepage criteria, treatment criteria, including federal 85% removal requirements and the need for the facility plan to address alternatives to stay within the existing mass loads and evaluate impacts on receiving water quality. Additionally, to prevent miscommunication in the future on the need for public notice on permit related actions prior to design and construction of proposed facilities, the grant and permit sections are developing procedures whereby all potential grantees are made aware of the Department's permit related procedures. It appears that the grant award condition also notifying the permittee of the need for EQC action on the requested load increase prior to release of the grant monies did not adequately prepare the City to procedural steps for public notice that would be required on the load increase request.

Hearings Officer's Report on Adair Village  
Page 3

Steve Downs, Project Manager, Westech Engineering, Inc.

Mr. Downs presented the City's efforts to comply with the existing permit and the activities the City is involved in to maintain compliance with the current permitted limits. Additional information was presented to illustrate that the preferred option results in an improvement to the quality of the environment.

The City has expended a good faith effort over the last year to take a sewer system built in 1958 and upgrade it. The City has undertaken efforts to reduce inflow and infiltration (I/I), eliminate summer discharges to Bowers Slough and ultimately, eliminate discharge to the slough completely. In 1987, the City Council embarked on the adoption of the preferred alternative developed in the facility plan and approved by DEQ and EPA. The City is working hard toward this goal.

The elimination of the discharge to Bowers Slough, with direct discharge to the Willamette River, will result in an increase in the monthly average mass discharge of BOD. However, on an annual basis, BOD is reduced by 650 pounds. TSS will potentially increase due to the stabilization pond process and higher TSS effluent concentration allowed for lagoons. Looking at the capacity of the river and dilution, the mean or average flow of the river in November provides a dilution of 26,000:1. The lowest flow on record results in a dilution factor of 4,300:1. Thus, as far as an environmental impact to the river there is very little.

Additionally, the City will be upgrading two pump stations and eliminating an existing raw sewage bypass at one of the stations which overflows into Bowers Slough during high flows.

The facility plan reviewed other technical options. These included summer spray irrigation and summer spray irrigation and winter discharge with 75% removal of I/I to stay within the current discharge limitations. The estimated additional cost above the preferred option to implement these alternatives are \$200,000 and \$120,000 respectively. The City can not afford these options.

It was requested that the EQC take action at the December 9, 1988, EQC meeting to allow the City to proceed with construction of the facility next summer. This will allow the City to be out of the Slough in 2 years as mandated by DEQ. EQC approval would also allow the City to proceed with site acquisition for the new facilities and the conditional use process through Benton County. All of these are necessary for a successful completion of the treatment facility this summer (1989).

It was requested that review of the draft permit be extended one week beyond the public hearing record to allow sufficient time for comment by the City.

Hearings Officer's Report on Adair Village  
Page 4

Department's Response

With regard to Mr. Down's request for additional time to review the draft permit, the Department verbally concurred following the public hearing that it was appropriate for the City to have additional time. The Department received the City's comments on November 28, 1988 and offers the following:

1. The Department concurs it is appropriate to modify the mixing zone for the existing facility discharge to Bowers Slough in the interim until the new facilities are completed. The Department recognizes that water quality standards are violated in Bowers Slough beyond the existing permit mixing zone boundary and is requiring the City to upgrade its facilities in accordance with Schedule C of the proposed permit.
2. Minor "housekeeping" revisions will be made to reflect the location and discharge points of the existing and proposed new treatment facility.
3. Revisions to the percent removal requirement for BOD<sub>5</sub> percent removal of less than 85% are not appropriate. The projected influent BOD<sub>5</sub> concentration upon completion of the I/I removal project should enable the treatment system to achieve 85% removal for effluent concentrations of 30 mg/l BOD<sub>5</sub> and less. The project certification evaluation criteria for the I/I removal project should include the 85% BOD<sub>5</sub> removal requirement.

The determination of a percent removal requirement less than 85% removal, but not less than 65% for TSS, is appropriate if the Commission approves the mass load increase issue. Given the influent TSS concentrations of the projected winter average flows following cost-effective I/I removal, in combination with the 50 mg/l TSS permitted effluent concentration, the facility could not achieve 85% removal but could meet the 65% minimum removal requirement allowed by EPA secondary treatment criteria. If the Commission does not approve the waste load increase, higher percent removal requirements may be imposed.

Attachment: Written Testimony Received Concerning the Proposed Increase  
in Mass Discharge Limits and the Draft NPDES Permit.

MMH:REF:kjc  
WJ1320  
229-5065  
December 5, 1988



## Adair Village ranks highest in tax rates

By Chuck Westlund  
of the Gazette-Times

Adair Village surpassed Philomath this year for the dubious honor of having the highest consolidated tax rate of any city in Benton County, according to annual tax figures from the Benton County assessor's office.

Adair Village: Fueled by a voter-approved \$250,000 bond sale, the consolidated tax rate in Adair Village jumped by almost 23 percent. The consolidated tax rate is the amount of taxes paid to all taxing agencies, such as the city, the county and school districts.

This year, the consolidated rate in Adair Village is \$37.17 per \$1,000 of assessed property valuation. Last

year, the rate was \$30.28 per \$1,000 of assessed property valuation.

The change means that the owner of a \$60,000 house will pay \$2,230 in taxes to various taxing agencies this year. That's an increase of about \$414 from last year.

The bond sale, approved overwhelmingly in June, will pay in part for improvements to the city sewer system, a project which will cost about \$1.3 million. Other funding is coming from state and federal sources.

Also playing a role in the Adair Village increase were hikes in tax rates for the Corvallis School District and for Benton County government.

Alsea: Residents of Alsea, which has the lowest tax rate of any

community in the county, will still see a major increase in taxes this year.

Alsea is an unincorporated community, so residents there pay no city taxes. The primary components of the bill are taxes paid to the school district and Benton County.

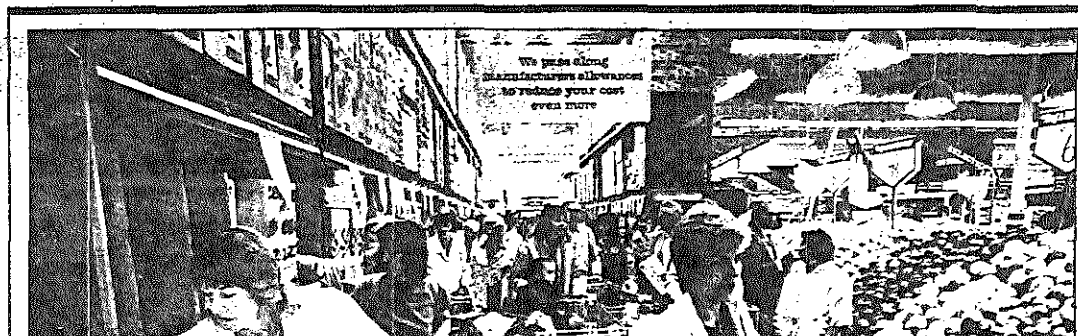
The tax rate in Alsea will jump by 18.5 percent, from \$22.22 per \$1,000 last year to \$26.33 per \$1,000 this year. That increase means the owner of a \$60,000 home in Alsea will pay about \$1,580 in taxes this year, an increase of \$247 from last year.

The increase in Alsea is attributable to an increase in school taxes. The school district tax rate climbed by 24 percent, from \$14.85 per \$1,000 to \$18.39 per \$1,000. Taxes paid to

See Tax/B4

COMPOSITE TAX RATES PER \$1,000 OF ASSESSED VALUE		
DISTRICT	1987-88	1987-88
Corvallis	\$32.32	\$30.07
Philomath	34.69	33.12
Monroe	32.43	31.22
Adair Village	37.17	30.28
TAX RATES BY DISTRICT		
Benton	\$ 3.77	\$ 3.54
CITIES		
Adair	\$ 4.08	\$ 3.90
Albany	8.77	8.12
Corvallis	7.15	6.45
Corvallis DTD	1.47	1.38
Monroe	5.57	5.55
Philomath	9.12	8.59
SCHOOLS		
Greater Albany	\$ 15.72	\$ 15.47
Alpine	11.88	11.44
Alsea	18.39	14.85
Belfountain	10.31	6.55
Corvallis	18.64	17.49
Harrisburg	11.29	10.97
Irish Bend	6.46	6.64
Monmouth-Independence	19.01	19.78
Monroe Union High	9.00	8.31
Norolon	11.83	11.35
Philomath	17.78	16.19
EDUCATIONAL SERVICE		
Urn-Benton	\$ .79	\$ .76
Polk	1.46	1.37
COMMUNITY COLLEGE		
Lane	\$ 2.07	\$ 2.01
Urn-Benton	1.94	1.83
FIRE DISTRICTS		
Adair	\$ 2.66	\$ 2.58
Alsea	1.38	1.17
Blodgett-Summit	.78	1.08
Corvallis	1.99	2.07
Hoskins-Kings Valley	1.47	1.50
Monroe	1.32	1.22
North Albany	1.05	1.68
Palestine	1.33	1.46
Philomath	1.27	1.21
ROADS		
Chinook	\$ 2.00	\$ 1.41
McDonald Forest Estates	1.77	1.52
Marys River Estates	2.49	2.50
North-F Street	2.16	2.02
Oakwood Heights	1.09	1.10
Ridgewood	2.49	1.00
Rosewood	2.25	2.25
Vineyard Mountain	1.47	1.42
MISCELLANEOUS		
Alsea Cemetery	\$ .04	\$ .07
Junction City Water	.49	.60
North Albany Sewer	1.37	1.37

B1-1



## House-OK'd rivers bill headed for Reagan

By Les Blumenthal  
of The Associated Press

WASHINGTON — The House on Wednesday passed and sent to the president's desk legislation that would designate almost 1,430 miles of 40 Oregon rivers for protection under the federal Wild and Scenic Rivers Act.

minutes of floor debate with only Republican Rep. Bob Smith opposing it.

Smith called the bill a "bad and beautiful, Jekyll and Hyde" measure that would trample on private property rights.

"The heartburn here is that private property is included," said Smith, adding that 85 percent of the rivers involved were in his district.



**WESTECH ENGINEERING, INC.**  
CONSULTING ENGINEERS & PLANNERS

## PRINCIPALS

C.H. STEKETEE, P.E.  
S.A. WARD, P.E.  
S.C. DOWNS, P.E.

February 17, 1988

Mr. Richard J. Nichols, Administrator  
DEQ - Water Quality Division  
811 SW 6th  
Portland, OR 97204

RE: City of Adair Village Discharge Standards

Dear Mr. Nichols:

We have been retained by the City of Adair Village to prepare a Sewerage Facilities Plan in anticipation of receiving an EPA Construction Grant for sewerage improvements this fiscal year.

DEQ has directed the City to eliminate its summer discharge to Bowers Slough within two years. In addition, elimination or restriction of the winter discharge to the slough may be required, pending our evaluation of receiving stream flows. Our early indication suggests that sufficient slough flows may be available further downstream from the present point of discharge.

We have assumed thus far that DEQ has no objections to the use of lagoons for summer holding, provided that the Department's seepage limitation of 1/4"/day is met without adverse impacts to groundwater. However, recent discussions with DEQ Regional personnel suggest that this standard is in a state of flux.

In order to properly evaluate all realistic alternatives for the City, we request your specific guidance on the following:

1. For a stabilization or holding lagoon, what design criteria and construction performance standard will be imposed with respect to allowable seepage?
  - 1/4"/day (allowing for a native clay liner)
  - 1/8"/day (requiring Bentonite)
  - 10<sup>-7</sup> cm/sec (mandating an impermeable membrane liner)

We believe that such tighter standards should be considered only in specific cases where groundwater degradation has been documented, or where prevailing soils or groundwater uses dictate extraordinary measures. Please recognize that increasingly tighter standards represent a very significant financial impact upon small communities such as Adair Village. Will EPA participate in the funding of such tighter standards?

2. DEQ and EPA have considered stabilization lagoons as secondary treatment. Therefore, we assume a winter effluent limit of 30/50 (BOD/TSS) applies, providing the receiving stream dilution ratio ( $< 1.0$ ) is available. We also assume that water quality standards for the Willamette Basin require a 10/10 summer discharge limit directly to the Willamette, and that a secondary (30/30) effluent would be permitted for a direct winter discharge to the river from the existing mechanical plant. Please advise us if these assumptions are incorrect. Also, since the Willamette River itself is not currently targeted for Total Mass Discharge Loading (TMDL) limitations, the City's mass discharge limits (lbs/day) can be increased, consistent with the design criteria and concentration limits for the new facilities.
3. Please advise us if anything other than secondary effluent is required for summer land application of treated wastewater, subject of course to hydraulic, BOD and nitrogen loading rates.
4. Some DEQ representatives have suggested the use of marsh treatment to polish the mechanical treatment plant effluent, with continued discharge to Bowers Slough. What effluent limits would be imposed; could the slough discharge be continued year around; and would lagoon seepage standards for marsh effluent be different if summer storage is still required?

These issues are of immediate importance to the timely completion of our Facilities Plan, and we look forward to your expeditious response. Please call me if you have any questions or need further information.

Very truly yours,

WESTECH ENGINEERING, INC.

---

Stephen C. Downs, P.E.  
Project Manager

SCD:jm

cc: City of Adair Village  
Scott Wilson, District 4 COG  
DEQ - Willamette Valley Region  
Barbara Burton - DEQ - Water Quality Division  
Francis Dzata - DEQ - Water Quality Division



## Department of Environmental Quality

811 SW SIXTH AVENUE, PORTLAND, OREGON 97204-1390 PHONE (503) 229-5696

May 16, 1988

Steve Downs  
Westech Engineering  
3421 25th Street S.E.  
Salem, Oregon 97302

Dear Steve:

This is a follow-up to our telephone conversation in early March 1988 regarding lagoon seepage requirements to address groundwater protection policies and treatment criteria of proposed expanded facilities for Adair Village and Halsey. This letter confirms in writing planning information related to you by Ken Vigil and Francis Dzata for these projects.

Your February 17, 1988, letter posed several questions. In addition, it appears you have made several assumptions about treatment criteria which are not completely consistent with water quality program policies. Facility plans and engineering studies are expected to address the water quality program policies and treatment criteria contained in Oregon Administrative Rules, Division 41. There may be cases where additional alternatives may be identified and compared against those treatment and disposal techniques which conform to these policies and treatment criteria because they will provide equivalent control of wastes. In certain situations, the preferred or recommended alternative may require exceptions to EQC policies.

The items discussed below should help clarify our position regarding appropriate information to be included in facility plans to enable decisions on appropriate exceptions on a case-by-case basis.

### 1. Questions Concerning Seepage Requirements.

As a result of increased concern about groundwater contamination, the EQC adopted a General Groundwater Quality Protection Policy in 1981. Consistent with these policies, highest and best practicable treatment and control of sewage to minimize potential pollutant loading to the groundwater is required. The Department considers a seepage requirement of 1/8 inch per day or less to be achievable for properly designed and constructed new treatment and storage lagoons or lagoons proposed to undergo expansion or significant modification. Where less than this level of protection is proposed, technical studies showing that lesser controls will adequately protect beneficial uses is needed. Such information would include hydrogeologic study information and contaminant loading projections that demonstrate that beneficial uses of groundwater will not be impacted. In some cases, a thorough hydrogeologic study which includes groundwater monitoring is not needed

Westech Engineering  
May 16, 1988  
Page 2

because sufficient information is readily available from other sources. Where indirect discharges to surface waters will occur (for example, via seepage ponds following treatment) information must include an evaluation that pollution loadings through groundwater to surface waters also will not impact receiving stream water quality and uses. If lesser controls are justified based on this study information, groundwater and/or surface water monitoring requirements may be specified in the Water Pollution Control Facilities permit to assure adequate protection of groundwater and surface water.

We do not foresee any problems with EPA grant funding assistance for lagoon treatment to meet 1/8 inch per day or less seepage. You may wish to consult with us as you obtain information on the hydrogeology for your projects so we can assist you in determining needed additional information.

2. Secondary Treatment.

Stabilization pond effluent of 30 mg/l BOD<sub>5</sub> and 50 mg/l TSS monthly average is considered equivalent to secondary treatment. Please be aware, however, that any proposed increase in permitted discharge loadings, summer or winter, requires approval from the Environmental Quality Commission in accordance with OAR 340-41-026(2). We would expect that any proposal to increase mass discharge loads above that which is currently permitted be compared with an alternative that assures effluent quality within the permitted loading and includes an evaluation of the impact on receiving water quality. Upon evaluating facility plans for grant funding assistance, we would determine if the information supports requesting an exception from the EQC.

Other water quality policies such as receiving stream dilution (30 to 1 for a 30 mg/l effluent BOD) and assurance that water quality standards will be met outside a reasonably defined mixing zone are applicable in any event. Thus, proposals for discharge should include an evaluation and characterization of low flows, potential environmental effects, and proposed discharge period. We will also evaluate outfall structure design to assure the mixing zone criteria for the basin are satisfied (copy attached).

3. Irrigated Effluent.

Enclosed is a copy of irrigation guidelines that the Department has made available to domestic waste sources and engineering consultants for several years. The quality of effluent required is dependent upon the use and proposed area to receive land applied effluent.

Westech Engineering  
May 16, 1988  
Page 3

4. Marsh Treatment.

The Department has approved and permitted one marsh treatment system. It is located in Cannon Beach. The engineering consulting firm proposed secondary lagoon effluent to the marsh and evaluated the capability of the marsh to treat to 10/10 prior to discharge to the receiving stream. The marsh is used in conjunction with the lagoon treatment system and it appears that this was in part dictated by the preference to discharge directly from the lagoon during the winter wet weather period. Information on this marsh treatment system continues to be collected and you are welcome to review our files. Oregon State University and Oregon Fish and Wildlife were active participants in the review and study of this facility.

If you have any additional questions or comments, do not hesitate to call. We are encouraged by the interest of both the City of Halsey and Adair Village to complete planning efforts. We do not foresee any difficulties in permitting expanded and improved wastewater treatment facilities for these communities provided the recommended alternatives are based on sound planning information and demonstrate existing and potential water quality concerns are addressed in an appropriate fashion.

Sincerely,

*Ralph E. Frank*  
*for*

Mary M. Halliburton, Manager  
Sewage Disposal Section  
Water Quality Division

MMH:kjc  
WJ537

Attachments

cc: Willamette Valley Region, DEQ  
City of Adair Village  
City of Halsey



**DEVELOPMENT DEPARTMENT**

180 NW 5th Street  
Corvallis, OR 97330-4728

(503) 757-6811

October 21, 1988

Department of Environmental Quality  
Water Quality Division  
811 SW Sixth Avenue  
Portland, Oregon 97204

RE: Modification of National Pollution Discharge Elimination System (NPDES)  
permit for the City of Adair Village

Benton County supports the proposed City of Adair Village sewer improvement project which would eliminate discharge of treated effluent into Bowers Slough. The proposed new outfall line to the Willamette River will traverse land zoned Exclusive Farm Use (EFU). The proposed lagoon site may also be located outside of the City limits on land zoned EFU.

Benton County has not conducted a land use review as required by County Ordinance. Article IV.04(4) of the Benton County Zoning Ordinance allows public utility facilities, including sanitary sewer lines, as a Conditional Use in the EFU zone. The City of Adair Village must apply for a Conditional Use Permit from the Benton County Development Department prior to construction of the proposed outfall line and sewage lagoons. The Conditional Use Permit application will be evaluated against Articles IV.05 and XX of the Benton County Zoning Ordinance.

Please enter this letter into the record of the public hearing. If further information is required, please contact the Development Department.

Sincerely,

A handwritten signature in black ink, appearing to read "Gary Munsterman", is written over the typed name and title.

Gary Munsterman  
Development Director

cc: City of Adair Village



**WESTECH ENGINEERING, INC.**  
CONSULTING ENGINEERS & PLANNERS

RECEIVED  
NOV 29 1988

## PRINCIPALS

C.H. STEKETEE, P.E.  
S.A. WARD, P.E.  
S.C. DOWNS, P.E.

November 28, 1988

Water Quality Division  
Dept. of Environmental Quality

Ms. Mary Halliburton  
DEQ Water Quality Division  
811 S.W. 6th  
Portland, OR 97204

RE: City of Adair Village  
File No. 500

Dear Ms. Halliburton:

On behalf of the City of Adair Village, we have reviewed the preliminary draft NPDES Permit, which was given to City representatives on November 17, 1988.

In general, we believe the proposed permit effluent limitations and compliance schedule realistically reflect the City's prevailing conditions and anticipated construction schedule for the new facilities; assuming the EQC approves the City's requested increase in mass discharge loads. However, we believe some comments on the proposed permit are appropriate.

1. Page 1. The existing treatment plant is located next to the Benton County Park. Also, neither the City, its existing treatment plant and outfall, nor the proposed new treatment facilities and outfall are located within the Mary's or Calapooia River basins. The appropriate subbasin would appear to be the Middle Willamette.
2. Page 2. The proposed interim effluent limitations appear acceptable and within the reasonable capabilities and limitations of the City's aged treatment plant. This is particularly true with the added provisions for an increased mass load discharge under high I/I flow conditions. However, the interim mixing zone specified in Condition A.1.c does not appear realistic, particularly in light of DEQ's October 1986 mixing zone survey. The vast majority of the Bowers Slough summer flow (at least in the immediate vicinity of Adair Village) is recognizably the treatment plant's effluent. We would prefer that a mixing zone not be specified during this interim period. However, if one must be specified, then we request that it be extended from the point of discharge, down to the slough's intersection with Ryal's Lane.



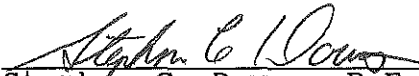
November 28, 1988  
Ms. Mary Halliburton  
Page 2

3. Pages 2 and 3. Conditions a1b and A2a (3) specify that the BOD and TSS removal efficiency shall not be less than 85 percent monthly average. We understand that this is based upon the influent and effluent concentrations (not mass loads). As revealed in the Facilities Plan, the existing mechanical treatment plant is capable of providing 85 percent removal on a seasonal average basis, even in spite of the prevailing high winter I/I flows. We understand that EPA secondary treatment standards allow stabilization lagoons to provide as low as 65 percent removal. Since Adair Village's lagoons will discharge only during the high streamflow winter months (and under a 30/50 standard for BOD/TSS), we request that the 85 percent reduction be delayed pending an evaluation of the project's success and lagoon's performance as part of the project certification.

We appreciate this opportunity to comment on the City's draft permit, and trust these comments are self explanatory. Please call me if you have any questions or need further information.

Sincerely,

WESTECH ENGINEERING, INC.

  
\_\_\_\_\_  
Stephen C. Downs, P.E.  
Project Manager

cc: City of Adair Village  
Ralph Funk, DEQ Water Quality Division  
Barbara Burton, DEQ Water Quality Division  
DEQ Willamette Valley Region - Salem

**PRELIMINARY**

Expiration Date: 11/30/93  
 Permit Number:  
 File Number: 500  
 Page 1 of 6 Pages

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM**

**WASTE DISCHARGE PERMIT**

Department of Environmental Quality  
 811 Southwest Sixth Avenue, Portland, OR 97204  
 Telephone: (503) 229-5696

Issued pursuant to ORS 468.740 and The Federal Clean Water Act

**ISSUED TO:**

City of Adair Village  
 103 N.E. Wm. R. Carr Ave.  
 Corvallis, OR 97330

**SOURCES COVERED BY THIS PERMIT:**

<u>Type of Waste</u>	<u>Outfall Number</u>	<u>Outfall Location</u>
Domestic Waste	001	Bowers Slough* (R.M. 2.5)
Domestic Waste	001	Willamette River (R.M. 122)

**PLANT TYPE AND LOCATION:**

Municipal Sewage Treatment Plant  
 (Trickling Filter) located  
 next to the Benton County  
 Park (existing)  
 Two cell lagoon off of Ryals  
 Lane (proposed)

**RECEIVING SYSTEM INFORMATION:**

Basin: Willamette  
 Subbasin: Upper Willamette  
 Stream: Bowers Slough\*  
 Willamette River  
 Hydro Code: 22E+BOWE 2.5D\*  
 22E=-WILL 122D  
 County: Benton

\* Until January 1, 1990

EPA REFERENCE NO: OR-002339-6

Issued in response to Application No. 999472 received 7/29/86.

This permit is issued based on the land use findings in the permit record.

Fred Hansen, Director

Date

**PERMITTED ACTIVITIES**

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

	<u>Page</u>
Schedule A - Waste Disposal Limitations not to be Exceeded...	2-3
Schedule B - Minimum Monitoring and Reporting Requirements...	4
Schedule C - Compliance Conditions and Schedules.....	5
Schedule D - Special Conditions.....	6
General Conditions.....	Attached

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

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

**SCHEDULE A**

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

a. Outfall Number 001 (Sewage Treatment Plant Outfall)

<u>Parameter</u>	<u>Average Effluent Concentrations</u>		<u>Monthly Average lb/day</u>	<u>Weekly Average lb/day</u>	<u>Daily Maximum lbs</u>
	<u>Monthly</u>	<u>Weekly</u>			
Year Around:					
BOD	30 mg/l	45 mg/l	50.0	75.0	100.0
TSS	30 mg/l	45 mg/l	50.0	75.0	100.0
FC per 100 ml	200	400			

<u>Other Parameters</u>	<u>Limitations</u>
pH (year around)	Shall be within the range 6.0-9.0
Average dry weather flow to the treatment facility. (Basis for mass discharge limits)	0.200 MGD
BOD & TSS removal efficiency	Shall not be less than 85 percent monthly average.

When, because of excessive infiltration or inflows, the total flow entering the treatment facility exceeds 0.300 MGD the percentage of BOD-5 and Suspended Solids removed by the treatment facility may be less than 85% and the pounds discharged may exceed the limits of Condition 1. During those periods the treatment facility shall be operated as efficiently as practicable and the amount of BOD-5 and Suspended Solids discharged shall not exceed a monthly average of 100.0 lbs/day each, or a daily maximum of 150 pounds each.

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

The allowable mixing zone is defined as that portion of Bowers Slough, beginning at the point of discharge and extending to Ryals Lane approximately 0.9 miles downstream.

2. Waste Discharge Limitations Not to be Exceeded after Attainment of Operational Level as Required by Schedule C, Condition 1, of this Permit.

a. Outfall Number 001 (Sewage Treatment Plant Discharge)

(1) May 1 - October 31: No discharge to state waters is permitted.

(2) November 1 - April 30:

<u>Parameter</u>	<u>Average Effluent Concentrations</u>		<u>Monthly Average lb/day</u>	<u>Weekly Average lb/day</u>	<u>Daily Maximum lbs</u>
	<u>Monthly</u>	<u>Weekly</u>			
BOD-5	30 mg/l	45 mg/l	80	120	160
TSS	50 mg/l	75 mg/l	133	200	267
FC/100 ml	200	400			

(3) Other parameters

Limitations

pH (year-round)

Shall be within the range 6.0 - 9.0

Average dry weather design flow to treatment facility. (Mass load is based on discharge flow of 0.318 mgd.)

0.090 MGD

BOD removal efficiency

Shall not be less than 85 percent monthly average.

TSS removal efficiency

Shall not be less than 65 percent monthly average.

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

The allowable mixing zone is defined as that portion of the Willamette River in a 25 foot radius from the point of discharge.

**SCHEDULE B**

1. Minimum Monitoring and Reporting Requirements  
(unless otherwise approved in writing by the Department)

a. Influent

<u>Item or Parameter</u>	<u>Minimum Frequency</u>	<u>Type of Sample</u>
Total Flow (mgd)	Daily	Continuous Recording
BOD-5	Two per Month	24-Hour Composite
TSS	Two per Month	24-Hour Composite
pH	Three per Week	Grab

b. Outfall Number 001 (sewage treatment plant outfall)

<u>Item or Parameter</u>	<u>Minimum Frequency</u>	<u>Type of Sample</u>
Total Flow (MGD)	Daily	Measurement
Quantity Chlorine Used	Daily	Measurement
Effluent Chlorine Residual	Daily	Grab
BOD-5	Two per Month	24-Hour Composite
TSS	Two per Month	24-Hour Composite
pH	Three per Week	Grab
Fecal Coliform	One per Week	Grab
Average Percent Removed (BOD & TSS)	Two per Month	Calculation
Flow Meter Calibration	One per Month	Verification

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

2. Reporting Procedures

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

SCHEDULE C

Compliance Conditions and Schedules

1. The permittee is required to eliminate all dry weather discharges to Bowers Slough and to make necessary facility improvements to achieve compliance with applicable water quality management policies, standards and treatment criteria set forth in Oregon Administrative Rules, Division 41, in accordance with the following:
  - a. By no later than February 1, 1989, the permittee shall submit preliminary engineering plans and specifications.
  - b. By no later than March 1, 1989, the permittee shall submit final engineering plans and specifications for construction of necessary improvements.
  - c. By no later than June 1, 1989, the permittee shall award construction bids for completion of necessary improvements.
  - d. By no later than January 1, 1990, the permittee shall complete construction of necessary improvements.
  - e. By no later than March 1, 1990, the permittee shall attain the necessary operational level to achieve compliance with the effluent limitations of this permit.
2. The permittee shall submit sludge management plans in accordance with Oregon State Department of Environmental Quality, Chapter 340, Division 50, "Land Application and Disposal of Sewage Treatment Plant Derived Products Including Septages" per the following schedule:

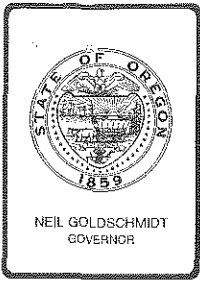
By no later than February 1, 1989, the permittee shall submit an interim sludge management plan for the existing facilities. Upon approval of the plan by the Department, the plan shall be implemented by the permittee until completion of facility improvements.
3. The permittee is expected to meet the compliance dates which have been established in this schedule. Either prior to or no later than 14 days following any lapsed compliance date, the permittee shall submit to the Department a notice of compliance or noncompliance with the established schedule. The Director may revise a schedule of compliance if he determines good and valid cause resulting from events over which the permittee has little or no control.

**SCHEDULE D**

Special Conditions

1. The permittee shall manage sludge in accordance with the Sludge Management Plan required by Schedule C, Condition 2 until existing treatment system is properly abandoned.
2. In the event the permittee finds it necessary to remove accumulated sludge solids from the lagoons, the permittee shall submit a sludge management plan developed in accordance with Oregon State Department of Environmental Quality, Chapter 340, Division 50, "Land Application and Disposal of Sewage Treatment Plant Sludge and Sludge Derived Products Including Septage" prior to removal of sludge from existing or new facilities.

P500W (kjc)



## *Environmental Quality Commission*

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

### INFORMATIONAL REPORT

Agenda Item I, December 9, 1988 EQC Meeting

Informational Report: Review of Metro Solid Waste Reduction Program.

#### ISSUES

To preserve landfill space and reduce the need to use good farmland for landfills, state law requires jurisdictions to adopt a waste reduction program before opening a new landfill in an area zoned exclusively for farm use. Also, the 1985 Legislature, in response to the pending landfill closure crisis in the Portland area, required Metro to submit a waste reduction program for approval by the Commission. This report examines whether Metro has fulfilled its obligations to reduce wastes, and if not, what action the Commission should take.

#### SUMMATION

- o The Commission approved Metro's required waste reduction program in 1986. In May 1988, Metro submitted the same waste reduction program to fulfill the requirements for use of the new Gilliam County landfill.
- o The Department reported to the Commission on September 9, 1988 that Metro had not adequately implemented major portions of their waste reduction program. The Commission then authorized a hearing, which was held October 12th, to determine the best course of action.
- o The Department believes that the best course of action is to negotiate a stipulated order, with penalties, covering activities in eight key elements of the Metro Waste Reduction Program. This order is scheduled to be adopted at the January 20, 1989 Commission meeting. Some important items to be in the order include salvage of lumber and reusable building materials and yard debris recycling at disposal sites, technical assistance in multifamily and commercial recycling, pilot recycling container projects, a pilot waste auditing and consulting service, and a recycled material procurement program.
- o Metro staff agree that a negotiated order would be an appropriate course of action, and concur in the basic elements to be included.

#### DIRECTOR'S RECOMMENDATION

The Department recommends that the Commission direct the Department to negotiate a stipulated order to be prepared for adoption at the January 20, 1989 EQC meeting.





## *Environmental Quality Commission*

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

### MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Agenda Item I, December 9, 1988 EQC Meeting

Informational Report: Review of Metro Solid Waste Reduction Program.

### Background and Problem Statement

In order to preserve landfill space and reduce the need to use good farm land for landfills, the 1979 Legislature passed SB 925, requiring jurisdictions which intend to open a new landfill in an area zoned exclusively for farm use to adopt a waste reduction program, and giving the Commission authority to order the jurisdiction to follow the waste reduction program (ORS 459.055). In 1985, the Legislature responded to the pending landfill closure crisis in the Portland area by requiring Metro to submit a waste reduction program for approval by the Commission prior to July 1, 1986 (SB 662, Chapter 679, Oregon Laws of 1985). Metro's plan was approved by the Commission on June 27, 1986. In May 1988, Metro submitted the same Waste Reduction Program to fulfill the requirements of ORS 459.055 relating to siting landfills in an exclusive farm use zone.

Metro was further required by the 1987 Legislature to implement its waste reduction program and to report to the Commission by July 1, 1988, and every two years thereafter, on implementation of the program (ORS 459.340 to 345). The Commission in turn is required to report to the Legislature on Metro's implementation of the program (ORS 459.350 to 355).

Metro submitted its report for Departmental review on June 30, 1988. The Department reported to the Commission at the September 9th meeting that major portions of Metro's waste reduction program have not been adequately implemented. The Commission then authorized a public hearing to (1) determine whether Metro's implementation actions comply with the approved Waste Reduction Plan pursuant to ORS 459.350, and (2) to determine whether the Commission should order implementation of the approved Waste Reduction Plan pursuant to ORS 459.055.

A public hearing was held October 12, 1988. The hearings officer's report is included as Attachment B. Based on testimony received and discussion with Metro staff and other interested persons, the Department still concludes that, as stated in the report to the Commission on September 9, Metro has not implemented the approved waste reduction program. The Department has determined, however, that some activities have been

completed or are on a path to completion and that other activities are not practical to complete at this time. A full analysis of implementation status and the Department's item-by-item findings is provided as Attachment A.

As described starting on page 4 of Attachment A, the Department recommends that the Commission issue a stipulated order to implement 18 activities in eight of the eleven key elements of the Waste Reduction Program. These eight elements are:

- Reduce and Reuse
- Recycle 405 Materials
- Yard Debris
- Post-collection Recycling
- Certification for Local Collection
- Rate Incentives
- Materials Market Assistance
- System Measurement

Some important items that are a part of these eight key elements are:

1. developing an area for recovery of lumber and reusable building items at Metro-area disposal sites,
2. a pilot building materials salvage program at disposal sites,
3. technical assistance in multifamily and commercial recycling,
4. pilot recycling container projects,
5. yard debris recycling at disposal sites,
6. new materials recovery centers to serve Clackamas and Washington counties,
7. a pilot waste auditing and consulting service for businesses, office complexes, construction/demolition companies, and shopping centers,
8. procurement policies encouraging the use of many recycled products by local governments and institutions, and
9. scheduled evaluation by Metro of the effectiveness of their programs.

Specific program activities to be included and suggested timelines are included in Attachment A starting on page 4. The Department is working with Metro to prepare an order which will stipulate timelines and due dates. Dates shown in Attachment A will be negotiated with Metro. If final agreed upon dates and timelines are not met, Metro will be subject to civil penalties for violation of the order. Metro staff agree that a stipulated order is appropriate, and the Metro Council has adopted a resolution concurring with the Department as to what activities need to be implemented (see Attachment E, draft resolution). Metro staff have stated their commitment to carry out the Waste Reduction Program, and will be requesting from the Metro Council an interim budget appropriation to obtain new staff resources to carry out the program's work plan. To allow review time by the Metro Council, the stipulated order is being prepared for the January 1989 EQC meeting. A report to the legislature on Metro's implementation of the waste reduction program will also be prepared for Commission review at the January meeting.

There are three key elements of the Metro waste reduction program that the Department does not plan to include in a stipulated order. For "Promotion, Education, and Public Involvement", the Department believes that each activity in this element has been completed or is progressing on schedule. For "Legislative Program", the Department recommends that Metro pursue the activities listed in the work plan, but believes it is not appropriate for legislative and lobbying efforts to be included as part of a stipulated order.

For "Alternative Technologies", Metro took major steps towards siting an energy recovery facility in St. Helens to accept Metro wastes. However, the City of St. Helens voted against allowing the incineration facility to be constructed there, and Metro's own independent health impact review panel said it could not guarantee that the energy recovery facility would not negatively impact the health of surrounding residents. Metro also negotiated a memorandum of understanding with Riedel Environmental Technologies to build a mass composting plant for 185,000 tons of waste per year. Progress on this plant has been slowed while Riedel seeks funding for construction.

The Department believes that although specific plans for alternative technologies have fallen through or been delayed, that Metro has lived up to the spirit of its waste reduction program for this program element. The Department believes that Metro will accomplish greater waste reduction by concentrating efforts on recycling and postponing further work on energy recovery until the other elements of the waste reduction program have been implemented.

#### Alternatives and Evaluation

The Commission could order Metro to implement its existing Waste Reduction Program without change. The Department believes, however, that some modification to the program is appropriate, as outlined above and in Attachment A. In addition, a negotiated order would allow the Department and Metro to be more specific about the timelines and activities to be undertaken than is present in the original waste reduction program. Finally, since the new staff at Metro have stated their commitment to carrying out an effective waste reduction program, the Department believes it would be better to work cooperatively with Metro than to work in confrontation.

The Commission could decide to take no action on the Metro Waste Reduction Program. The Department believes that to do so would neglect our responsibility under ORS 459 to make sure that the waste reduction programs and priorities of waste management are carried out.

The Commission could, as recommended, approve proceeding with program revisions and a stipulated order to be prepared for the January EQC meeting. The Department believes that an agreement should be reached at the earliest time feasible on the eight key elements of the program.

Adopting a stipulated order earlier than January would not allow sufficient time for Metro staff to coordinate with Metro Council.

Summation

1. The Department has reviewed the report submitted by Metro on the implementation of its waste reduction program and has determined that major portions of the program have not been implemented or are not on schedule.
2. On September 9, 1988, the Commission directed the Department to hold a public hearing to determine the best course of action regarding the Metro Waste Reduction Program.
3. The Department believes that the best course of action is to negotiate a stipulated order, with penalties, covering the points considered in Attachment A, to be adopted at the January 20, 1989 Commission meeting.
4. Metro staff agree that negotiating a stipulated order would be an appropriate course of action.

Director's Recommendation

Based on the summation, it is recommended that the Commission direct the Department to negotiate a stipulated order to be prepared for adoption at the January 20, 1989 EQC meeting.

*Mike Down*  
for  
Fred Hansen  
Director

- Attachments
- A. Memo on Status of Metro Waste Reduction Program
  - B. Hearings Offer's Report, October 12, 1988 hearing
  - C. ORS 459.055 and ORS 459.340 to 355
  - D. Notice of Public Hearing
  - E. Draft Metro Resolution

Peter H. Spendelow  
Phone: 229-5253  
November 23, 1988

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STATE OF OREGON

Department of Environmental Quality

Memo to: David Rozell, Waste Reduction Manager Date: November 21, 1988

From: Peter Spendelow, Recycling Specialist

Regarding: Metro Waste Reduction Program

Based on the September staff report, the testimony received at the public hearing, meetings with Metro, and other information received, here is an update on the status of Metro in implementing their waste reduction program, and the items that should be included in a stipulated order.

The Metro waste reduction program work plan listed 49 specific activities making up 11 distinct program areas. Some of these activities were listed in the work plan as optional. There is some overlap among activities, such as the education and promotion, markets assistance, and grants and loans components of many of the program areas.

1. Completed or On Schedule

There are 18 specific activities that the Department and Metro concur have been completed satisfactorily or are on schedule. These activities (and program names) are:

Program Name:	Activity:
Promotion and Education	Market Research
	Theme and Graphic Look
	Multi-year Campaign
	Specific Campaigns
	Recycling Information Center
	Support for Local Jurisdictions
	Public Involvement
Reduce and Reuse	Plastics Reduction Task Force
	Packaging Reduction
Recycle 405 Materials	Recycling Information Center Enhancement
	Regional Promotion and Education
Yard Debris	Materials Recovery Centers
	Promotion and Education
	Yard Debris Principal Recyclable Material
Materials Markets Assistance	Annual Market Analysis
	Annual Market Survey
	Consumer Education

For materials market assistance, the annual market survey activity was originally listed in the September staff report as being behind schedule.

However, Metro published their 1987 Annual Market Survey in September, 1988. so this item is now listed as completed.

2. Optional Programs

Six of the forty-nine activities were listed as optional activities in the Metro Waste Reduction Program work plan. These are:

Program Name:	Activity:
Recycle 405 Materials	Source Separation Technology Development Grants and Loans
Yard Debris	Diversion Credits, Loans and Grants
Materials Markets Assistance	Grants and Loans: Research and Development
	Grants and Loans: User Assistance
	Materials Brokerage

Metro plans to pursue most of these through their newly-passed "one percent for recycling" grants and loans program. This program should raise more than \$300,000 per year to fund new recycling activities. Metro states that one of the main criteria for grants and loans will be whether issuing the assistance will further the goals of the waste reduction program. Metro is already actively pursuing source separation technology development (research and pilot project on furthering source separation through the use of recycling containers or other mechanisms). The one activity that Metro does not plan to pursue at this time, except possibly on a pilot basis in conjunction with grants and loans, is the development of a specific materials brokerage program. Metro believes that for most materials it would be impractical for them to serve as a "market of last resort" at this time.

3. Activities not to be included in a DEQ - Metro Order

These seven items have either been substantially completed with only minor tasks remaining, have been postponed or not completed for various reasons, or are inappropriate to include in a negotiated order. The Department believes that some of these items, particularly the two concerning legislative programs, should be pursued by Metro but are inappropriate for a stipulated order. The Department does not feel it necessary for Metro to complete the remaining items at this time, but recommends that Metro reexamine the items in the future:

Program Name:	Activity:
Reduce and Reuse	Waste Exchange
Alternative Technologies	Materials and Energy Recovery
Legislative Program	Legislative Program
Rate Incentives	Fund Work Plan Commitments
Materials Markets Assistance	Annual Supply Profile
	Legislative Action
System Measurement	Waste Substream Composition Study (geographic portion)
	Substream Resource Recovery Study (geographic portion)

A waste exchange would be a valuable component of a waste management system. However, Metro believes that a waste exchange would be much more valuable and effective if it operated on a state-wide or interstate basis rather than just the Metro region. The Department agrees with that assessment, and anticipates that if a waste exchange to serve the Northwest were to start up, that Metro and the Department would be involved in helping to implement the program. The Washington State Department of Ecology has requested federal funding to do a feasibility study for a regional waste exchange.

For alternative technologies, Metro has devoted the staff time and effort called for in their work plan in attempting to implement the program, culminating in the Metro Council authorizing the negotiation of a memorandum of understanding with Combustion Engineering Inc. (C-E) for construction of a 350,000 tons per year refuse-derived fuel facility. However, two events have since caused Metro to suspend negotiations with C-E. First, Metro's independent Health Impact Review Panel issued findings stating that they could not guarantee that an incinerator would not negatively impact human health. This resulted in the Council adopting a resolution in May 1988 to suspend negotiations with C-E. Second, the City of St. Helens voted in May 1988 to prohibit the construction of an incineration facility in the city. St. Helens was the site of the C-E proposed facility, and C-E has not located an alternative location.

The Metro Council also approved a memorandum of understanding with Riedel Environmental Technologies (RET) for construction of a waste composting plant with a capacity to handle 185,000 tons per year. The facility is scheduled to be operational 18 months after financing is arranged.

The Department believes that although specific plans for alternative technologies have fallen through or been delayed, Metro has lived up to the spirit of their waste reduction program and the state priorities for waste management regarding alternative technologies. The Department recommends that Metro reexamine this program after further work in recycling implementation has been accomplished, and that alternative technologies not be required in any negotiated order between the Commission and Metro.

Regarding the activity of funding work plan commitments, Metro did amend their user fee to fund different waste reduction activities under their work plan, but it is clear that the staff resources dedicated to waste reduction have not been sufficient to fully implement the Metro program. However, the Department prefers that the order specify just the work plan commitments to be carried out, and not to specify how Metro intends to fund those commitments.

The annual supply profile was a small activity by which Metro would estimate annually the changes in the amount of material available for recycling. The Department believes this survey would have value, but that it can be done less frequently than an annual basis.

Regarding system measurement, Metro has conducted and published an excellent study of the overall composition of the Metro waste stream. The study is certainly among the best in the nation for a single jurisdiction. The one part of Metro's system measurement work plan that was not included in this study was an estimation of the geographic distribution of wastes generated that contain recyclable materials. This estimation was to be used to determine the best locations for siting materials recovery facilities. The Department believes that such a study would be helpful, but that Metro can use other methods for determining appropriate locations for new materials recovery facilities.

**4. Items to be included in a DEO - Metro Negotiated Order**

Some of the activities listed here have been nearly or partially completed by Metro. Others have not been pursued at all. The Department believes that each of the activities listed below contain work elements that should be a part of a stipulated order.

Program Name:	Activity:
Reduce and Reuse	Salvageable Building Materials and Items
Recycle 405 Materials	Technical Assistance
	Local Collection Service Certification
Yard Debris	Materials Markets Assistance
	Technical Assistance
	Rate Incentives
	Local Collection Service Certification
	Bans on Disposal (required by ORS 459.195)
Post Collection Recycling	Materials Recovery Centers (Clackamas+Wash.)
	Use of Transfer Stations
	Waste Auditing and Consulting
Certification: Local Collection	Certification for Local Collection Services
Rate Incentives	Rate Incentives to Insure Compliance
	Incentives for Post-Collection Recycling



Materials Markets Assistance	Recycled Products Survey
	Institutional Purchasing
System Measurement	Set Waste Reduction Performance Goals
	Establish Ongoing Measurement

A discussion of each of these programs and activities follows, along with a list of those work elements and timelines that the Department would like to see in a stipulated order. These lists and timelines will be subject to negotiation with Metro.

**Program: Reduce and Reuse.**

**Activity: Salvageable Building Materials and Items.**

1) All disposal sites and transfer stations that accept significant amounts of building materials or demolition debris for disposal should set aside an area for recovering lumber and reusable building items. This should be accomplished at the Metro general-purpose landfills and transfer stations by January 1, 1990, and at the demolition fills by January 1, 1991. Spotters or gate attendants should be used to direct loads of salvageable materials to this recycling area. Existing facilities such as the ambitious Marin County, California facility or the Glenwood Receiving Station (Eugene) could be used as models for recovery of these materials.

2) Metro should also carry out a pilot project in which a disposal site sets aside an area where high-grade loads of debris could be dumped and salvageable materials removed. This pilot project should be in effect and recovering material by September 1, 1989. If this pilot project is successful, it should be expanded to all other Metro-area disposal sites that accept significant amounts of demolition or building material for disposal. The Metro Solid Waste Reduction Goals Committee recently recommended that Metro adopt a lumber recovery program, a goal that could be combined with other salvage programs referred to above.

3) Metro should conduct a specific promotion campaign for reusable materials, similar to the Metro campaigns for yard debris, Christmas trees, or household hazardous waste.

4) Metro should develop a model policy for local governments to implement that would require contractors and demolition companies to indicate what materials they will be able to recover in their demolition work before the local government will grant a demolition or remodeling building permit.

**Program: Recycle 405 materials**

**Activity: Technical Assistance**

The original work plan called for a high degree of effort in providing technical assistance services to local governments in developing single and multifamily curbside collection programs and effective promotion and

education programs in accordance with SB 405. Included were specific items including designation of a project manager for technical assistance, the holding of workshops, and direct consultation through the formation of a technical assistance team. Metro has provided some technical assistance, but should provide the degree of effort called for in the work plan. This assistance should be concentrated in the areas most in need of development, including multifamily collection, commercial collection, and yard debris. Two work elements are suggested:

- 1) Metro should identify those areas where multi-family or commercial recycling is not provided, and where technical assistance is most needed to establish multifamily and commercial recycling programs.
- 2) Metro should proactively provide technical assistance as needed to get the desired multifamily and commercial recycling programs established. This assistance should include, at Metro's initiation, direct consultation of Metro staff with appropriate local government officials and collectors.

**Activity: Source Separation Technology Development**

This activity was listed as optional in the Waste Reduction Program Work Plan, but subsequent legislation (ORS 459.305) requires Metro to provide residential recycling containers as a pilot project not later than July 1, 1989.

- 1) Metro should continue with their pilot project, modified as necessary to ensure implementation by the July 1 date.
- 2) Metro should implement a pilot project involving containers for multi-family residential units.

The local collection service certification activity is discussed below under the program by that same name.

**Program: Recycle -- Yard Debris**

**Activity: Materials Markets Assistance**

In many respects, Metro has gone well beyond the activities listed in the original work plan in providing assistance to the yard debris processors. However, the activities relating to institutional purchasing have not been completely carried out, except for the extensive purchase of composted yard debris products for the St. John's landfill.

- 1) By July 1, 1989, Metro should contact all of the Metro area local governments, including parks departments and the Port of Portland, to make them aware of the availability of composted yard debris and to see if they can substitute composted yard debris for peat moss or other soil amendments that they may presently using.

2) Metro should draft a model procurement policy for composted yard debris products, and then work with local governments and institutions to have them adopt and follow that procurement policy.

3) For institutions that Metro determines can use significant amounts of composted yard debris, Metro should provide samples and demonstrate to the institution that composted yard debris can be used effectively.

4) Metro should continue their good work helping the yard debris processors develop markets, purchasing composted yard debris for their own projects, and providing promotion and education for recycling yard debris.

**Activity: Bans on disposal**

1) Metro should work with all the disposal sites in the region to make sure that each develops a mechanism for having yard debris recycled, either by setting aside an area for processing yard debris or to receive source-separated yard debris for later shipment to a yard debris processor. This recycling capability should be implemented at all Metro-area general purpose and demolition landfills by July 1, 1989.

2) By July 1, 1989, Metro should prohibit the disposal of source separated yard debris at all Metro-area disposal sites.

**Activity: Rate Incentives**

Metro currently accepts source-separated yard debris at the St. John's landfill. Residents who bring in their own source-separated yard debris pay a lower disposal fee for that material than they would for mixed waste, giving them an incentive to keep contaminants out of the yard debris. However, commercial generators and collectors who pick up source separated yard debris are not given any rate incentive to keep their yard debris loads clean.

1) Metro should, as soon as possible, provide all users of its transfer stations and landfills with economic incentives to have yard debris recycled and kept clean of contaminants.

2) Metro should use its authority to ensure that other Metro-area disposal sites that accept yard debris for recycling have economic incentives for source-separation of yard debris. These incentives should go into effect at the time the disposal sites develop yard debris recycling capabilities.

3) Metro should adopt economic incentives to influence local governments or collection services to provide yard debris collection service.

**Activity: Technical Assistance**

Metro has provided great assistance to the two major yard debris processors. However, Metro should expand these efforts to take a more proactive role in providing assistance to local governments, haulers, and small scale processors such as chipping and gardening services that might compost their own waste.

**Activity: Local Collection Service Certification.**

Metro committed in their work plan to develop standards for yard debris recycling by jurisdiction, and to charging higher disposal rates for those jurisdictions that do not implement adequate yard debris collection and/or processing systems. Since the work plan was adopted, the Commission has adopted rules listing yard debris as a principal recyclable material in the entire Metro area. Although the newly-adopted yard debris rules do not require an action on Metro's part, it would be more efficient if a single entity, such as Metro, were to do the planning and development for an area-wide program. In addition, Metro could use rate incentives and their proposed certification program to help provide an orderly and more equitable way to phase in yard debris collection under the Recycling Opportunity Act. The discussion in the Certification for Local Collection Service Program lists specific work activities for this item.

The **Materials Markets Assistance** activity is listed as completed because, although no processing operation was set up to serve north Portland as called for in the work plan, Metro accepted source separated yard debris at a reduced disposal fee at the St. John's landfill for shipment to an existing processor. The Department considers that this arrangement satisfactorily substitutes for having a yard debris processor operate in the north part of Portland as long as the fee Metro charges for accepting yard debris at St. Johns is close to the fees charged by yard debris processors at their own facilities.

**Program: Post Collection Recycling/Materials Recovery**

Metro's Waste Reduction Program made a strong commitment to working to develop adequate materials recovery facilities to serve the region. The summary of tasks for this program show 7350 staff hours to be dedicated to this program in 1986 and 1987 (nearly two FTE for the two years). Only a small portion of this time has actually been spent on the activities of this program. Metro has completed some aspects of this program, but needs to devote considerably more effort to effectively implement a post collection recovery program.

**Activity: Materials Recycling Centers**

1) Metro should determine the geographic areas that could economically support a materials recovery center where no such Metro-franchised center now exists. This determination should be made by September 1, 1989. The

Department believes that Clackamas County and Washington County could each support a materials-recovery facility.

2) Metro should work to ensure that sufficient materials recovery facilities are built to result in efficient recovery of recyclable materials throughout the entire Metro region. If Metro determines that an area exists that could economically support a materials-recovery facility, and if no private or Metro-franchised facility fills this need, then Metro should issue a request for proposal to construct and operate such a facility in the area by January 1, 1990. Each area that can support a materials-recovery facility should have a facility on-line and operating by January 1, 1992.

**Activity: Use of Transfer Stations**

All transfer stations in the Metro region should be designed either to recover recyclable materials from hi-grade loads of waste, or to provide an area for unloading and temporary storage of material pending transfer to an appropriate materials recovery facility. This capability for materials recovery shall be provided in all new transfer stations, and in existing transfer stations by January 1, 1990. Alternatively, if Metro finds it impractical to establish materials recovery capabilities at a transfer station, Metro should use its flow control authority to refuse to accept any wastes at the transfer station that could be accepted and processed at a materials-recovery facility.

**Activity: Waste Auditing and Consulting**

1) Metro should conduct a pilot project, to be initiated by March 1, 1989 and completed by October 1, 1989, to provide waste auditing and consulting to fifty representative moderate to large businesses, office complexes, construction/demolition companies, and shopping centers. In this pilot project Metro should determine the quantity and composition of the wastes produced by each business, and shall demonstrate to the business what materials could be effectively recovered through source-separation, and what wastes could be made available to a materials recovery center.

2) By January 1, 1990, Metro staff should prepare a report to DEQ and to the Metro Council on the effectiveness of the waste auditing and consulting pilot project.

3) If the pilot project demonstrates that the waste auditing and consulting service was effective at reducing the wastes generated by certain classes of businesses or institutions, Metro shall conduct an inventory of the Metro-area businesses and institutions in those classes, and shall offer waste auditing and consulting services to all of those businesses by July 1, 1992.

4) Metro should prepare and distribute written information targeted at waste reduction in certain classes of businesses.

5) In conjunction with the waste auditing and consulting service, Metro should work with affected haulers to help set up routes for high-grade loads that could be delivered to a materials recovery facility.

**Program: Certification for Local Collection Services**

This program, and the rate incentives program linked with it, was considered by the Department to be one of the strongest aspects of the Metro Waste Reduction Program when it was adopted.

- 1) Metro shall adopt standards for yard debris recycling programs that are consistent with OAR 340-60-035, 040, 115, 120, and 125. These standards should be adopted by September 1, 1989.
- 2) Metro shall review the yard debris recycling programs offered in all local government units within the Metro area, and shall certify the yard debris recycling programs that meet the Metro standards.
- 3) Haulers delivering wastes from certified areas shall be charged \$4.50 less per ton as compared to haulers delivering wastes from non-certified areas. The effective date of this differential shall be January 1, 1990. The figure of \$4.50 per ton was adopted by the 1987 Metro rate study as an appropriate differential to use in that event that a local government does not implement the opportunity to recycle.
- 4) Metro shall examine and modify its rate structure as necessary to recover its costs and to maintain a differential that would be effective in ensuring compliance with the Metro standards.
- 5) By January 1, 1990, Metro shall also adopt standards for multi-family recycling and for commercial recycling and the generation of high-grade loads of wastes, plus standards for other recycling or education activities. Jurisdictions or haulers meeting these standards shall also be offered a further rate differential as an incentive for meeting these standards. This rate differential should be put into effect by January 1, 1991. Other activities that Metro should consider in their standards include the distribution of recycling containers, frequency of service, and notification, education, and promotion.

While there is room to modify the work elements of this program any agreement negotiated with Metro should include activities that will still effectively accomplish the program goals.

**Program: Rate Incentives**

See above for the portion of the rate incentive program that is tied to certification of local jurisdictions.

**Activity: Incentives for Post-Collection Recycling**

- 1) The existing waiver of minimum charge for individuals who drop off recyclable material is a good policy, and should be continued. Metro should consider expanding this incentive by adopting further recycling credits, such as has been so successful in Deschutes and Lane Counties.
- 2) By March 1, 1989, Metro should examine the effectiveness of its present rate structure and rate incentives for materials processing facilities. If the rate incentives are not producing the desired waste reduction effect agreed to by Metro and the Department, then Metro should propose and adopt new rate structures to produce the desired materials-recovery and waste reduction.
- 3) Metro should examine and propose similar rate incentives that could result in materials other than paper being pulled out of the waste stream. One other incentive that should be continued and expanded is the lower disposal rates for source-separated yard debris (see yard debris program above). Metro should also consider incentive rates for high-grade loads of paper, cardboard, lumber, or salvageable demolition waste delivered to transfer stations where no appropriate processor is nearby.

**Program: Materials Markets Assistance Program**

The Department recognizes that the newly-adopted "one percent for recycling" program could be a valuable addition to this program.

**Activity: Recycled Products Survey**

Metro should complete its survey of recycled products available for purchase in the Metro region by July 1, 1989. This survey should include:

- 1) recycled paper products
- 2) reusable containers
- 3) recycled plastic products
- 4) paving and construction materials
- 5) ground covers and soil amendments
- 6) recycled rubber products
- 7) lubricating oils
- 8) fuels derived from recycled oil or other recycled products
- 9) insulation and building materials

The survey should also include the price of the recycled material in comparison to the price of similar items made from virgin materials.

**Activity: Institutional Purchasing**

- 1) Based on the survey of recycled products, Metro should develop model policies for procurement of these products, and work with local governments and institutions to have this procurement policy adopted and implemented.

2) Metro should obtain samples of the recycled products, and should work with potentially large users to demonstrate the feasibility of using the recycled products.

Program: System Measurement

**Activity: Set Waste Reduction Performance Goals**

The Department recognizes that a Metro advisory committee has prepared a recommendation regarding performance goals, and expects that Metro will complete this process and that the Metro Council will adopt goals by March 1, 1989.

**Activity: Establish Ongoing Measurement**

1) By July 1, 1989, Metro should establish a protocol for periodic sampling of wastes delivered to Metro-area facilities to determine the quantities of recyclable materials that are being disposed. This sampling should be conducted and published annually. The protocol should be established in such a way that the effectiveness of major elements of the waste reduction program, such as paper recovery from businesses or lumber recovery programs, can be estimated.

2) Metro should annually publish a report detailing the amount of waste delivered to each Metro-area disposal or materials recovery facility, and the percentage of waste going to each facility that was sent to landfill. This report should also include Metro-area waste that is sent to facilities outside the Metro region, including Yamhill and Marion county facilities.



To: Environmental Quality Commission

From: Hearings Officer

Regarding: Report on Public Hearing held October 12, 1988 Regarding Metro Waste Reduction Program.

Summary of Procedure

A public hearing was held on October 12, 1988 from 2:00 to 3:00 pm in Portland to accept testimony regarding the Metro Waste Reduction Program. Stephanie Hallock, Division Administrator for the Hazardous and Solid Waste Division, presided as hearings officer.

The following persons presented formal oral testimony, in the following order:

Jeanne Roy, Recycling Advocates  
Ann Kloka, Sierra Club Columbia Group  
Debbie Gorham and Bob Martin, Metro  
Betty McArdle, Oregon Environmental Council

All persons presenting oral testimony also presented written testimony. In addition, written testimony was received from Estle Harlan, representing Oregon Sanitary Services Institute. Copies of all written testimony are attached.

Summary of Testimony

Jeanne Roy, Chair, Recycling Advocates stated that she did not believe that Metro should be allowed to change their program goals, objectives, or action elements, and that she believes the plan is a good one that can be implemented. Jeanne noted that earlier this year Metro chose to submit the same waste reduction plan, without change, as being the plan they would follow in regards to the requirements for siting a landfill in an exclusive farm use zone. Jeanne believes that DEQ should order Metro to implement the Plan and should put Metro on a compliance schedule for five of its programs: yard debris, post-collection recycling, certification, rate incentives, and markets assistance. Jeanne then discussed specific aspects for each of these programs.

Ann Kloka, representing the Columbia Group of the Sierra Club, stated that much work went into formulating the Plan, and that although not perfect, it is a good workable plan. She recommended that the Commission order Metro to implement the important elements of the Plan, and set a strict compliance schedule. Specific elements discussed by Ann included certification for local collection services, grants and loans, waste auditing services, institutional purchasing, and technical assistance.

Bob Martin, the new Solid Waste Director for Metro, said that he comes to this job with an environmental background, and is highly committed to implementing an effective waste reduction program at Metro. He will be looking closely at the plan and at his existing resources at Metro, and will try to maximize the effectiveness of those resources at carrying out the waste reduction commitments that Metro has agreed to. If, as he suspects is the case, there are gaps and activities that cannot be done with present staffing levels, he will be asking Metro Council for additional resources to fill those gaps.

Debbie Gorham presented a summary of the accomplishments of the Metro Waste Reduction Program, and outlined where she expects Metro to go from here. Debbie outline the areas where she believes Metro has completed their commitments or are on schedule, the areas where elements have not been completed on schedule, but are in process or scheduled to be completed at a later date, and a few areas where Metro has not undertaken a program due to poor feasibility or where Metro has developed alternative methods to achieve the objective of the element. The certification program was one program where Debbie stated that in the staff's view, the objectives of the program will be better met through the new solid waste functional plan than through the use of certification as an implementation strategy. Debbie also repeated Metro's commitment to aggressively pursue a waste reduction program, and stated a commitment to work closely with all affected parties in the future.

Betty McArdle, representing Oregon Environmental Council (OEC), stated that Metro had failed to implement numerous elements of its adopted plan, and that the EQC should order the implementation of the plan. Actions called for by OEC include 1) denial of the new Gilliam County regional disposal permit, 2) issuance of an order directing Metro to implement all portions of its plan, with a 90 day deadline for items behind schedule, and 3) imposition of the maximum civil penalty if Metro fails to comply with the schedule. OEC believes the Metro plan does not need changes.

Estle Harlan, representing the Oregon Sanitary Service Institute (OSSI) stated that Metro has not complied with the work plan that was filed, but that the Metro report filed did not explain the changes that have occurred or are in process that will produce a better, more workable plan. Estle believes that the original plan was developed in haste, with virtually no input into the development of the plan by affected parties. She does not believe Metro should carry out the certification part of the program since Metro does not have collection authority, and since no other jurisdiction has implemented rate incentives where such varied demographic/collection conditions exist within a jurisdiction. If rate incentives are to be

adopted, they should come from some new funding source such as a Metro tax base. Estle believes that the Metro functional planning process should be given time to work.

Departmental Response

Attachment 1 to the 12/9/1988 EQC meeting outline the course of action that the Department is proposing. The Department believes that the activity items discussed in attachment 1 represent a partial consensus, based on the comments received, of those items that should be scheduled for implementation by Metro. The Department also believes that all parties are in substantial agreement as to the facts regarding what Metro has implemented.

Regarding OEC testimony, the Department has already issued the new Gilliam regional disposal permit. The Department also believes that there are certain activities in the Metro waste reduction program that should not be covered in any order, as outlined in attachment 1.

Regarding OSSI testimony, the Department agrees that the Metro plan was adopted relatively quickly, but also believes that the affected persons were given a number of opportunities to make their views known, as outlined in Appendix 4 of the original Metro Waste Reduction Program documents. The Department further believes that the certification, rate incentives, and avoided disposal credits are feasible, and that jurisdictions such as Lane County, with a more varied set of collection conditions than the Metro area, have successfully implemented such incentives.

TESTIMONY TO DEQ ON IMPLEMENTATION OF METRO'S WASTE REDUCTION PLAN

By Jeanne Roy, Chairman, Recycling Advocates

October 12, 1988

Metro should not be allowed to change the program goals, objectives, or action elements of its Plan at the present time for the following reasons:

1. To adopt the Plan Metro went through a process of Council Committee meetings every other week for several months, public meetings to receive input from local government, haulers, and others; hearings before Metro Council, hearings before DEQ, revisions based on DEQ requests, and hearings before Metro Council again. We do not believe that a Plan adopted in this manner should be changed in a two-month period by negotiations between the DEQ and Metro staff. Neither do we believe that Metro staff time should be spent now on revisions. Staff time should be spent on implementation.

2. Metro chose to submit this Plan without changes in May along with a permit application for a landfill in an exclusive farm use zone. If it had wanted to change the Plan, it should have done so before then.

3. The Plan is a good one, and it can be implemented.

The DEQ should order that Metro implement the Plan and should put Metro on a compliance schedule for five of its programs: Yard Debris, Post-Collection Recycling, Certification, Rate Incentives, and Markets Assistance.

Yard Debris. The goal of this program is "To achieve maximum feasible reduction of yard debris currently being landfilled through the use of regional processing facilities and on-route collection of source separated yard debris." Metro should be required to establish a processing facility for yard debris in the northern part of the region. Alternatively it could demonstrate that the present private processing facilities will continue to be adequate when on-route collection is extended and establish yard debris transfer stations instead. If it intends to rely on essentially one processor, it should have a contractual agreement with that company.

Metro should be ordered to implement lower rates for commercial loads of source separated yard debris at its processing and transfer points. Otherwise generators and haulers will have no incentive to keep their loads uncontaminated. Otherwise residential collection of separated yard debris will be discouraged.

As soon as rates for source separated yard debris have been set lower than landfill rates, Metro should ban source separated yard debris from landfills under its control. Space for yard debris at CTRC and demolition landfills needs to be set aside immediately.

Post-Collection Recycling. Metro should be put on a schedule for redesigning CTRC for maximum waste substream differentiation because they are so far behind schedule.

A waste auditing and consulting service is urgently needed now that disposal rates are about to rise by 150%. Metro was to have a plan for assisting waste generators develop high-grade loads by 12/86. They should be put on a new compliance schedule.

Certification. The purpose of this program is to establish standards of performance for the local communities and to provide incentives which encourage them to voluntarily meet the standards. Typical standards of performance are percentages of waste recycled, but other measurable standards might be frequency of service, provision of containers, or inclusion of specific materials such as yard debris or scrap paper. According to the Plan the incentives are to be lower disposal rates for certified cities and possibly grants and loans. An alternative way of implementing the program would be to leave certification at 405 levels and give the incentives directly to the haulers who recycle the materials. They could be paid (through disposal account credits) according to the tonnage they recycle as is done in Lane County. Lane County pays the haulers \$170/ton for glass, tin cans, aluminum, and oil. Or Metro could decide not to use differential rates and use grants instead.

Rate Incentives. The waiver of the User Fee and Transfer Charge at OPRC and after November 1 at CTRC are to prevent double charging. Now the fees are imposed on only the waste landfilled after processing. The waiver has never provided enough differential to be a significant incentive. As a result of our organization's lobbying efforts, the Metro Council adopted an amendment to its new rate ordinance which will give a \$2/ton credit to processors of 50-80% waste paper loads. However, the \$2/ton was an arbitrary figure, and more paper might be recycled if a higher incentive is offered for higher grade loads. Metro should be ordered to do a more thorough analysis of the incentives than they did in their rate study, to closely monitor the effects, and to make adjustments more often than annually.

Metro should be ordered to implement rate incentives for the certification program as described in the Certification paragraph above.

Markets Assistance. Metro should have a deadline for providing technical assistance and promotion for developing insitutional purchasing policies.

Grants should be targeted for research and development of new

methods for utilizing waste paper.

Metro has established a grant program for waste reduction which is unconnected to its Plan. It should be ordered to give highest priority to grants which are called for in the Plan, specifically under the 405 Program (p. 15), Certification Program (p. 31), and Markets Assistance Program (p. 41).

We believe that Metro should be given a short time frame to demonstrate compliance and should be fined if they do not.

the Sierra Club, Columbia Group,  
to the Department of Environmental Quality  
on Metro's Solid Waste Reduction Program

October 12, 1988

I am representing over 3500 members of the Columbia Group of the Sierra Club who are concerned about Metro's Solid Waste Reduction Program. A lot of work went into formulating this plan, and, although it's not perfect, it is a good workable plan. However, Metro has ignored some important points in the program and has ignored most compliance deadlines. Metro has also made some major modifications that should first have been subjected to review by the DEQ and to a public hearing.

We view the Solid Waste Reduction Program as a good vehicle to help Metro get an aggressive recycling program going. Metro seems to view the Program more as an annoyance that they have to respond to every two years.

The program has some items that could make a real difference between a feeble attempt at recycling and a serious one. For instance, if truly effective "rate incentives" were implemented for taking materials to recovery centers, haulers would make a serious effort to encourage more recycling from their customers, including yard debris, and to keep all recyclables separated.

"Certification for Local Collection Services" is also an excellent tool that Metro could use to set high performance goals for local jurisdictions. This could include curbside pickup of source-separated yard debris and plastics, as well as providing collections for apartment buildings and businesses. These jurisdictions would be rewarded for their significant waste reduction through rate incentives.

Metro must start using its "Grants and Loans" program to encourage market research and stimulate demand for recyclable materials.

Metro has yet to establish a "Waste Auditing and Consulting Service" to assist waste generators in creating high-grade loads of recyclables.

Metro was also required to provide technical assistance for creating "institutional purchasing" policies favoring recycled materials and has not done so.

There are several other elements of the Solid Waste Reduction Work Plan that Metro has not taken action on. In fact, the DEQ review shows that only 17 of the 49 action elements in the plan have been completed or are on schedule.

We recommend that the DEQ take the important elements that Metro has not acted on and recommend to the Environmental Quality Commission that they order Metro to comply with these elements and set a strict compliance schedule. Any deviations from these action items would have to be reviewed by the DEQ and subjected to a public hearing.

Sierra Club - Columbia Group  
2637 SW Water Ave  
Portland, OR 97201 224-1538

Testimony of Metro's Solid Waste Staff  
Regarding DEQ's Review of the  
1988 Waste Reduction Program Report

The purpose of our testimony today is to discuss our waste reduction program accomplishments and to outline where we go from here. Metro's Waste Reduction Program (WRP), approved by the EQC in 1986, contains eleven distinct programs to reduce waste in the metropolitan area.

Promotion, Education and Public Involvement

Reduce and Reuse Programs

Recycle - 405 Materials

Recycle - Yard Debris

Post-Collection Materials Recovery

Alternative Technologies

Legislative Programs

Certification Program

Rate Incentives

Materials Markets Assistance Program

System Measurement



5. POST-COLLECTION MATERIALS RECOVERY: Material Recovery Centers.
6. ALTERNATIVE TECHNOLOGIES: Proposals for Alternative Technologies.
7. RATE INCENTIVES: Incentives for Post-Collection, Funding for Work Plan.
8. MATERIALS MARKETS ASSISTANCE PROGRAM: Annual Market Analysis, Annual Market Survey, Consumer Education.
9. SYSTEM MEASUREMENT: Waste Substream Composition Study, Substream Resource Recovery Study, Waste Reduction Performance Goals.

Several other elements of the Waste Reduction Program have not been completed on schedule, but are in process, or scheduled to be undertaken at a later date. Those elements, listed by program and then by action element are:

1. REDUCE AND REUSE: Waste Exchange.
2. RECYCLE - 405 MATERIALS: Source Separation Technology (Curbside Container Recycling, Multi-Family Recycling).

4. MATERIALS MARKETS ASSISTANCE PROGRAM: Materials Brokerage.
  
5. CERTIFICATION PROGRAM

The purpose of delineating the status of each element in written testimony is to enable the DEQ, and then the EQC to assess the adequacy of Metro's work implementing the program. This assessment must consider Metro's production of a legally enforceable Solid Waste Management Plan (SWMP), developed cooperatively with all local governments within the Metro region. This participatory development of the Solid Waste Management Plan inherently motivates local compliance with region waste reduction programs. It is the strong view of Metro staff that all of the objectives of "certification programs" listed in the Waste Reduction Program, including local compliance, will be better met through the Solid Waste Management Plan than through use of "certification" as an implementation strategy.

Our intention is to revise the Waste Reduction Program principally to reflect how the SWMP, with region-wide work plans, will effect the objectives of the Certification Program. This revision will be presented to the Metro Council, and then to the DEQ and EQC this year. In early 1989, the revision of the Waste Reduction Program that incorporates regional work plans will be prepared: Metro would like to return to the DEQ with this revision, as well.

Recognition of the challenge involved to make an integrated waste reduction system optimally operable says to me, "work efficiently, and communicate regularly and candidly with the entities that make results possible." The scope is set on the future, using lessons from the past but not suffering the past. We've sighted the same goal posts, and together we can meet and surpass them.

DLG:mk

10/11/88

METRO RESPONSE TO DEQ REVIEW  
OF WASTE REDUCTION PROGRAM IMPLEMENTATION  
SEPTEMBER 16, 1988

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PROGRAM: PROMOTION, EDUCATION AND PUBLIC INVOLVEMENT

	DEQ Comment	METRO Response
A.	Market Research	
	Completed on schedule	Concur
B.	Theme and Graphic Look	
	Completed on schedule	Concur
C.	Multi-Year Campaign Plan	
	Completed on schedule	Concur
D.	Specific Campaigns	
	Completed on schedule	Concur
E.	Recycling Information Center	
	Ongoing	Concur
F.	Support for Local Jurisdictions	
	Ongoing	Concur
G.	Public Involvement	
	Proceeding on schedule	Concur

PROGRAM: REDUCE AND REUSE PROGRAMS

DEQ Comment	METRO Response
A. Plastics Reduction Task Force	
Completed	Concur
B. Packaging Reduction	
Ongoing	Concur
C. Salvageable Building Materials and Items	
Not pursued	Ongoing
	In 1987 Metro co-sponsored a controlled demolition project at the Environmental Learning Center. This project examined the need and feasibility of promoting reuse of building materials before disposal. About 90% of this particular building was reused or recycled. The data gathered in this project will be incorporated into a handbook for promotion of future projects. As stated in the July 1988 report, the RIC continues to provide information on regional recyclers of building materials.
D. Waste Exchange	
Not pursued	Completed
	Metro indicated it would explore the feasibility of expanding its clearinghouse activities for industrial and manufacturing waste. The Waste Reduction Manager did

PROGRAM: REDUCE AND REUSE, continued

DEQ Comment

METRO Response

evaluate the element and concluded (as reported) that 1) the market was too small, 2) successful programs required warehouse and operating staff and 3) little effect on waste stream would occur.



PROGRAM: RECYCLE - 405 MATERIALS

DEQ Comment

METRO Response

A. Technical Assistance

Not pursued

Ongoing

This program, as written in the 1986 Waste Reduction Program, includes services to local jurisdictions as shown below on the left column. The right column shows Metro's implementation of those services.

Referrals	performed as needed
Bibliographic searches	performed as needed
Information packages, work-books	prepared and distributed by Public Affairs
Direct consultation	advisor to City of Gresham Recycling Committee, member of DEQ waste tire and yard debris committees
Monthly Market Report	part of RIC monthly report
On-line data search	Purchase LOGIN software
Library	In the RIC and continually updated, teacher handbook written listing materials available throughout the region

PROGRAM: RECYCLE - 405 MATERIALS, continued

DEQ Comment	METRO Response
B. Recycling Information Center Enhancement	
Ongoing/on schedule	Concur
C. Certification Program	
Not pursued	Concur
D. Regional Promotion and Education	
Ongoing/On schedule	Concur
E. Source Separation Technology Development	
Behind Schedule/scheduled for future action	Concur
	The 1986 Waste Reduction Program includes development and distribution of home recycling containers as an <u>optional</u> work program. This program was included in the 87-88 budget. Work on the RFP for home containers began in that fiscal year and continues into FY 88-89. A curbside recycling container project contract will be awarded in November 1988 and will investigate the effect of containers on recycling in this region.
F. Grants and Loans	
Behind schedule/scheduled for future action.	Behind schedule
	This program was also an <u>optional</u> action element of the 1986 Waste Reduction Program.

PROGRAM: RECYCLE - 405 MATERIALS , continued .

DEQ Comment

METRO response

As stated in the July 1988 report, the Metro 88/89 budget provides \$306,000 for funding research and development and/or user assistance programs.

PROGRAM: RECYCLE - YARD DEBRIS

METRO response

DEQ Comment

A. Material Recovery Centers

Completed

Concur

B. Materials Markets Assistance

Behind schedule with some elements not pursued

Ongoing.

The Yard Debris markets assistance program operates separately from the Materials Markets Assistance program on page 16. Metro hired a full-time staff person in 1987 to work exclusively in the area of yard debris. Metro's assistance to the processors in areas of lab and field testing, product development, presentations at association meetings and trade shows, comparative market research and promotion and education have been instrumental in the increase in yard debris recycling.

C. Diversion Credits

Not pursued

Completed

This was an optional program. Due to the current supply of yard debris meeting processor capacities, diversion credits are not needed at this time. Sales did not equal production until 1987 (Note: Metro purchased 14% of processors' 1987 sales in that year and more than the total 1987 sales in 1988 for landfill cover),

PROGRAM: RECYCLE - YARD DEBRIS, continued

DEQ Comment	METRO response
D. Technical Assistance	thus, diversion would be meaningless. Note: DEQ ordered McFarlane's to reduce on-site material storage.
Not pursued	Ongoing
	Metro continues information sharing through mailing results of quarterly testing, demonstration plots, brochures and staff technical analysis to municipalities, processors and haulers throughout the country.
E. Promotion and Education	
Ongoing	Concur
F. Analysis of Yard Debris as Principal Recyclable	
Completed	Concur
G. Rate Incentives	
Not Pursued	Completed
	Rates for disposal of clean yard debris are less than rates for garbage disposal at St. Johns Landfill. No capacity at Metro South; however, McFarlane's is 3 miles from Metro South and we advise haulers to use McFarlane's.

PROGRAM: RECYCLE - YARD DEBRIS, continued

DEQ Comment	METRO Response
H. Local Collection Service Certification	
Not Pursued	Concur
I. Bans on Disposal	
Not pursued	Concur
	The ban is not required until January 1989; however, the effect of such a ban causes Metro to reconsider this element of the program. DEQ's proposed yard debris rule acknowledges that processors do not have adequate capacity, thus, a ban is not appropriate until alternatives are available.

PROGRAM NAME: POST-COLLECTION RECYCLING/MATERIALS RECOVERY

DEQ Comment	METRO response
A. Material Recovery Centers	
Completed	Concur
B. Use of Transfer Stations	
Behind schedule	Concur
	Salvage programs and post-collection separation of recyclables occur at Metro South. Land use appeals stopped work on WTRC pending completion of Functional Plan.
C. Waste Auditing and Consulting	
Not pursued	Concur

PROGRAM NAME: ALTERNATIVE TECHNOLOGIES

DEQ Comment

METRO response

A. Solicit Proposals for  
Alternative Technologies

Insufficient and  
conflicting information

Complete

The information presented in the July 1988 report and a later discussion with DEQ staff clearly summarized this program and the attention being paid to alternative technologies' effect on existing compost markets.



PROGRAM NAME: LEGISLATIVE PROGRAM

DEQ Comments

METRO response

- A. Present packaging, plastics, purchasing policies and other proposals for legislative action.

Conflicting information on Metro's participation in the 1987 legislative session.

Ongoing

Metro did not propose legislation in 1987. Metro continues to be active in this area and is currently investigating appropriate legislation for introduction at the next session including plastic container labeling.

PROGRAM NAME: CERTIFICATION FOR LOCAL COLLECTION SERVICES

DEQ Comment

METRO response

A. Adopt Certification Standards

Not pursued

To be revised

The objectives of this program are to: 1) effect greater regional recycling by working cooperatively with local governments to set standards; 2) to measure recycling performance; and, 3) provide incentive to meet recycling standards. Staff feels the objectives of this program are better met through Metro's Solid Waste Management Planning process - a cooperative effort of local governments, Metro and the solid waste industry. The participants have already developed and endorsed recycling goals and programs with clear understanding of and commitment to their respective responsibility in program implementation. Measurement techniques have been defined and supported. The incentive for meeting goals and standards lies in Metro's functional planning authority.

PROGRAM NAME: RATE INCENTIVES

DEQ Comments	METRO Response
A. Incentives for Post-Collection Recycling/Materials Recovery	
Insufficient information	Complete
	Metro exempts disposers of high-grade wastes at Metro South from paying the Regional Transfer Charge or the User Fee.
	Metro Council has adopted a policy that credits waste paper processors \$2 per ton for loads consisting of 50 to 80 percent mixed paper and reduces high grade loads at Metro South station.
B. Rate Incentives to Assure Compliance by Local Collection Services with the Standards of the Certification program	
Not pursued	Not pursued
C. Funding of Work Plan Commitments Through User Fee Rates.	
Insufficient information	Completed
	All waste reduction programs approved in Metro budgets are

PROGRAM NAME: RATE INCENTIVES, continued

DEQ Comment

Metro Response

funded through the User Fee.  
The Waste Reduction budget  
reflects work that will be  
undertaken to accomplish the  
goals and objectives of the  
1986 Waste Reduction Program.

PROGRAM NAME: MATERIALS MARKETS ASSISTANCE PROGRAM

DEQ Comment	METRO response
A. Annual Market Analysis	
Conducted 86/87	Conducted 86/87, concur
B. Annual Market Survey	
Not conducted, may be focused on in 1988	Completed for 86/87; included in 88/89 budget.
	Metro surveyed markets in 1987 and 1988 to determine recycling levels for 1986 and 1987. This is an ongoing task to measure the effectiveness of recycling programs.
C. Annual Supply Survey	
Not conducted	Concur
D. Recycled Products Survey	
Not conducted	Behind Schedule
	This survey is included in the institutional purchasing program in the 1988/89 Metro budget.
E. Consumer Education	
Ongoing	Concur

PROGRAM NAME: MATERIALS MARKETS ASSISTANCE PROGRAM, continued

	DEQ comment	METRO Response
F.	Institutional Purchasing	
	Did not provide technical assistance to local jurisdictions	Behind Schedule  Institutional purchasing program is included in Metro's 88/89 budget and includes assistance to local jurisdictions.
G.	Legislative Action	
	Not pursued	Ongoing  See Legislative Program, page 12.
H.	Grants and Loans / Research and Development	
	Behind Schedule	Ongoing  See page 5 section F
I.	Grants and Loans / User Assistance	
	Behind Schedule	Ongoing  see page 5 section F
J.	Materials Brokerage	
	Not pursued	Concur

PROGRAM NAME: SYSTEM MEASUREMENT

DEQ Comment	METRO response
A. Waste Substream Composition Study  Behind Schedule	Concur/now complete  This action element required one waste sort to be accomplished. Metro performed four seasonal waste sorts to derive comprehensive waste composition data. This action element was completed in December 1987.
B. Substream Resource Recovery Study  Behind Schedule	Concur/now complete  This action element represents one of the first accomplishments of the solid waste management planning process. This study was performed by a committee of haulers, government representatives, recyclers, processors, landfill operators and interested citizens. The recommendations forwarded by this committee include six programs that can achieve 52 percent recycling for the region. These recommendations are currently being reviewed by the Planning Policy Committee. The Metro Council adoption of these recommendations will represent a regionally endorsed recycling system. The recommendations will work with other programs from the 1986 Waste Reduction Program to achieve even greater recycling for the region.

PROGRAM NAME: SYSTEM MEASUREMENT, continued

DEQ comments

METRO response

C Set Waste Reduction  
Performance Goals

Behind Schedule

Concur/now complete

This element was part of the committee work in action element B above. The waste reduction goal set by the committee is currently 52%. This will continue to be evaluated and changed as more programs are implemented and more materials are recycled.

D. Establish Ongoing  
Measurement of Performance

Behind Schedule

Behind Schedule

Yearly survey of markets was done for 1986 and 1987 to determine level of recycling performance.



# OREGON ENVIRONMENTAL COUNCIL

2637 S.W. Water Avenue, Portland, Oregon 97201

Phone: 503/222-1963

Comments of Betty McArdle,  
Assistant to the Executive Director  
Oregon Environmental Council  
regarding METRO's  
Waste Reduction Plan  
October 12, 1988

The two questions we are addressing today are:

1. Has METRO implemented its 1986 Waste Reduction Plan?
2. If not, should the EQC take any action to compel implementation.

With regard to the first question, METRO's track record speaks for itself. Clearly the agency has failed to implement numerous elements of its adopted plan. DEQ's own analysis, along with testimony previously solicited from various groups including OEC, has documented this failure. METRO made a pact with the public that certain elements of the Plan would be implemented by certain dates. Those deadlines have not been met.

As to the second question, the EQC should utilize its full legal authority to force implementation of the plan. This should include at least the following actions:

1. Denial of the pending application for a landfill disposal site permit near Arlington, OR until such time as METRO adequately implements its waste reduction plan. We believe ORS 459.055 (2) prohibits the EQC from issuing such a permit until implementation by METRO occurs.

2. The issuance of an order directing METRO to implement all portions of its plan, pursuant to ORS 459.055. For those portions of the plan that had deadlines previous to the Commission's action, the Commission should direct Metro to implement those elements within 90 days.

3. The EQC should impose the maximum civil penalties allowable on METRO if the agency fails to comply with the 90-day compliance schedule. For purposes of calculating the amount of civil penalties, each day beyond the 90-day compliance schedule should be considered a new violation.

METRO now claims that certain elements of its plan should be modified or abandoned. One such element is the commitment to prohibit source-separated yard debris from entering the St. Johns landfill after January 1, 1989, a commitment that METRO staff termed "non-sensical" at the Commission's September 30 meeting.

As a policy matter, OEC disagrees with this assessment. We believe that such a ban is the logical companion ordinance to the Commission's recent decision to require curb-side collection of yard debris in the Portland metropolitan area.

As a procedural matter, if METRO wishes to change this or any other element of its plan, it must comply with the requirements of ORS 459.340 (DEQ review of proposed amendments) and its own ordinance-adoption process. This has not occurred.

It is unclear to OEC why any changes to the plan are necessary. As recently as May 1988, METRO submitted its 1986 waste reduction plan to DEQ in order to satisfy the requirements of ORS 459.055. The plan METRO submitted was unchanged from the one approved by the METRO council and the EQC in 1986. The fact that METRO now claims that major portions of the plan no longer make sense is evidence to OEC of a fundamental lack of commitment by METRO to meaningful waste reduction.

**CONCLUSION**

The Oregon Legislature clearly intended that solid waste reduction take place as the trade-off against the loss of prime farmland for landfill siting. The statute at ORS 459.055 is clear on this point. The legislature also authorized the Commission to utilize its full legal authority to compel compliance by a local government. We believe the Commission must now exercise that authority.

Portland has a garbage crisis. METRO's 1986 waste reduction plan was intended to address that problem. It hasn't. The agency's track record is one of planning at the expense of implementation.

We urge the EQC to issue an enforcement order at its next meeting, and to deny the pending application for a landfill disposal site near Arlington until METRO has adequately implemented its waste reduction plan.



Reply to: 2202 SE Lake Road  
Milwaukie, OR 97222

Hazardous & Solid Waste Division  
Dept. of Environmental Quality



OREGON SANITARY SERVICE INSTITUTE

654-9533

October 7, 1988

TO: HEARINGS OFFICER, DEPARTMENT OF ENVIRONMENTAL QUALITY  
Hearing October 12, 1988  
Re: Metro's Waste Reduction Plan

Metro is not in compliance with the Plan that was filed. The fault lies not with the fact that they have not implemented portions of that Plan, but that the former Solid Waste Director filed the Plan with the Department without explaining the changes that have occurred or are in process that will produce a better, more workable Plan.

The original Plan was developed in haste because of the short deadline given by the 1985 Legislature. There was virtually no input into the development of that plan by affected parties. It was unfortunate the Plan was adopted in its present form, because thousands of hours have been spent since the adoption in revising the Plan into viable policies.

In particular, critics of Metro have been concerned that Metro has not implemented Certification and Rate Incentives. Both of those ideas have a wonderful ring to them. It is only when you try to implement them that you find the bell is cracked. Based upon DEQ's approval of wasteshed reports, Metro has certified jurisdictions within its region. Beyond that, certification should not occur because Metro has no collection authority. A product of certification was to be rate incentives or diversion credits. Metro appropriately concluded that such an enforcement device was impossible to implement in an equitable manner. It should be noted that local governments across the nation have struggled with the question of rate incentives, but no jurisdiction has implemented them where varied demographics/collection conditions existed within the jurisdiction. They are an administrative nightmare at best. The impending increase in disposal fees at transfer/disposal facilities will create a natural rate differential between those facilities and recycling/processing centers that will effectively give a recycling incentive. Before any artificial rate structure is implemented, the natural rate differential that is based upon cost of service should be allowed to function and impact the lifestyles of generators in this region. The purpose of the certification program was to "assure participation of local jurisdictions and the collection industry in waste reduction efforts." Through the Functional Planning Process of Metro, that is occurring without Metro over-stepping their authority and without artificial, inequitable rate gimmicks.

If the electorate of this region want rate incentives, they need to come from some new funding source such as a tax base for Metro or through legislative funding. The State of Rhode Island has pumped \$26 million into their recycling program to finance additional costs to haulers and local governments. Their ultimate participation goal is 15%. We are already at 25% without any state help.

October 7, 1988

The State of New Jersey's legislature also funded their recycling program with approximately \$10 million to assist local governments in implementing programs. That state allows communities to pick the three most profitable materials, and that is all they have to recycle.

The Metro region is responding to their responsibility to recycle. Metro has worked effectively with local governments through the Functional Planning Process to get the jurisdictions to buy in to the waste reduction efforts that must occur. It is important to let this process have the time to work.

Respectfully submitted,



ESTLE HARLAN, Consultant for  
Solid Waste Industry

EH:e

C: OSSI  
TRI-COUNTY COUNCIL  
METRO

ORS 459.055 and ORS 459.340 to 355

**459.055 Landfills in farm use areas; waste reduction programs.** (1) Before issuing a permit for a landfill disposal site to be established after October 3, 1979, in any area zoned for exclusive farm use, the department shall determine that the site can and will be reclaimed for uses permissible in the exclusive farm use zone. A permit issued for a disposal site in such an area shall contain requirements that:

(a) Assure rehabilitation of the site to a condition comparable to its original use at the termination of the use for solid waste disposal;

(b) Protect the public health and safety and the environment;

(c) Minimize the impact of the facility on adjacent property;

(d) Minimize traffic; and

(e) Minimize rodent and vector production and sustenance.

(2) Before issuing a permit for a landfill disposal site established under ORS 459.047 or 459.049, or for a disposal site established as a conditional use in an area zoned for exclusive farm use, the department shall require the local government unit responsible for solid waste disposal pursuant to statute or agreement between governmental units to prepare a waste reduction program and shall review that program in the manner provided in subsection (5) of this section. Such program shall provide for:

(a) A commitment by the local government unit to reduce the volume of waste that would otherwise be disposed of in a landfill through techniques such as source reduction, recycling, reuse and resource recovery;

(b) A timetable for implementing each portion of the waste reduction program;

(c) Energy efficient, cost-effective approaches for waste reduction;

(d) Procedures commensurate with the type and volume of solid waste generated in the area; and

(e) Legal, technical and economical feasibility.

(3) If a local government unit has failed to implement the waste reduction program required pursuant to this section, the commission may, by order, direct such implementation.

(4) The department shall report to each Legislative Assembly on the use made of this section, the level of compliance with waste reduction programs and recommendations for further legislation.

(5) A waste reduction program prepared under subsection (2) of this section shall be reviewed by the department and shall be accepted by the department if it meets the criteria prescribed therein.

(6) Notwithstanding ORS 459.245 (1), if the department fails to act on an application subject to the requirements of this section within 60 days, the application shall not be considered granted. [1979 c.773 §8a]

**459.340 Implementation of the solid waste reduction program by metropolitan service district.** (1) The metropolitan service district shall implement the provisions of the solid waste reduction program as adopted by the metropolitan service district.

(2) After September 27, 1987, before the metropolitan service district council adopts an amendment to the district's solid waste reduction program, the district shall submit the proposed amendment to the Department of Environmental Quality for review and comment. The department shall review the proposed amendment to determine whether the amendment meets the requirements of section 8, chapter 679, Oregon Laws 1985. [1987 c.876 §13]

**459.345 Metropolitan service district biennial report to commission.** (1) Not later than July 1, 1988, and every two years thereafter, the metropolitan service district shall report to the commission on the implementation of its solid waste reduction program approved under section 8, chapter 679, Oregon Laws 1985, or as amended in accordance with ORS 459.340.

(2) The report submitted by the metropolitan service district under this section shall be in writing and shall include, but need not be limited to:

(a) A summary of the progress of the metropolitan service district in acquiring property and permits for the site selected under chapter 679, Oregon Laws 1985.

(b) The current status of implementation of the metropolitan service district's solid waste reduction program including the use of landfill disposal sites, recycling opportunities and the use of resource recovery technologies.

(c) A summary of the amount and percent of solid waste that is currently reused, recycled or disposed of in a solid waste disposal site and a comparison of such amounts and percentages to the district's existing and projected annual goals for the next two years for:

(A) The amount and percent of solid waste that will be reused, recycled or disposed of in a solid waste disposal site operated by the metropolitan service district or in a solid waste disposal site that the district has entered into an agreement to use; and

(B) The amount in tons by which solid waste disposed of annually in a landfill operated by the district or which the district has entered into an agreement to use will be reduced.

(d) A summary of the metropolitan service district's solid waste budget. [1987 c.876 §14]

**459.350 Commission review of metropolitan service district report.** The commission shall review the report submitted by the metropolitan service district submitted under ORS 459.345 to determine:

(1) Whether the district's activities related to solid waste disposal comply with the district's solid waste reduction program and any goals established by the district in previous reports submitted under ORS 459.345; and

(2) Whether the program and all disposal sites operated by or used by the district continue to meet the criteria established under ORS 459.015. [1987 c.876 §15]

**459.355 Reports by Department of Environmental Quality to legislature.** Not later than September 1, 1988, the Department of Environmental Quality shall make a preliminary report to the President of the Senate and the

Speaker of the House of Representatives and to the appropriate legislative interim committee. The preliminary report shall address the criteria required in the metropolitan service district report under ORS 459.345. The department shall submit a full report to the Legislative Assembly on or before January 1, 1989, and every two years thereafter, to correspond with the report submitted to the commission under ORS 459.345. [1987 c.876 §16]

*Oregon Department of Environmental Quality*

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

**METRO SOLID WASTE REDUCTION PROGRAM IMPLEMENTATION**

Date Issued: Sept. 22, 1988  
Hearing Date: Oct. 12, 1988  
Comments Due: Oct. 14, 1988

**WHO IS AFFECTED:** Recyclers, garbage haulers, local governments, business and industry, and residents within the Metropolitan Service District (Metro).

**WHAT IS PROPOSED:** The public hearing will be used to determine if Metro has adequately implemented their 1986 Solid Waste Reduction Program which was approved by the Environmental Quality Commission (EQC). It also will seek comment on what, if any, action the EQC should take regarding Metro's Waste Reduction Program.

**WHAT ARE THE HIGHLIGHTS:** The Department has reviewed the status report on implementation of the 1986 Waste Reduction Program submitted by Metro and finds that Metro has not adequately implemented the program. Department findings and those from the public hearing will be presented to the EQC for action. The Department is soliciting opinions and responses to the following questions:

1. Has Metro adequately implemented their Solid Waste Reduction Program? Are the program performance measures, timelines and goals realistic? Have they been achieved?
2. Are any specific changes needed in the Program?
3. What EQC action is recommended?

**HOW TO COMMENT:** Oral and written comments can be presented at a public hearing before a hearings officer on:

Wednesday, October 12, 1988  
2:00 p.m.  
DEQ Conference Room 4  
811 SW 6th  
Portland, Oregon



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 Department urges all interested parties wishing to make a presentation at the hearing to also provide written testimony. Written comments must be received by 5:00 p.m. on Friday, October 14, 1988. Send comments to David Rozell, Waste Reduction Section Manager, DEQ, 811 SW 6th, Portland, Oregon 97204.

**WHAT IS THE  
NEXT STEP:**

After the public hearing, DEQ will evaluate and respond to the public comments and make recommendations to the EQC. The EQC will discuss this issue at a meeting late this fall.

**FOR INFORMATION:**

Call Dave Rozell, 229-6165.

The Department urges all interested parties wishing to make a presentation at the hearing to also provide written testimony. Written comments must be received by 5:00 p.m. on Friday, October 14, 1988. Send comments to David Rozell, Waste Reduction Section Manager, DEQ, 811 SW 6th, Portland, Oregon 97204.

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NEXT STEP:**

After the public hearing, DEQ will evaluate and respond to the public comments and make recommendations to the EQC. The EQC will discuss this issue at a meeting late this fall.

**FOR INFORMATION:**

Call Dave Rozell, 229-6165.

BEFORE THE COUNCIL OF THE  
METROPOLITAN SERVICE DISTRICT

FOR THE PURPOSE OF PRIORITIZING	)	Resolution No. 88-1012
THOSE ELEMENTS OF THE WASTE RE-	)	
DUCTION PROGRAM NOT YET COMPLETE	)	Introduced by Rena Cusma,
AND TO DEVELOP AN IMPLEMENTATION	)	Executive Officer
SCHEDULE	)	

WHEREAS, Metro is required by ORS 459.345 to submit a progress report on implementation of the 1986 Waste Reduction Program (WRP) to the Environmental Quality Commission (EQC) on July 1, 1988; and

WHEREAS, Said report was delivered to the Department of Environmental Quality (DEQ) on July 1, 1988; and

WHEREAS, The Department of Environmental Quality evaluation of the report was unfavorable and recommended the Environmental Quality Commission to direct Metro to show cause why Metro should not be ordered to implement the program; and

WHEREAS, The Environmental Quality Commission will determine what, if any, action is necessary to cause Metro to implement the Waste Reduction Plan; and

WHEREAS, Metro and DEQ staff have met to identify programs not yet complete and to discuss a strategy Metro shall employ to achieve the objectives of those programs; and

WHEREAS, The priority programs are identified in Attachment A, Section 3; and

*Revised 11/14/80*

WHEREAS, The Waste Reduction Program must be incorporated into the Solid Waste Management Plan to achieve regional consensus and local government action necessary to implement certain elements of the Waste Reduction Program; now, therefore,

BE IT RESOLVED,

The Council concurs with the Summary of Progress (Attachment A) and the need to accomplish those items in Section 3 expeditiously. The Solid Waste Department staff shall develop a time schedule and work plan and identify resources needed to implement those items for Council concurrence prior to presentation to the EQC.

The Solid Waste Department and the Planning and Development Department shall work to revise the Waste Reduction Program and submit the program to the Council for consideration of incorporating it into the Solid Waste Management Plan.

ADOPTED by the Council of the Metropolitan Service District this \_\_\_\_ day of \_\_\_\_\_, 1988.

---

Mike Ragsdale, Presiding Officer

**SUMMARY OF PROGRESS**

**Metro Waste Reduction Program Work Plan**

1. The activities in this section, included in the 1986 Waste Reduction Program, have been completed or are on schedule:

<u>PROGRAM NAME</u>	<u>ACTIVITY</u>	<u>SUMMARY</u>
Promotion and Education	Market Research	Regular surveys to assess effectiveness of promotion programs.
	Theme and Graphic Look	Ties together all our work plans, i.e., "Save the Earth with a Brown Paper Bag," etc.
	Multi-Year Campaign	Detailed schedule and budget for promotion work.
	Specific Campaigns	Two major radio and/or television promotions per year and eight community projects.
	Recycling Information Center	Main point of public contact for recycling and reduction inquiries.
	Support for Local Jurisdictions	Monthly calendar of events, ready-to-print materials, assist in work with media.
	Public Involvement	Arrange for various public meetings.

<u>PROGRAM NAME</u>	<u>ACTIVITY</u>	<u>SUMMARY</u>
Reduce and Reuse	Plastics Reduction Task Force	Task Force to re-search plastic reduction strategies.
	Packaging Reduction	Promote consumer awareness of packaging issues.
	Recycling Information Center (RIC) Enhancement	Upgrade RIC information services, e.g., computer development, community project involvement.
Recycle 405 Material	Regional Promotion and Education	Provide regional campaigns on curbside recycling.
	Materials Recovery Centers	Provide capacity for yard debris processing at St. Johns.
Yard Debris	Promotion and Education	Promote home composting, source separation and market development.
	Principal Recyclable Analysis	Analysis of yard debris as principal recyclable.
	Technical Assistance	Share information from out-of-region
	Rate Incentives	To encourage source separation, continue
	Materials Markets Assistance	Encourage use of recycled yard debris products.

<u>PROGRAM NAME</u>	<u>ACTIVITY</u>	<u>SUMMARY</u>
Materials Markets Assistance	Annual Market Analysis	Identify market strengths and weaknesses and future growth outlook.
	Consumer Education	Educate re: purchase of products made from recycled material.
	Annual Market Survey	Survey companies that purchase recycled materials.
Rate Incentives	Funding Work Plan Commitments	Modify user fees to fund waste reduction programs.

2. The following five items are being pursued by Metro through the "1% For Recycling" Program or other resources. A primary criterion for disbursing "1% for Recycling" funds is how the project meets the objectives of the 1986 Waste Reduction Program.

<u>PROGRAM NAME</u>	<u>ACTIVITY</u>	<u>SUMMARY</u>
Recycle 405	Source Separation	Distribute home and office containers.
	Grants and Loans	Target businesses, local governments and recyclers who support waste reduction.
Yard Debris	Diversion Credits, Loans and Grants	Use to encourage yard debris processing.
Materials Markets Assistance	Grants and Loans: R & D	Target monies to R & D for new methods of utilizing secondary materials.

<u>PROGRAM NAME</u>	<u>ACTIVITY</u>	<u>SUMMARY</u>
Materials Markets Assistance (continued)	Grants and Loans: User Assistance	Monies for users of secondary materials to encourage expanded use of materials.

3. The following activities, some which are partially completed and others not yet initiated, shall be completed in full. The objectives for each program will remain unaltered, but substitution in the method for achieving objectives is acceptable if 1) it will be as effective as the original element, and 2) if it is adopted by Metro Council prior to an agreed upon deadline.

i.) Activities in progress; timeline for completion passed; will reschedule based on resources.

<u>PROGRAM NAME</u>	<u>ACTIVITY</u>	<u>SUMMARY</u>
Reduce and Reuse	Salvageable Building Materials and Items	Examine need and feasibility of programs to promote reuse of building materials before disposal and to develop salvage capability at disposal facilities.
Recycle 405	Technical Assistance	Provide technical assistance to local governments in developing recycling programs, related policies, and promotion and education.
Yard Debris	Bans on Disposal	Ban disposal of source separated yard debris from METRO landfills.



<u>PROGRAM NAME</u>	<u>ACTIVITY</u>	<u>SUMMARY</u>
Post Collection Recycling	Materials Recovery Centers	Establish facilities for material recovery from specific waste substreams.
	Use of Transfer Stations	Include salvage programs and post collection separation of recyclables at transfer stations.
Materials Markets Assistance	Institutional Purchasing	Assist and promote development of policies that favor purchase of products made from recycled materials.
Rate Incentives	Incentives for Post Collection	Provide economic incentive for materials recovery processing
System Measurement	Set Waste Reduction Performance Goals	Based on analysis of waste, set goals for recovery; reexamine periodically.

ii.) Activities not yet initiated; timeline for completion passed; will reschedule based on resources.

<u>PROGRAM NAME</u>	<u>ACTIVITY</u>	<u>SUMMARY</u>
Post Collection Recycling	Waste Audit and Consulting	Advise, assist and/or conduct audits; design programs to help generate high grade loads.

<u>PROGRAM NAME</u>	<u>ACTIVITY</u>	<u>SUMMARY</u>
Materials Markets Assistance	Waste Audit and Consulting	Advise, assist, conduct audits to generate high grade loads
System Measurement	Establish On-going Measurement System	Measure: <ul style="list-style-type: none"> <li>- success of material recovery</li> <li>- tons recycled and landfilled</li> <li>- quantities recycled and participation rates</li> <li>- effectiveness of achieving goals</li> </ul>

iii.) Activities where objective remains intact but method of accomplishment includes collaborative efforts of Metro, local jurisdictions and haulers:

<u>PROGRAM NAME</u>	<u>ACTIVITY</u>	<u>SUMMARY</u>
Recycle 405	Local Collection Service Certification	Assure curbside programs are optimally effective.
Yard Debris	Local Collection Service Certification	Set standards for local jurisdiction yard debris recycling and provide rate incentives.
Certification	Certification, Local Service	Assure maximum feasible waste reduction
Rate Incentives	Rate Incentives to Ensure Local Compliance	Examine Rate structure and implement modifications to assure compliance with performance standards.

4. The following eight activities shall be reviewed as part of Council FY 89-90 budget process and will either be scheduled for implementation or removed from the plan:

<u>PROGRAM NAME</u>	<u>ACTIVITY</u>	<u>SUMMARY</u>
Reduce and Reuse	Waste Exchange	Develop information clearinghouse for industrial and manufacturing waste.
Alternative Technologies	Materials and Energy Recovery	Direct as much as 48 percent of waste to material and/or energy recovery.
Legislative Program	Legislative Program	Develop and pursue legislative action package on waste reduction issues.
Materials Markets Assistance	Annual Supply Profile	Measure potential growth of supply for recyclable material.
	Legislative Action	Support recycling-related legislation.
	Materials Brokerage	Guarantee market price and supply for recycled products.
	Waste Substream Composition Study (geographic portion)	Identify geographic distribution of waste substream generation points.
	Substream Resource Recovery Study (geographic portion)	Identify geographic location of needed facilities.

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*Revised 11/14/80*

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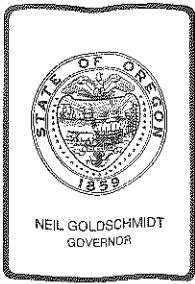
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	Substream Resource Recovery Study (geographic portion)	Identify geographic location of needed facilities.



## *Environmental Quality Commission*

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

### REQUEST FOR COMMISSION ACTION

Agenda Item J, December 9, 1988, EQC Meeting

Mid Multnomah County Sewer Financing  
Information Report

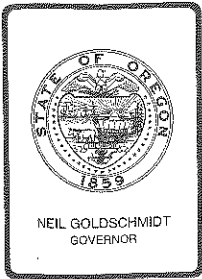
#### SUMMATION

On April 25, 1986, the Commission entered an order requiring the implementation of a plan to provide sewer services for a portion of Mid Multnomah County. The plan calls for the Department of Environmental Quality to assist with financing outside of incorporated areas using Pollution Control Bond Fund proceeds.

The cities of Gresham and Portland and DEQ are drafting a memorandum of understanding about the structure of financing for the area and wish to inform the Commission about the issue generally. The Department will return to the Commission as early as January 1989 for approval to proceed to our first bond sale on the matter.

#### DIRECTOR' RECOMMENDATION

Accept the information report.



## *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, December 9, 1988, EQC Meeting  
Mid Multnomah County Sewer Financing

### BACKGROUND

On April 25, 1986, the Environmental Quality Commission entered an Order which required implementation of a plan to provide sewer service for a specifically defined area in Mid Multnomah county. The area involved contains an estimated 56,000 cesspools which are contributing to degradation of the quality of groundwater. The EQC order was entered after extensive Commission deliberations which extended over a 22 month period, included 13 public hearings where 248 people testified, and included written comment from more than 2100 citizens, organizations, etc. The order is supported by a record of 8805 pages and an additional 23 exhibits including 12 volumes of consultant reports and plans.

The plan the EQC ordered implemented was prepared by the East Multnomah County Sanitary Sewer Consortium and provided for sewer construction to be accomplished by Portland and Gresham. The Plan further provides that property in the area will not be required to annex to Portland or Gresham to receive sewer service. The plan also provides that rates and charges for sewer service will be based on cost of service so that those outside city limits do not subsidize the cost of service for those inside city limits, and vice versa. The latter two provisions were insisted upon by the EQC to assure fairness.

A somewhat unique provision of the plan is that it is based on the use of "Assessment Bonds" as a means of financing collector sewer construction in the area outside city limits. Legal authority for Assessment Bonds has been around for a long time, but it has been used little, if at all, since the "Bancroft Bonding Act" became law. The sole repayment method for Assessment Bonds is the assessment against the benefitted property. The assessment becomes the first lien against the property. Bancroft Bonds rely on the assessment against benefitted property as the primary means

for Bond Repayment but also provide for the authority for the city to levy a city-wide property tax as a backup repayment method to make the bonds more secure in the eyes of purchasers. Bancroft Bonds, because of added security, would carry a lower interest rate.

The plan contemplates DEQ using proceeds of the state Pollution Control Bond Fund to purchase the assessment bonds issued by Portland and Gresham. This was expected to lessen the cost burden on the residents outside city limits somewhat through an anticipated interest rate that would be lower than the Assessment Bonds would yield on the market.

The Pollution Control Bond Fund is a constitutionally authorized bond program. Under the program, DEQ sells general obligation bonds of the state of Oregon and uses the proceeds from the bond sale to make loans to local governments to do sewer construction financing.

Under the proposed program, the proceeds received from DEQ by the local government would be loaned to individual citizens to meet their obligations for financing assessments needed to construct sewers. The individual citizens would pay back the city, usually monthly, and then the city would pay back DEQ. From these repayments, DEQ would then pay off its debt for the bonds originally sold. In the case of Mid County, the security for the loan to the individual citizen is a first lien on their real property which is being sewered. If the citizen defaults on the loan, the city forecloses on the property, just as they do for non payment of taxes. The proceeds of the sale of the property are then used to pay off the lien. Although both the cities and DEQ would prefer that no defaults occur, and a safety net has been developed to aid individuals who cannot afford sewers, the likelihood that some defaults will occur exists.

DEQ staff have been working with financial advisors and staff from the cities of Gresham and Portland to come to agreement about the form the bond financing will take, the kind of security to be offered and the amount and means of sharing risk involved should any of the individual recipients default.

The governments involved are now writing a memorandum of understanding which will cover the general agreements we are reaching about the structure of the financing.

The result will be in a relatively small first bond sale. However, the agreement sets a precedent for bond sales and loan agreements related to them for the next 20 years of financing to be done in the Mid County Area. The agreements reached are also

important because the sharing of the risk by the cities and DEQ will make some difference in the cost to the ultimate recipients in Mid Multnomah County.


DEQ has taken the position that it is of primary importance to manage the Bond fund in a fiscally prudent manner. The first goal of all of our financing is to assure that the loans made will be repaid by the recipients in full. The second goal is to assure that the best agreement be made at the lowest cost to the ultimate recipient.

The agreement now being reached will meet both goals. The Cities and DEQ are agreeing to a structuring of the financing which will result in the greatest risk being incurred in the first few years of a 20 year issue. This means the risk has to be covered for a shorter period of time. A fund will be established to cover potential defaults for the length of time it takes to foreclose and secure lien payment. The financing structure will be tested against criteria similar to those contained in Standard and Poor's Structured Finance Criteria to assure that all potential risk is covered.

ORS 340-81-026 requires that loans from the Pollution Control Bond Fund secured by means other than General Obligation Bonds issued by the public agency receiving proceeds shall be approved by the Commission. Therefore, prior to selling state bonds which would be loaned to local governments and be dependent upon first lien assessment bonds for repayment, the Department will seek Commission approval. The Department expects to return to the Commission in January if our financing structure agreements have been finalized to seek approval for the first bond sale on Mid Multnomah County.

DIRECTOR'S RECOMMENDATION

Accept the Department's information report.

  
Fred Hansen

LTaylor



STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMORANDUM

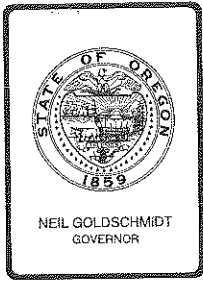
DATE: November 23, 1988

TO: Commissioners

FROM: Lydia Taylor \*

SUBJECT: Staff report on Governor's recommended budget

The Governor's recommended budget is considered confidential by the Governor's office until it is released by them on December 1st. The attached staff report will not be released to the public until December 1st and details from the attachments should not be provided to anyone until that date. Thanks.



## *Environmental Quality Commission*

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

### REQUEST FOR COMMISSION ACTION

Agenda Item K, December 9, 1988, EQC meeting

Governor's Recommended Budget  
Information Report

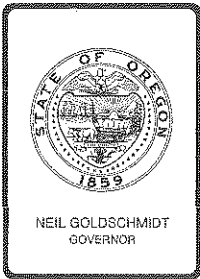
#### SUMMATION

The agency budget request has been reviewed by the Governor and a final Governor's recommended budget decided upon.

The Governor's recommended budget will include an increase of \$38.3 million dollars and 83 new positions (the equivalent of 49.9 full time positions) for the 1989-91 biennium for DEQ. The bulk of the increase will be in programs to prevent damage to the environment in groundwater, solid waste management and recycling, hazardous waste reduction, spill response, hazardous waste site assessment and asbestos abatement management. There are also major increases in environmental cleanup dollars and state match for revolving loan fund financing for local sewer projects.

#### DIRECTOR'S RECOMMENDATION

Accept the information report.



## Department of Environmental Quality

811 SW SIXTH AVENUE, PORTLAND, OREGON 97204-1390 PHONE (503) 229-5696

### MEMORANDUM

**To:** Environmental Quality Commission

**From:** Director

**Subject:** Agenda Item K, December 9, 1988, EQC Meeting  
Governor's Recommended Budget

### BACKGROUND

DEQ operates on a biennial budget approved during each legislative session. The budget is originally developed with two components, base budget and decision packages. The guidelines used in preparing the budget allow the agency to continue current activities, with some adjustment for inflation. (This portion of the budget is called a "base budget".) The agency is also allowed to request new programs or program enhancements by way of mini budgets called "decision packages". After the agency has developed a budget request consisting of base budget and decision packages, the Executive Department analyzes it and makes recommendations for the Governor's consideration. These recommendations generally result in modifying (reducing) the agency's request. The agency has an opportunity to appeal Executive Department recommendations either before the Director of the Executive Department or before the Governor. After the appeal, a final decision is made by the Governor. The result is a Governor's Recommended Budget. This budget is submitted to the Legislature for review and ultimate approval (usually somewhat modified) of the request.

By December 1st, all state agencies have had their budgets reviewed and analyzed and a Governor's recommended budget developed. DEQ's Governor's recommended budget is summarized in attached documents and compared to previous biennia legislative approved budgets.

A description of major elements of the DEQ Governor's recommended budget follows.

#### BASE BUDGET

The Agency was required to absorb potential cost of living salary increases by reducing its base budget personal services costs. These cuts resulted in the elimination of 6.49 full time equivalent positions. When final cost of living salary increases are decided for state employees, dollars will be added back to all state agency budgets to cover the costs. The Executive Department also required cuts to base budget of three positions in the underground storage tank program for which there will not be sufficient revenue. The agency Governor's recommended base budget for 1989-91 is \$46.3 million compared to \$47.0 million for the existing biennium.

#### DECISION PACKAGES

The following decision packages are recommended by the Governor and provide an increase of 83 new positions, 49.9 full time equivalent staff and \$38.3 million dollars to the DEQ budget. Several of the decision packages require new legislation in order to be implemented. Attachment A provides dollar and staffing information about each of the decision packages.

(102) Employee Safety. The recommended budget will contain a position to coordinate employee safety and dollars to contract from some safety services. DEQ employees are routinely in close proximity to toxic substances at spill sites, RCRA sites and in our laboratory. This program will allow the Department to be proactive in safety matters.

(106, 206) Asbestos Abatement. The decision package provides increased capability for preventing asbestos release from improper removal, handling and disposal.

(107) Wood Heating Control Strategy. Proposed legislation and this decision package will ensure that effective strategies will be developed and implemented to provide solutions to wood heating caused pm10 problems in non compliance areas.

(108) Financial Assistance on Sewage Treatment. The decision package provides for Pollution Control Bond Fund proceeds to be used as state match on the new state revolving loan fund which will replace EPA's construction grants program.

Decision packages 101, 103, 114, 111, 112 and 115 will be funded primarily from a fee consisting of a part of a percent being charged on the first holder of hazardous substances in the state and on the gross operating revenue from wholesale petroleum products in the state.

(101) Groundwater Protection. The package will provide staff at DEQ and money for staff at Agriculture, Health, Water Resources and Department of Geology and Mineral Industries for hydrogeologic characterizations and ambient monitoring of groundwater aquifers, monitoring of vulnerable areas, state agency coordination, grants and research for groundwater studies.

(103) Remedial Action, State Superfund Sites, Site Assessments. The package would provide staff and funding for management of voluntary cleanups and abandoned site cleanups. Voluntary cleanups include such sites as Metro's convention center and PGE Station L site which is being donated to OMSI. The decision package includes \$2.5 million general fund dollars to aid with cleanup of abandoned sites

(114) Spill Response. The package will provide funding for the State Fire Marshall and local governments to develop readiness to responde to spills of hazardous materials.

(111) Hazardous Waste Reduction. The package willd provide staff to deliver technical assistance to help industry develop processes which will help prevent the creation of hazardous wastes.

(112) Hazardous Waste Prevention. This package will enhance the Department's ability to assure that generators, transporters, and managers of hazardous waste in Oregon are registered with the state and operating in a manner that meets hazardous waste management requirements. These requirements consider the protection of human health and the environment.

(115) Underground Storage Tank Compliance. The package would provide for preventative measures to assure that tanks installed will not later leak into the environment.

The following two packages will be financed from a \$2.00 per ton tipping fee on garbage going into Oregon landfills. A large amount of the fee will be charged against waste which will be coming into Oregon from other states.

(205) Comprehensive Solid Waste Management and Recycling. This decision package will provide recycling grants to local governments to maximize the opportunity to recycle in Oregon.

(105) Solid Waste Management and Recycling. The package focuses on assisting local governments with the management of special solid wastes such as incinerator ash, asbestos and infectious and medical wastes. The package will also fund a household hazardous waste collection program throughout the state.

(104) Site Assessment and Program Development. This package provides resources for site assessment at locations contaminated with hazardous substances. Positions are included to manage contracts and to develop cost recovery, data management and other administrative systems.

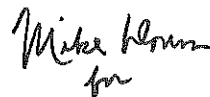
(116) Leaking Underground Storage Tanks. Provides federal dollars and other fund dollars for cleanup activities at complex leaking tank sites. This includes management, performance and contact oversight responsibilities.

Other packages in the Governor's recommended budget will include: RCRA authorization and hazardous waste management increase (109); Management improvements (113); Toxic air investigations (117); Waste tire limitation for market incentive(128); Tualatin TMDL assistance and implementation (118,218); computer maintenance cost increases(120); FEMA title 3 training (121); Regional hazardous waste initiative (122); Regional sites(123); water quality special projects (EPA) (127).

Decision packages which were requested by the Department but not included in the Governor's recommended budget include a laboratory certification program; a title transfer upon change in ownership in the motor vehicle inspection program; information system support and documentation for agency management; sludge management staff increases; sewage pretreatment staff increases; a position to manage illegal drug lab cleanup; and, ocean resources management staff.

#### DIRECTOR'S RECOMMENDATION

Accept the Governor's recommended budget information report.



Fred Hansen

#### Attachments

Attachment A - Summary of Decision Package Recommendations by Agency Ranking

Agenda Item <sup>K</sup>  
December 9, 1988, EQC Meeting  
Page 5

Attachment B - Summary of Base Budget plus Decision Packages  
by Program subsection

Graphs: Dollars in budget by fund; percent of dollars by  
fund; percent of dollars by program; full time equivalent  
positions by program. (87-89 figures are estimated; 89-91  
figures are Governor's recommended, all other figures are  
actual.)

Dalke/Taylor

SUMMARY OF DECISION PACKAGE RECOMMENDATIONS BY AGENCY RANKING

Agency Ranking	Package Number	Package Description	Program	Request		Governor's Recommendation	
				Amount	FTE	Amount	FTE
1	101	GW Quality Protection	WQ	115,193	1.00	3,653,193	5.00
2	102	Employee Safety	HSW	203,990	2.00	139,891	1.00
3	103	Rem Act/Resp to Priority	HSW	7,204,034	3.00	3,899,034	3.00
4	104	Site Assess/Prg Devel	HSW	2,602,862	3.50	602,862	3.50
5	205	Comp Sld Wst Mgmt & Recyc	HSW	2,346,283	1.00	2,346,283	1.00
5	105	Sld Wst Mgmt & Recycle	HSW	1,594,346	5.00	1,594,346	5.00
6	106	Asbestos Control	AQ	1,058,776	11.00	599,575	6.00
6	206	Asbestos Control	AQ	37,193	0.50	37,193	0.50
7	107	Wood Heating Ctrl Strtgy	AQ	236,937	2.00	236,937	2.00
8	108	Fin Asst-Sewage Treatment	WQ	13,052,072	1.00	13,052,072	1.00
9	109	RCRA Auth/Hazrds Wst Mgmt	HSW	172,504	1.75	172,504	1.75
10	110	Lab Certification	MSD	340,763	4.25	0	0.00
11	111	Hazrds Wst Reduct/Tech As	HSW	275,140	2.11	275,140	2.10
12	112	Hazrds Wst Mgmt/Prev Prgm	HSW	532,840	2.00	532,840	2.00
13	113	Mgmt Improvement	MSD	317,310	3.00	317,310	3.00
14	114	Spill Response	HSW	3,738,486	1.00	3,738,486	1.00
15	115	Undrgrnd Strg Tnk Compl	HSW	577,269	2.00	347,982	1.26
16	116	Leaking UST	HSW	1,758,188	6.00	1,758,188	6.00
17	117	Toxic Air Investgtns	AQ	124,771	1.00	124,771	1.00
18	128	Waste Tires	HSW	3,648,000	0.00	3,648,000	0.00
19	118	Tualatin TMDL Assistance	WQ	191,204	2.00	191,204	2.00
19	218	Imp Tualatin TMDL/Assist	WQ	83,695	0.75	83,695	0.75
20	119	Veh Inspect/Title Trans	AQ	891,989	11.00	0	0.00
21	120	Info sys Trn/Docum/Supprt	MSD	155,910	1.25	24,000	0.00
22	121	FEMA Title 3 Training	HSW	120,522	0.00	120,522	0.00
23	122	Reg Hazrds Waste Initativ	HSW	187,453	0.00	187,453	0.00
24	123	Regional Sites	HSW	282,691	2.75	110,000	1.00
25	124	Sludge Mgmt	WQ	372,627	4.00	0	0.00
26	125	Pretreatment	WQ	355,149	3.50	0	0.00
27	126	Illegal Drug Labs	HSW	105,434	1.00	0	0.00
28	127	Water Qual Spec Assess	WQ	459,556	4.75	459,556	0.00
29	229	Ocean Res Mgmt Tech Assis	HSW	98,872	1.00	0	0.00
29	129	Ocean Res Mgmt Act	WQ	71,394	0.50	0	0.00
TOTALS				43,313,453	85.61	38,253,037	49.86



GOVERNOR'S RECOMMENDED BUDGET BY PROGRAM

PROGRAM	BASE BUDGET		DECISION PACKAGES		TOTAL	
	\$	FTE	\$	FTE	\$	FTE
----- AIR QUALITY PROGRAM -----						
Air Source Control	2,803,576	27.52				
106 - Asbestos Control			599,575	6.00		
Subtotal-Air Source Control	2,803,576	27.52	599,575	6.00	3,403,151	33.52
Field Burning	1,852,053	6.25			1,852,053	6.25
Motor Vehicle Inspections	4,783,418	57.46			4,783,418	57.46
Noise Control	336,758	3.00			336,758	3.00
Administration	1,472,419	9.32			1,472,419	9.32
Planning and Monitoring	4,185,118	37.97			4,185,118	37.97
206 - Asbestos Control			37,193	0.50	37,193	0.50
107 - Wood Heating Control Strategy			236,937	2.00	236,937	2.00
117 - Toxic Air Investigations			124,771	1.00	124,771	1.00
Subtotal-Planning and Monitoring	4,185,118	37.97	398,901	3.50	4,584,019	41.47
TOTAL AIR QUALITY	15,433,342	141.52	998,476	9.50	16,431,818	151.02
----- WATER QUALITY PROGRAM -----						
Industrial Waste and Non-Point Source Control	1,881,600	18.31			1,881,600	18.31
Planning	3,004,726	24.20			3,004,726	24.20
101 - Groundwater Quality Protection			3,653,193	5.00	3,653,193	5.00
127 - Special Assessment Projects			459,556	0.00	459,556	0.00
Subtotal-Planning	3,004,726	24.20	4,112,749	5.00	7,117,475	29.20
Municipal/On-Site Waste Management	2,432,735	25.27			2,432,735	25.27
118 - Operator Technical Assistance & Training			191,204	2.00	191,204	2.00
Subtotal-Municipal/On-Site Waste Management	2,432,735	25.27	191,204	2.00	2,623,939	27.27
Municipal Engineering Services	812,726	8.00			812,726	8.00
Administration	1,312,574	12.93			1,312,574	12.93

GOVERNOR'S RECOMMENDED BUDGET BY PROGRAM

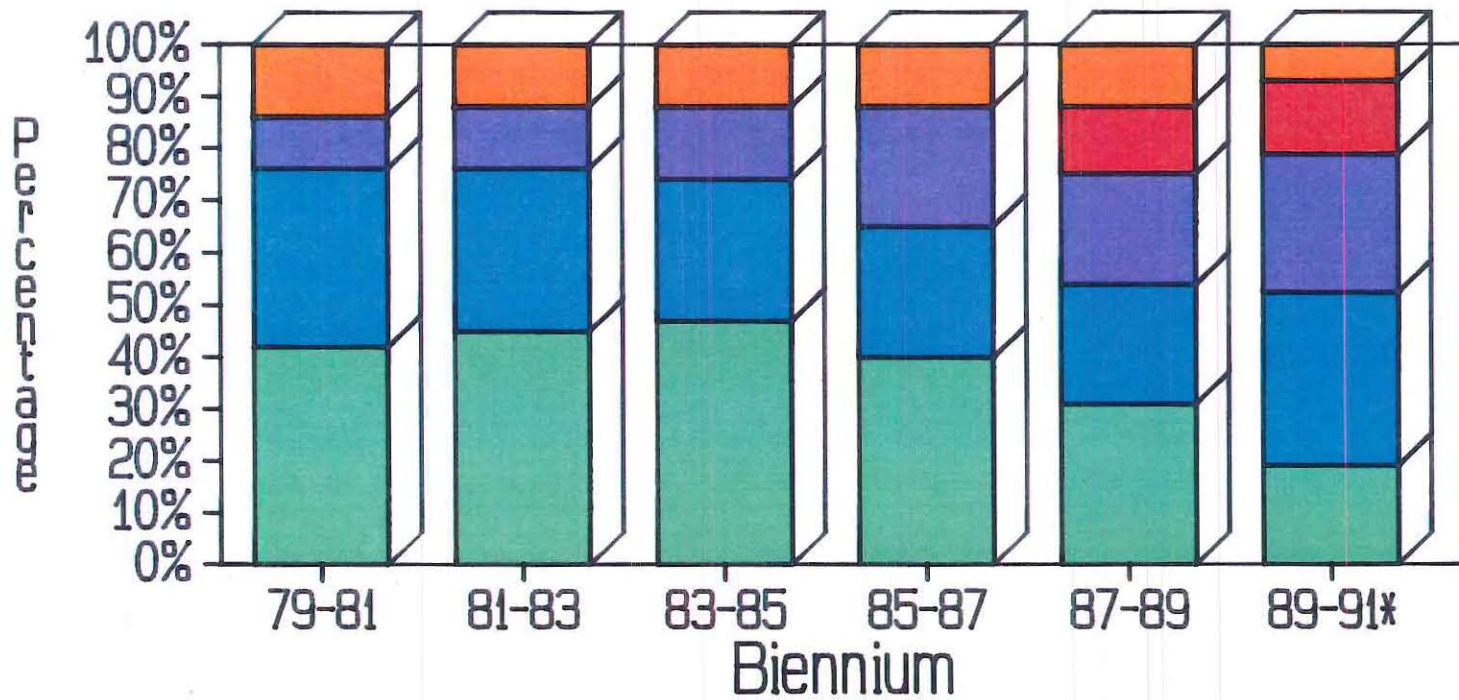
PROGRAM	BASE BUDGET		DECISION PACKAGES		TOTAL	
	\$	FTE	\$	FTE	\$	FTE
Municipal Waste Community/Financial Services	984,191	8.25			984,191	8.25
108 - Fin. Asst.-Sewage Treatmt. Works Constr.			13,052,072	1.00	13,052,072	1.00
218 - Operator Technical Assistance & Training			83,695	0.75	83,695	0.75
Subtotal-Municipal Waste Community/Fin. Services	984,191	8.25	13,135,767	1.75	14,119,958	10.00
<b>TOTAL WATER QUALITY</b>	<b>10,428,552</b>	<b>96.96</b>	<b>17,439,720</b>	<b>8.75</b>	<b>27,868,272</b>	<b>105.71</b>
<b>HAZARDOUS/SOLID WASTE PROGRAM</b>						
Solid Waste Management	1,553,754	14.00			1,553,754	14.00
105 - Comp. Solid Waste Management & Recycling			1,594,346	5.00	1,594,346	5.00
128 - Waste Tires Recycling Account			3,648,000	0.00	3,648,000	0.00
123 - Regional Sites			110,000	1.00	110,000	1.00
Subtotal-Solid Waste Management	1,553,754	14.00	5,352,346	6.00	6,906,100	20.00
Hazardous Waste	3,950,809	35.00			3,950,809	35.00
109 - Hazardous Waste Mgmt./RCRA Authorization			172,504	1.75	172,504	1.75
112 - Hazardous Waste Mgmt./A Preventive Program			532,840	2.00	532,840	2.00
Subtotal-Hazardous Waste	3,950,809	35.00	705,344	3.75	4,656,153	38.75
Waste Reduction	619,515	6.15			619,515	6.15
205 - Comp. Solid Waste Mgmt. & Recycling			2,346,283	1.00	2,346,283	1.00
111 - Hazardous Waste Reduction Technical Asst.			275,140	2.10	275,140	2.10
Subtotal-Waste Reduction	619,515	6.15	2,621,423	3.10	3,240,938	9.25
Administration	887,682	9.50			887,682	9.50
122 - Regional Hazardous Waste Initiative			187,453	0.00	187,453	0.00
Subtotal-Administration	887,682	9.50	187,453	0.00	1,075,135	9.50
Hazardous Materials	2,068,493	12.00			2,068,493	12.00
114 - Spill Response			3,738,486	1.00	3,738,486	1.00
115 - Underground Storage Tank Compliance Program			347,982	1.26	347,982	1.26
121 - FEMA Title III Training Grants			120,522	0.00	120,522	0.00
Subtotal-Hazardous Materials	2,068,493	12.00	4,206,990	2.26	6,275,483	14.26
<b>TOTAL HAZARDOUS AND SOLID WASTE</b>	<b>9,080,253</b>	<b>76.65</b>	<b>13,073,556</b>	<b>15.11</b>	<b>22,153,809</b>	<b>91.76</b>

GOVERNOR'S RECOMMENDED BUDGET BY PROGRAM

PROGRAM	BASE BUDGET		DECISION PACKAGES		TOTAL	
	\$	FTE	\$	FTE	\$	FTE
=====						
-----						
ENVIRONMENTAL CLEAN-UP						
-----						
Environmental Clean-Up	5,962,694	29.00			5,962,694	29.00
103 - Superfund Sites Asmt.& Response to Priority			3,899,034	3.00	3,899,034	3.00
104 - Superfund Assessment & Core Continuation			602,862	3.50	602,862	3.50
116 - Leaking Underground Storage Tank Clean-Up			1,758,188	6.00	1,758,188	6.00
-----						
TOTAL ENVIRONMENTAL CLEAN-UP	5,962,694	29.00	6,260,084	12.50	12,222,778	41.50
=====						
-----						
AGENCY MANAGEMENT						
-----						
Agency Management	5,437,687	48.50			5,437,687	48.50
102 - Employee Safety			139,891	1.00	139,891	1.00
113 - Management Improvement			317,310	3.00	317,310	3.00
120 - Info. System Training, Doc. & Micro Support			24,000	0.00		
-----						
TOTAL AGENCY MANAGEMENT	5,437,687	48.50	481,201	4.00	5,918,888	52.50
=====						
*****						
** AGENCY-WIDE TOTAL **						
*****						
	46,342,528	392.63	38,253,037	49.86	84,595,565	442.49
=====						

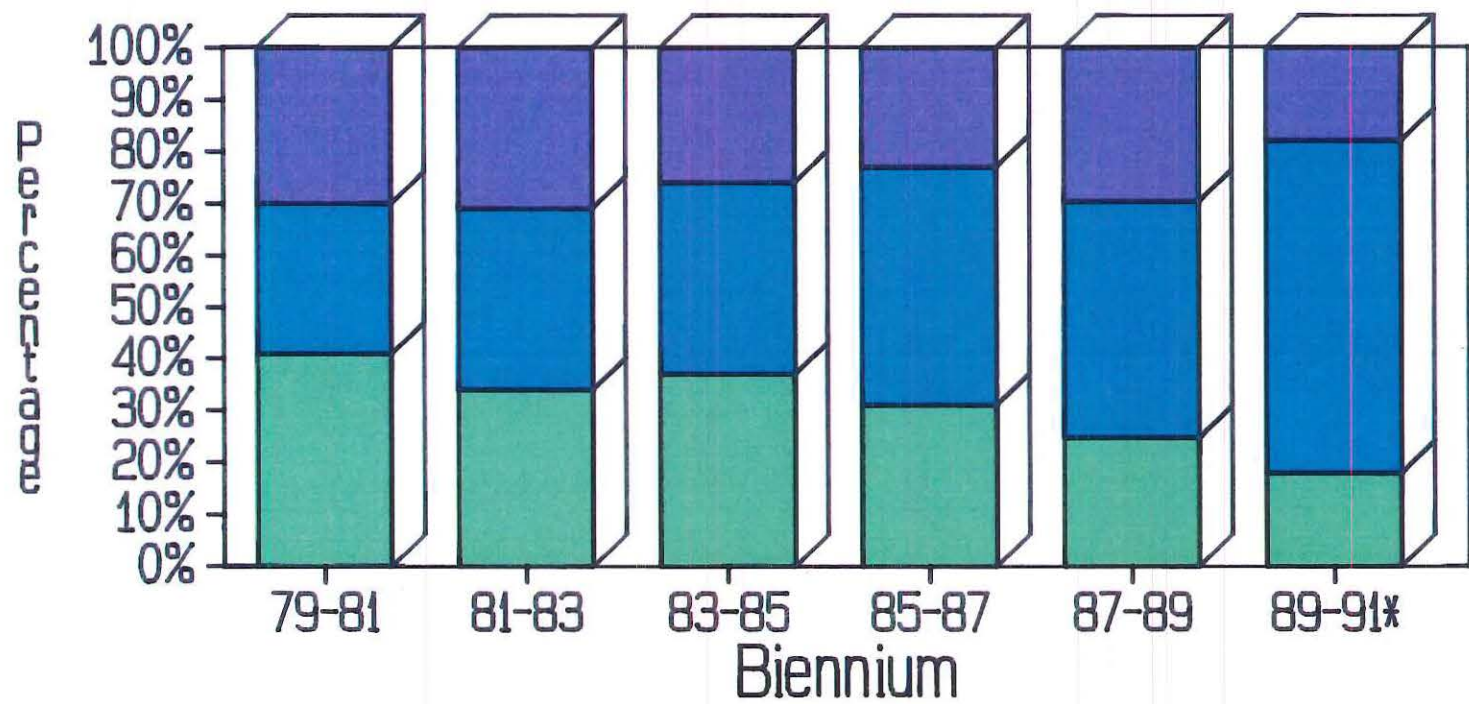
# DEQ OPERATING BUDGET

## Percentage of Budget by Program Area



\*Governor's Recommended Budget

# DEQ OPERATING BUDGET Percentage By Fund



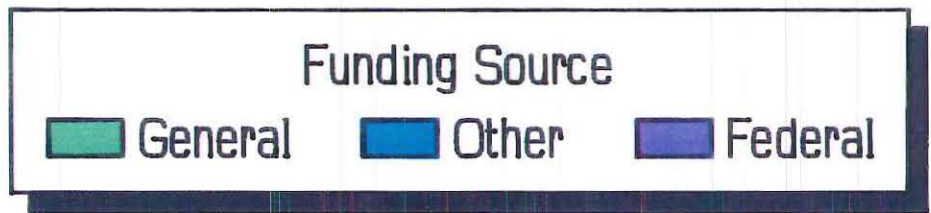
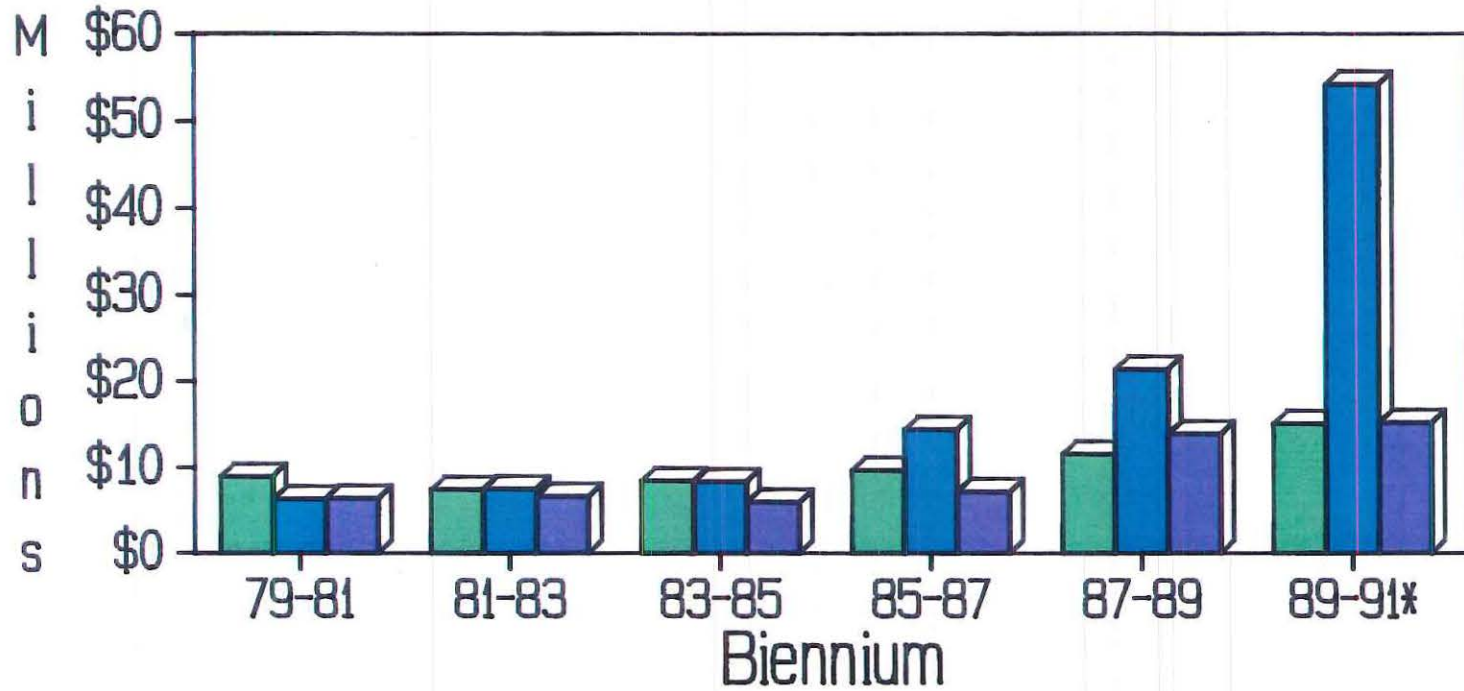
Funding Source

General Other Federal

\*Governor's Recommended Budget

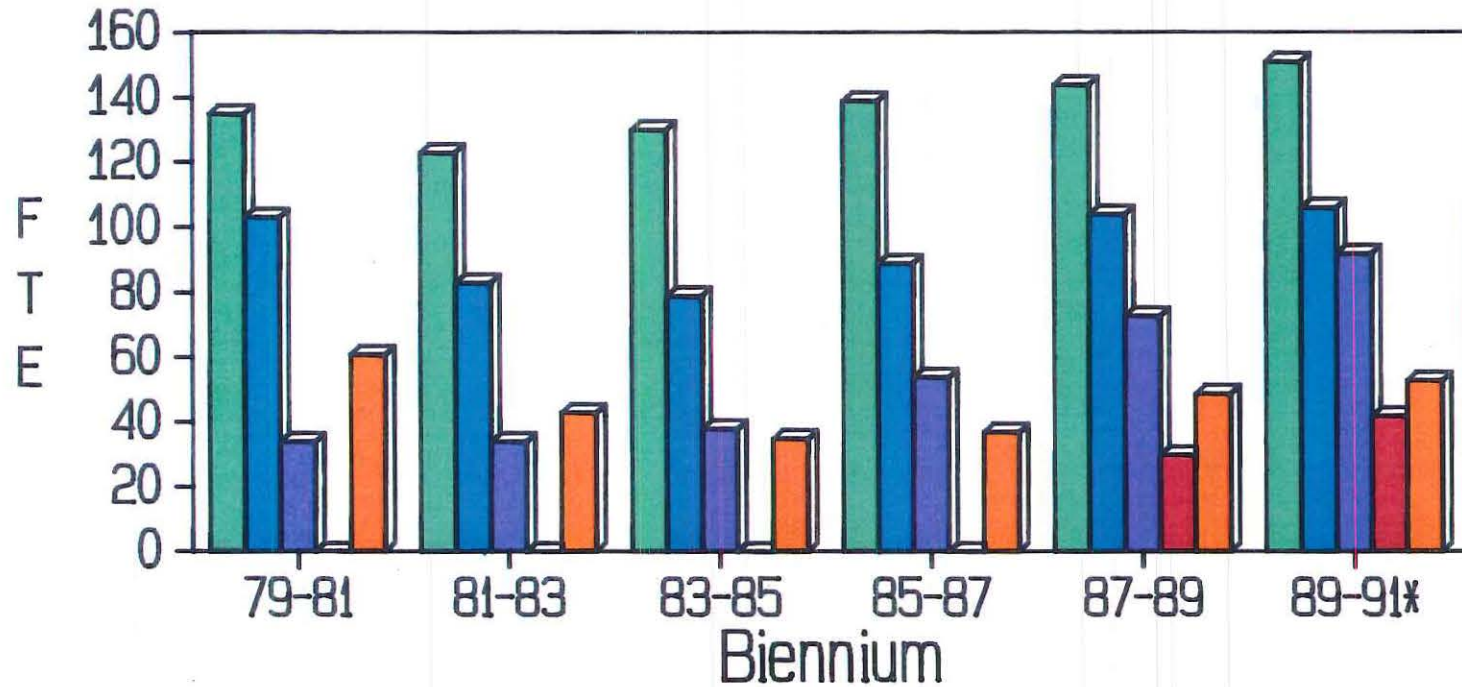
# DEQ OPERATING BUDGET

## Dollar Comparison by Fund



\*Governor's Recommended Budget

# DEQ OPERATING BUDGET FTE by Program



\*Governor's Recommended Budget

OREGON ENVIRONMENTAL QUALITY COMMISSION MEETING

WORK SESSION

December 8, 1988

Conference Room 4

Department of Environmental Quality

811 SW Sixth Avenue

Portland

Note: The purpose of the work session is to provide an opportunity for informal discussion of the following items. The Commission will not be making decisions at the work session.

- 2:30 pm Discussion of Medford Air Quality Issues (Wood stoves, Monitoring, etc.)
- 3:15 pm Status of Education Efforts
- 3:45 pm Water Quality Program-Background Discussion
- 4:30 pm Staff Report Format





## Environmental Quality Commission

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

### MEMORANDUM

TO: Environmental Quality Commission DATE: November 22, 1988  
FROM: Director *mw*  
SUBJECT: Discussion Item for December 8, 1988, EQC Work Session:  
Status Report - Medford Area PM<sub>10</sub> Issues

### Background

At the November 4, 1988, EQC meeting the Commission authorized a hearing on new PM<sub>10</sub> industrial emission rules for the Grants Pass, Klamath Falls and Medford areas. After this action the Commission requested the Department to report at the next Commission work session on the status of three PM<sub>10</sub> issues in the Medford area. These issues were as follows:

1. Expectations for new source testing and monitoring requirements.
2. Approach to resolve Dr. Palzer's concerns about the accuracy of estimates of source contributions to PM<sub>10</sub> problems.
3. Status of woodheating control strategy development.

Department staff are scheduled to have a series of major meetings in the Medford area on November 28 and 29, with local government and citizens to discuss items 2 and 3. The results of these meetings should clarify and give more specific direction on these issues of interest to the Commission. In order to give the Commission the most up-to-date information for the December 8 work session, it would be best if a detailed report on these issues is sent after the Medford meetings. Such reports will be sent by December 2, 1988.

A letter to local governments in the Medford area is attached to this memo which will give the Commission some background on one of the up coming meetings. This meeting will deal specifically with the issue of local woodheating control plans or strategies which are required in order to meet E-Board conditions for release of oil overcharge funds.

Other meetings are scheduled with Dr. Palzer and the Clean Air coalition to discuss items of mutual interest.

### New Source Testing and Monitoring Requirements

The Department has utilized conventional techniques in the Medford area to determine industry compliance with applicable emission standards. These techniques include periodic required emission tests observed by Department staff, routine plant inspections, periodic off site evaluation of stack emissions and review of annual reports on process data.

Over the years citizens and government have raised concerns that some industries are not maintaining continuous compliance with Department emission limits. With the addition of many wet scrubber particulate controls systems resulting from rules adopted in 1978, visual compliance monitoring has become more difficult. Steam plumes from these devices in fog conditions and during cool nighttime conditions at times mask particulate emissions. Although nighttime and other surveillance have not documented any significant non-compliance conditions, the Department sees value in developing a more continuous and automated compliance surveillance program. Such a program is warranted considering the seriousness of PM<sub>10</sub> air quality problems in the airshed and desirability of maximizing performance of emission control systems.

Existing Department rules for the Medford area have given the Department discretion to require installation and operation of instrumentation to measure and record emissions or other parameters which affect the emissions of air contaminants from wood-waste fired boilers, veneer dryers, and particleboard dryers.

The Department has not exercised this discretion because suitable equipment has not been readily available. Advances in process and emission monitoring equipment have been made over the years and the Department has now concluded that it would be practical to require installation of such instrumentation.

In the new PM<sub>10</sub> rules the Commission has authorized for hearing, the Department is proposing continuous monitoring and recording equipment to be installed within two years of adoption of the rules. Within one year a plan must be submitted for approval which described the approach that the industry will take in choosing instrumentation.

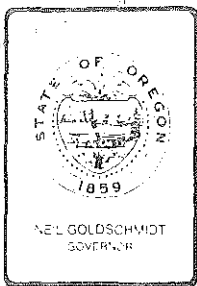
In order to insure quality data the Department would require approval of a method and frequency of calibration. The Department would also apply its own audit capability to verify the quality of data. Records of the monitoring would be required to be periodically submitted to the Department for review. This entire

EQC Work Session  
December 8, 1988  
Page 3

program is similar to successful programs required of larger industries such as pulp and paper mills, aluminum plants, municipal incinerators and steam electric generating plants.

The Department is confident that the proposed program will provide a greater degree of confidence in industrial compliance and will provide industry with a greater ability to maximize the control efficiency of its air pollution control system.

John F. Kowalczyk  
229-6459  
November 22, 1988  
AD4046  
Attachment



## Department of Environmental Quality

811 SW SIXTH AVENUE, PORTLAND, OREGON 97204-1390 PHONE (503) 229-5696

November 17, 1988

Jeff Golden, Chairman  
Jackson County Commissioners  
10 South Oakdale  
Medford, OR 97501

Re: Oil Overcharge Funding Project

Dear Commissioner Golden:

The Emergency Board has set aside \$750,000 of oil overcharge funds for an energy/environmental project in the Medford area. This letter is intended to provide a framework for responding to the conditions attached to those funds. We hope to come to agreement with Jackson County and the cities of Medford and Central Point by November 28, 1988, in order to keep this project moving forward. We plan to go to the January 5, 1989, E-Board meeting and need to finalize the project write-up by December 2, 1988.

To review, the Emergency Board conditions were as follows:

1. The local jurisdictions are to develop plans to address the federal PM<sub>10</sub> air quality requirements which are within their control;
2. A specific plan will be developed for expenditure of the \$750,000; and
3. The plans will be presented to the appropriate legislative body prior to March 31, 1989.

Practically speaking, the E-Board ceases to exist once the legislative session begins and so does the certainty of the set aside funds. Thus, the January 5, 1989, E-Board meeting may be the last real opportunity to receive the funding authorization.

For brevity, I will refer to the first two conditions as the local air quality strategy and oil overcharge financial plan, respectively, in the remainder of this letter.

### Local Air Quality Strategy

The most challenging of the E-Board conditions is the development of local air quality plans that are adequate to meet the PM<sub>10</sub> health standards. PM<sub>10</sub> concentrations on worst winter days in the Medford area are approximately twice the health standard.

Jeff Golden, Chairman  
November 17, 1988  
Page 2

The most critical source category for control by local jurisdictions is residential woodsmoke from stoves and fireplaces. In order to meet the 24-hour PM<sub>10</sub> health standard, residential woodsmoke must be reduced by 70% or more on worst winter days. These residential woodsmoke reductions, when combined with the additional industrial controls proposed by the Department, should be adequate to meet both the 24-hour and annual PM<sub>10</sub> health standards. Continued and/or increased local control of open burning and fugitive dust emissions would also be a useful part of the PM<sub>10</sub> control strategy.

To date, the biggest obstacle we have faced in regard to the plan itself has been the inclusion of a commitment to mandatory curtailment by local government. As you know, this issue has been driven by the U.S. Environmental Protection Agency (EPA) stated requirements for plan approvability. We are now trying a somewhat different approach with EPA. A state legislative proposal has been put together by the Air Quality Division which would require local governments in existing PM<sub>10</sub> nonattainment areas to adopt mandatory curtailment ordinances by mid-1991 unless the woodstove emission reductions necessary for attainment have been realized. In addition, fallback provisions are included in the event that a local government might fail to adopt the necessary ordinance prior to the 1991-92 heating season. These provisions include: a ban on installation of woodstoves or fireplaces in new homes; limit on replacement of existing woodstoves to woodstoves in a least-emissions category; and a requirement for removal of woodstoves and fireplaces from use in buildings upon ownership transfer.

We do not yet have assurances from EPA that such a legislative proposal, if adopted, would eliminate the need for local government commitment to mandatory curtailment. Given the narrow window of opportunity for the E-Board authorization of the oil overcharge money, we feel it is prudent to move forward on the basis that EPA will accept the legislative approach. Obviously, the issue of local government mandatory curtailment commitment would once again arise if EPA does not ultimately agree with the alternative approach or if the legislative proposal is not carried forward and adopted by the state legislature.

Given the above, we believe a minimally acceptable plan for the Medford area must contain the following elements:

1. Establishment of attainment of the PM<sub>10</sub> national ambient air quality standards as the goal of local government.
2. A specific plan to achieve that goal (i.e., voluntary curtailment and other program elements): (a) This plan must provide assurance that the needed reduction will not be precluded by curtailment exemptions; (b) A requirement that only certified stoves may be installed; (c) A commitment to pursue and expend grant funding for replacement of existing woodstoves with cleaner-burning

Jeff Golden, Chairman  
November 17, 1988  
Page 3

technology; (d) A public education program on the effects of woodstove emissions and preventative alternatives.

While not required at this time, I am urging you to seriously consider restrictions on further growth of the woodsmoke problem such as a ban on woodstoves or fireplaces in new homes. In the same vein, I strongly suggest you consider curtailment of certified cordwood stoves during third-stage (red) advisory periods.

#### Oil Overcharge Financial Plan

The framework for the financial plan could be an expansion of the existing woodstove replacement and weatherization project, the Cooperative Local Effort for Air Resources (CLEAR), being implemented by the Jackson County Housing Authority. The CLEAR project establishes income eligibility criteria and the maximum investment per home. The CLEAR project gives priority to the replacement of woodstoves with gas, oil or electric units but provides for replacement with pellet or best cordwood stoves in some cases. The CLEAR project also leverages local utility and weatherization funding in order to benefit a larger number of homes.

The original CLEAR project applied to only the non-Medford portion of the PM<sub>10</sub> problem area because of restrictions on the original funding source. The oil overcharge funding could be used to expand the CLEAR project to include the critical City of Medford PM<sub>10</sub> area. The air quality benefits of the project expansion would be even greater than the original CLEAR project. We propose that the highest priority be given to homes within the Medford city limits with a guaranteed minimum of \$75,000 to be spent on projects within the jurisdiction of each participating local government within the nonattainment area. Per our request to the E-Board, \$50,000 would be targeted for in-home woodstove testing in the Medford area. A draft of the financial plan is attached.

#### Overall Plan

The overall PM<sub>10</sub> control plan will be the combination of local and state efforts to reduce residential and industrial PM<sub>10</sub> emissions. The additional state control requirements for industrial sources are scheduled for public hearings during January 1989. These industrial rules, the local air quality plans, and any pertinent statutes adopted by the 1989 Legislative Session, would form the basis of the State Implementation Plan to be submitted to EPA.

Jeff Golden, Chairman  
November 17, 1988  
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In summary, the key issues on which we need to come to agreement are local air quality plans adequate to meet PM<sub>10</sub> health standards and the specifics of how the \$750,000 would be used. To further assist you in the development of your plan we have attached a guidance package which provides you with a formula for calculating potential reductions associated with a curtailment program. Also included in the guidance is a completed example of the formula using our best knowledge of your woodstove population.

As indicated in my previous letter to you, each of the three involved local governments (Medford, Central Point, Jackson County) may develop their own plan or they may wish to submit an area plan. Frankly, the latter is the preferred route but the first is an option to allow continued progress if one of the involved entities declines to participate. In order to meet the December 2nd deadline, we will need to have the meeting on November 28th serve to finalize plan(s) preparation.

We will be in contact by phone to help insure the most productive and conclusive meeting on November 28, 1988. We will also be available to meet with you in Medford prior to the 28th if you believe such a meeting would be helpful.

Sincerely,



Nick Nikkila  
Administrator  
Air Quality Division

NN:d

AD4028

Attachments

cc: Burke Raymond, County Administrator  
Kerry Lay, Planning Director

## PROPOSED FINANCIAL PLAN

### Medford Area Energy/Environmental Project for Woodstove Replacement and Weatherization

The framework for the financial plan would be an expansion of the existing woodstove replacement and weatherization project, the Cooperative Local Effort for Air Resources (CLEAR), being implemented by the Jackson County Housing Authority. The CLEAR project establishes income eligibility criteria and the maximum investment per home. The CLEAR project gives priority to the replacement of woodstoves with gas, oil or electric units but provides for replacement with pellet or best cordwood stoves in some cases. The CLEAR project also leverages local utility and weatherization funding in order to benefit a larger number of homes.

The original CLEAR project applied to only the non-Medford portion of the PM<sub>10</sub> problem area because of restrictions on the original funding source. The oil overcharge funding would be used to expand the CLEAR project to include the critical City Medford PM<sub>10</sub> area. The air quality benefits of the project expansion would be even greater than the original CLEAR project. Of the \$750,000 oil overcharge funds, \$550,000 would be targeted to the Medford area, \$150,000 added to the remainder of the PM<sub>10</sub> problem area, and \$50,000 used for in-home testing to verify the performance of best cordwood woodstoves in the Medford area.

An overview of the existing CLEAR project is attached. The attached information would apply to the proposed oil overcharge project except that the Medford area would also be included and the list of funding sources for the CLEAR project would be expanded to include the oil overcharge funds.



RECORDED  
AUG 02 1988

HOUSING AUTHORITY OF JACKSON COUNTY  
DEVELOPMENT DEPARTMENT  
2231 TABLE ROCK ROAD MEDFORD, OR 97501  
779-6186

AIR QUALITY CONTROL

KEEP THIS PACKAGE FOR YOUR RECORDS AND GENERAL INFORMATION.

OVERVIEW OF JACKSON COUNTY WOOD SMOKE ABATEMENT PROGRAM, CLEAR

A. You should know:

1. In order to participate in this program, your total household income must fall below these limits:

1 person	2 persons	3 persons	4 persons	5 persons	6 persons
\$15,250	\$17,400	\$19,550	\$21,750	\$23,100	\$24,450

2. YOUR JACKSON COUNTY PROPERTY TAXES ON THE BENEFITED HOUSE MUST BE PAID CURRENT.

3. Your family must use and have a history of using wood as a heat source in your home during the heating season. This may be either a fireplace used solely for heat or a non-certified wood stove, barrel stove or burner.

4. Your home must be located in the target area, roughly outlined as that area encompassed by South Stage Road from Pacific Highway to Arnold Road, then north to the intersection of Hanley and Jacksonville Highway. From that intersection, north to include all Central Point zip codes (97502) which are SOUTH of the Rogue River. All White City zip codes (97503) are eligible. The incorporated areas of Medford are NOT eligible to participate.

5. After you submit your application to the Housing Authority staff will:

- a. verify your income
- b. schedule a site inspection
- c. photograph your wood stove
- d. give your name and address to the electric company and the gas company as well as any interested oil furnace dealers.

Since the best selection of an alternate heat source for your home must be based on intelligent research, these energy/fuel suppliers will be allowed 21 days to furnish you with information about their heating fuel/energy and the advantages of their heating systems. You will be asked to select either gas, electricity or oil as your new heat source. Some families will receive certified wood stoves. This will be discussed later. You will also be asked to solicit bids from installers and select the contractor that you feel would be able to furnish you with the best heating system. Staff will assist you in all phases.

6. Your home must be in habitable condition and able to pass HUD's basic inspection for habitability, the Housing Quality Standards test.

7. Every applicant is expected to contribute \$100 to delivery costs of the program. This is due when the Contract is signed. For exceptions to this requirement, contact staff.

B. Your responsibility as a participant in the program:

1. You will be required to relinquish your present wood stove. This will be removed, as well as metal chimney pipes, supports, thimbles, mounts, bases and heat foils, backing and other associated components of the wood heater. The program will repair your ceiling, roof, walls and floor to match existing construction as much as possible.

2. After your new heating system is installed, your home will be insulated to conserve heat. If your present electrical system is inadequate to supply power to the new heating system, a 200 amp breaker service box will be installed. Insulation will include bringing ceilings, floors, doors and windows into conformance with air infiltration standards of the weatherization programs backed by CP National and Pacific Power and Light. Caulking and weather sealing are included.

3. The address of every participating home will be noted at the Jackson County Planning Department, and a 'flag' placed on that address. This notation means that no wood heating device may ever be installed and used at that address. Members of the Building and Planning Department inspection team will conduct routine exterior inspections of the dwelling for several years to ensure conformance. If an exterior inspection indicates that a wood heating device has been installed, this would constitute grounds for further inspection and implementation of sanctions, fines, repayment or other action by the county. No permits will ever be issued for the installation of a wood heating device if the home has had an electric, gas or oil unit installed under this program. In order to have this 'flag' removed, ALL costs incurred at that address must be repaid to the program. This is binding on present and subsequent owners.

4. Low income-owner occupied homes whose families heat solely with wood will be the first to participate. After the qualified families who are presently using wood as their only source of heat have been assisted, funds would be used to assist homes used as rentals and families who use wood and other heating sources (mixed use).

5. In order for a tenant occupied home to participate, the tenants must be income eligible. The landlord applies, on the basis of a low income tenant, and the landlord pays the expenses, if any, of participating.

C. Who can receive a certified stove?

1. After the \$100 fee is paid, there are NO OTHER COSTS for owner-occupant participants whose homes are in good condition, have paid their taxes, meet income requirements and convert to gas, electric or oil heating energy.

2. If a family can clearly demonstrate that its financial condition makes it impossible to pay gas, electric or oil bills for the new system, they would be eligible to receive a certified wood stove. The program would buy only 50% of the new certified wood stove. The remaining 50% would become a lien against the property, which would dissolve at 10% per year over a period of ten years. On an annual basis, a county representative may inspect the device to ensure that it is in place and functioning as per the agreement. If the device is overtly damaged, removed and replaced with a dirtier unit, sold or otherwise taken out of service and heat derived from a more polluting replacement, repayment of the lien, fines and other sanctions would be triggered. If a family removes the stove and installs an acceptable alternative heat source that is not polluting, the lien is forgiven. If the certified stove is properly maintained for the full ten years, the lien will be forgiven. If the owner sells, trades, grants, loses, gives the property as a gift, or otherwise alienates the property during that ten year period, the prorated balance of the loan is due and payable. These loans are not assumable by the new owner.

D. All participants must have paid property taxes and a \$100 participation fee before being prioritized into one of the following categories:

Priority One: Low Income family in owner occupied dwelling,  
Sole source of heat = wood.

Conversion to gas, electric or oil  
plus insulation = free

Installation of certified wood stove, allowed in  
limited circumstances, is 50% free + 50% lien.  
Wood stove installations are subject to annual  
inspections by the county Planning Department.  
The 50% lien forgives at a rate of 10% per year  
over a 10 year period, provided the agreement is  
not broken.

\* Sale, grant, loss, gift or other alienation of

property by the owner will cause the prorated balance to be due and payable upon transfer. This loan is not assumable by subsequent owners.

Priority Two: Low income family in rental (tenant occupied)  
Sole source of heat = wood

Conversion to gas, electric or oil heat, plus insulation is a 100% loan to the property owner.

This loan forgives at the rate of 10% per year for ten years. Terms are the same as above.

Installation of a certified wood stove may be allowed in limited circumstances.  
This would be paid for by 50% owner's cash and a 50% lien which forgives at a rate of 10% per year for ten years. Terms are the same as above.

Priority Three: Owner occupied OR tenant occupied, low income.  
Family heats with wood and another heat source.

Conversion to gas, electric or oil plus insulation = free to owner occupants.  
= 100% loan to landlord in tenant occupied. See Priority Two.

Installation of a certified wood stove may be allowed in limited circumstances.  
This would be paid for by 50% owner's cash and a 50% lien which forgives at a rate of 10% per year for ten years. Terms are the same as above.

Participation will be decided by your Priority level and the time and date that your application is received in the Housing Authority. Complete your four page application and submit it early for inclusion in the program. Funds will be spent on a Priority basis.

The goal of the program is to increase the quality of our air in Jackson County by removing uncertified wood stoves from use as heating devices in residences. Citizens realize the need to have other heat sources in their homes, but those with limited incomes are not able to purchase the new cleaner burning heating devices, and are forced to continue heating with wood. The program proposes to replace the old wood stoves with either alternative systems or certified wood heaters, thus removing and destroying the old polluting heaters.

If you have further questions about this program, please contact the Development staff at the phone listed on page one.

GENERAL GUIDANCE ON EVALUATION OF  
WOODSMOKE PROGRAM EFFECTIVENESS

The following factors collectively affect the ability to achieve the needed woodsmoke emission reduction: The growth rate in the new stove population; the type and number of exemptions from the woodburning advisory; and the actual compliance rate with the advisory. The necessary balance in these parameters will be met through establishment of target achievement levels, closely monitoring actual achievement rates, and adjusting program emphasis and targets as actual conditions warrant.

The following table is an example of the critical parameters and targeted achievement levels for the woodsmoke reduction strategy. This calculation table can be used to demonstrate if the emission reduction needed to meet health standards can be achieved by the given strategy. This example is based on the expected emission rates from strategy elements and the expected accomplishments from the CLEAR woodstove replacement program administered by the Housing Authority of Jackson County, including the addition of proposed oil overcharge funds.

	Stove Population (% of baseline)	X Emission Rate (% of conventional stove emissions)	= Airshed Emissions (% of baseline)
<b>Exemptions From Curtailment</b>			
Conventional stoves	5 <sup>a</sup>	100	5
BEST pellet stoves	1.3 <sup>b</sup>	10	0.1
BEST cordwood stoves	1.3 <sup>b</sup>	40	0.5
Existing certified woodstoves (10%)	not exempt <sup>c</sup>	70	0 (7) <sup>d</sup>
Future certified units (replacements, 20%)	not exempt <sup>c</sup>	70	0 (14) <sup>d</sup>
New certified units (population growth, 1988-1992, 8%)	not exempt <sup>c</sup>	70	0 (5.6) <sup>d</sup>
Conversions From Wood Noncompliance With Curtailment	1.3 <sup>b</sup> 24.4	0 100	0 24.4
Compliance With Curtailment	66.7	0	0
<hr/>			
Total	100		30
(Note: Maximum emissions to achieve 70% reduction goal =			30)

Footnotes:

- <sup>a</sup> Existing sole-source woodheated home population.
- <sup>b</sup> Estimated achievement from CLEAR program.
- <sup>c</sup> Certified stoves not exempted in this example since the combined emissions from all certified stove categories would cause emissions to exceed 30% emissions target.
- <sup>d</sup> Airshed emissions if certified stoves exempted from curtailment.

WORKSHEET

Stove Population X Emission Rate = Airshed Emissions  
 (% of baseline) (% of conventional (% of baseline)  
 stove emissions)

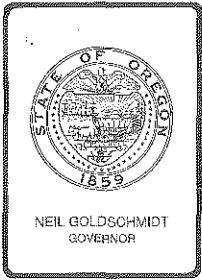
Exemptions From Curtailment

Conventional stoves	100	
BEST pellet stoves	10	
BEST cordwood stoves	40	
Existing certified woodstoves	70	
Future certified units (replacements)	70	
New certified units (population growth, 1988-1992)	70	
Conversions From Wood	0	
Noncompliance With Curtailment	100	
Compliance With Curtailment	0	0

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Total 100  
 (Note: Maximum emissions to achieve 70% reduction goal = 30)

Footnotes:



## Environmental Quality Commission

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

TO: Environmental Quality Commission      DATE: December 2, 1988

FROM: Director *[Signature]*

SUBJECT: Status Report on Medford PM<sub>10</sub> Issues for  
December 8, 1988, EQC Work Session

### Overview

At the November 4, 1988, EQC meeting the Commission authorized a hearing on new PM<sub>10</sub> industrial emission rules for the Grants Pass, Klamath Falls and Medford areas. After this action the Commission requested the Department to report at the next Commission work session on the status of three PM<sub>10</sub> issues in the Medford area. These issues were as follows:

1. Status of woodheating control strategy development;
2. Approach to resolve Dr. Palzer's concerns about the accuracy of estimates of source contributions to PM<sub>10</sub> problems; and
3. Expectations for new source testing and monitoring requirements. (A discussion of this issue was sent to the Commission last week, but is recapped at the end of this memorandum.)

Department staff met with local governments and interested citizens to discuss issues 1 and 2 in a series of major meetings in the Medford area from November 28 to December 1, 1988. The results of those meetings provide a clearer and more complete status report on both of these issues:

1. Staff of the Department and local government agreed on the minimum necessary elements of the local woodheating action plans and local elected officials approved those action plans on November 30 and December 1. These local action plans, combined with the attached legislative proposal on woodheating issues, provide improved assurance that the necessary woodsmoke reductions will occur.
2. Department staff met with Dr. Palzer and colleagues on November 29, 1988. There was a general consensus at that meeting on how to proceed to finalize the PM<sub>10</sub> source contribution estimates and insure that the PM<sub>10</sub> control strategy will be adequate to meet health standards.

These issues are discussed in more detail in the following sections and the attachments; staff will be available for questions at the December 8, 1988, work session.

### Woodheating Control Strategy Development

It has been recognized for nearly a decade that residential woodsmoke must be effectively controlled, in addition to industrial sources, in the Medford area to meet particulate health standards. While substantial progress has been made in controlling industrial particulate emissions, residential woodsmoke has not been effectively controlled because of a lack of overall citizen support, and subsequently local government support, for such measures as mandatory weatherization programs and mandatory woodburning curtailment programs. A status report on the Medford-Ashland particulate strategy was presented to the Commission at its June 10, 1988, meeting (Attachment 1).

As a result, the Department has been working with the U.S. Environmental Protection Agency (EPA) and local governments in the Medford-Ashland area in an attempt to develop an effective and mutually acceptable woodheating control strategy. This effort has resulted in a three-step strategy that provides greater assurance that the needed woodsmoke reductions will be ultimately achieved. The three-step strategy includes:

1. An aggressive local voluntary air quality improvement plan;
2. A proposed state statute directive that local governments adopt mandatory curtailment programs if the voluntary programs do not provide the needed reductions in woodheating emissions by mid-1991; and
3. A proposed state statute authorizing a state backup strategy if local governments fail to adopt or implement the statutorily required mandatory curtailment programs.

The local voluntary air quality improvement plan was adopted by Jackson County on November 30, 1988, and by the cities of Medford and Central Point on December 1, 1988 (Attachment 2). This plan includes: specific intent by local governments to provide the reductions in woodheating emissions needed to meet the national ambient air quality standards for PM<sub>10</sub> by June 1, 1991; a comprehensive public education program using Regional Strategy funding (lottery funds); a more aggressive voluntary woodburning curtailment program than previously implemented, including door-to-door information on the program and encouragement to cooperate, monitoring of compliance levels, annual evaluation of the program, and revisions as needed to achieve the compliance goals; financial incentives for weatherization of homes and replacement of existing woodstoves with cleaner burning units using community development block grants and other funding; voluntary firewood seasoning certification program; and a ban on installation of non-certified woodstoves and fireplace inserts.

The key short-term control measure to meet particulate standards is the avoidance of wood use during air pollution episodes. The Department does not have statutory authority to implement woodburning curtailment programs. Thus, the success of the particulate strategy is largely dependent on the



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commitment of citizens and local governments to effectively curtail woodburning on air stagnation days.

The key long-term control measure is the replacement of existing woodstoves with cleaner burning units. Large-scale replacement with cleaner burning units will greatly reduce, but probably not totally eliminate, the needed number of days of curtailment per year in the Medford area.

The Department's project to identify those certified woodstoves which represent the best existing stove technology (BEST), and thus offer the most assurance of maintaining a high level of emission control over their lifetimes, is nearing completion. Local jurisdictions have agreed in their plans that only BEST woodstoves (and gas, electric, oil, and certified pellet heating units) will be eligible for financial incentives such as provided in the Coordinated Local Effort for Air Resources (CLEAR) program administered by the Housing Authority of Jackson County.

The Department is submitting the local air quality improvement plan with its request to the January 6, 1989, meeting of the Emergency Board in hopes of adding \$700,000 of oil overcharge funds to an expanded CLEAR program. These additional funds would allow including the City of Medford within the boundaries for eligible homes.

Locally shaped and enforced strategies to deal with residential woodsmoke pollution problems are highly preferable over state or federal actions. The local woodheating action plans adopted on November 30 and December 1, 1988, and other potential financial incentive programs will help achieve the necessary pollution reductions. However, in order to address the case where local strategies may fail, authorization is needed from the Oregon Legislature to impose automatic requirements that would effectively reduce future residential woodsmoke emissions in areas that failed to develop or implement the necessary control strategy.

Therefore, the Department has drafted a legislative proposal (Attachment 3) to provide alternative woodsmoke reduction measures that would go into effect only if the local woodheating control strategy failed. If local woodheating strategies fail, the proposal would require local governments to adopt and implement mandatory curtailment programs. If local governments fail to do so, a ban on installation of new woodstoves and the removal of woodstoves upon sale of residences would be required. The proposal also currently includes tax credits for replacement of existing woodstoves with cleaner burning units and fees on woodstoves sales to fund public education. The latter two items, as well as the oil overcharge funding for project CLEAR, would help the voluntary curtailment program to be more effective.

The overall PM<sub>10</sub> control strategy for the Medford-Ashland area would include the woodheating strategy (local woodheating plan plus legislative proposal), the additional industrial control requirements, and any other particulate control measures (additional open burning requirements, etc.). The PM<sub>10</sub> control strategy would be combined with the technical analysis and

documentation as a proposed State Implementation Plan revision and returned to the Commission for public hearing authorization during the first half of 1989. Following adoption, the State Implementation Plan revision would be submitted to EPA for approval.

#### Approach to Resolve Concerns about Source Contribution Estimates

The Department calculated PM<sub>10</sub> emission inventories for the Oregon PM<sub>10</sub> problem areas in September 1987. Residential woodsmoke from stoves and fireplaces is the major PM<sub>10</sub> source category in the Medford-Ashland Air Quality Maintenance Area, as summarized in the following table.

<u>Source Category</u>	<u>Annual PM<sub>10</sub> Emissions (%)</u>	<u>Worst Day PM<sub>10</sub> Emissions (%)</u>
Residential woodsmoke	41	65
Wood products industry	21	13
Soil and road dust	24	14
Motor vehicle exhaust	7	4
<u>Other</u>	<u>7</u>	<u>4</u>
Total	100	100

Worst day PM<sub>10</sub> concentrations must be reduced by about 50% to meet the daily PM<sub>10</sub> health standard in Medford; annual average PM<sub>10</sub> concentrations must be reduced by about 20% to meet the annual standard.

The Department used the above PM<sub>10</sub> emission inventories and chemical fingerprinting techniques to identify residential woodsmoke as the largest contributor to annual PM<sub>10</sub> concentrations and the dominant contributor, larger than all of the other sources combined, on worst winter days.

The Jackson County Woodburning Task Force targeted reductions in residential woodsmoke emissions of 70-75% on worst days, and 50-60% annual average, in order to meet the PM<sub>10</sub> health standards. The Department targeted an additional 20% reduction in industrial emissions (on worst days and annual average).

In January 1988, Dr. Robert Palzer presented a draft report to the Jackson County Commissioners that questioned the Department's estimates of relative contributions of residential and industrial sources to the PM<sub>10</sub> problem. Specifically, Dr. Palzer estimated that industry contributes twice as much as residential woodsmoke to the annual PM<sub>10</sub> concentrations and that industry contributes a similar amount as residential woodsmoke to winter PM<sub>10</sub> concentrations.

Dr. Palzer's conclusions were based on an assumed industrial impact in the summer months (when there are no woodheating emissions) which was then extrapolated to the other months of the year based on the relative monthly ventilation factors. Dr. Palzer's major concern was that the PM<sub>10</sub> control

strategy, if heavily based on residential woodsmoke reductions alone, would fall short of meeting the ambient PM<sub>10</sub> health standards.

In order to finally resolve the DEQ-Palzer differences, the Department agreed to work with Jackson County to obtain the necessary funding and identify a qualified independent third-party consultant to evaluate the Palzer and DEQ preliminary PM<sub>10</sub> estimates.

The Department is now in the process of updated receptor and dispersion modeling to finalize the PM<sub>10</sub> source contribution estimates for the Medford-Ashland area. A related EPA-funded and DEQ-coordinated project to improve the Pacific Northwest chemical fingerprints used in receptor modeling was initiated in November 1986 and is scheduled for completion in February 1989.

Department staff met again with Dr. Palzer and some of his colleagues on November 29, 1988. The consensus at the November 29 meeting was that the better way to resolve the DEQ-Palzer differences, rather than a third-party review of the preliminary PM<sub>10</sub> source contribution estimates, would be for the Department to do a worst-case analysis of the possible range of industrial and residential impacts using the chemical fingerprinting techniques. The Department agreed to analyze the effectiveness of the proposed residential-industrial strategy under "worst-case" source contribution estimates as part of the evaluation process. This analysis should be possible by December 31, 1988, using the existing chemical fingerprints and by March 31, 1989, using any improvements to the chemical fingerprints resulting from the Pacific Northwest project.

It is important to recognize that the Department and Dr. Palzer have agreed from the beginning of these discussions that both industrial and residential emission reductions are needed in order to meet the PM<sub>10</sub> health standards in the Medford area.

#### New Source Testing and Monitoring Requirements

The Department has utilized conventional techniques in the Medford area to determine industry compliance with applicable emission standards. These techniques include periodic required emission tests observed by Department staff, routine plant inspections, periodic off-site evaluation of stack emissions and review of annual reports on process data.

Over the years citizens and government have raised concerns that some industries are not maintaining continuous compliance with Department emission limits. With the addition of many wet scrubber particulate controls systems resulting from rules adopted in 1978, visual compliance monitoring has become more difficult. Steam plumes from these devices in fog conditions and during cool nighttime conditions at times make it difficult to observe visible particulate emissions. Although nighttime and other surveillance have not documented any significant non-compliance

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conditions, the Department sees value in developing a more continuous compliance surveillance program. Such a program is warranted considering the seriousness of PM<sub>10</sub> air quality problems in the airshed and the desirability of maximizing performance of emission control systems.

Existing Department rules for the Medford area have given the Department discretion to require installation and operation of continuous monitoring instrumentation to measure and record emissions or other parameters which affect the emissions of air contaminants from wood-waste fired boilers, veneer dryers, and particleboard dryers.

The Department has not required continuous monitoring in some cases because suitable equipment has not been readily available. Advances in process and emission monitoring equipment have been made in recent years and the Department has now concluded that it would be practical to require installation of such instrumentation.

In the new PM<sub>10</sub> rules which the Commission has authorized for hearing, the Department is proposing continuous monitoring and recording equipment to be installed within two years of adoption of the rules. Within one year a plan must be submitted for approval which describes the approach that the industry will take in choosing instrumentation.

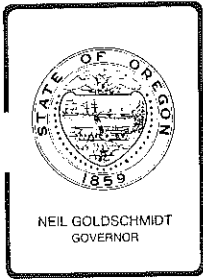
In order to insure quality data the Department would review and approve continuous monitoring plans for each affected plant. Data quality assurance would be part of the monitoring plan and the Department would apply its own audit capability to verify the quality of data. Records of the monitoring would be required to be periodically submitted to the Department for review. This entire program is similar to successful programs required of larger industries such as pulp and paper mills, aluminum plants, municipal incinerators and steam electric generating plants.

The Department is confident that the proposed program will provide a greater degree of confidence in industrial compliance and will provide industry with a greater ability to maximize the control efficiency of its air pollution control systems.

AD4133  
Merlyn L. Hough  
229-6446  
December 2, 1988

- Attachments:
1. Staff report to EQC at June 10, 1988, EQC Meeting.
  2. PM<sub>10</sub> action plans recently adopted by local governments.
  3. Woodheating proposal for 1989 Legislative Session.

# Attachment 1



## Environmental Quality Commission

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

### EXECUTIVE SUMMARY

TO: Environmental Quality Commission

FROM: Fred Hansen, Director *Ful*

SUBJECT: Agenda Item M, June 10, 1988, EQC Meeting. Informational Report: Implementation Status of the Total Suspended Particulate Air Pollution Control Strategy in the Medford-Ashland Air Quality Maintenance Area.

At the EQC meeting in Medford on April 29, 1988, the Commission directed the Department to prepare a report on what occurred in the implementation of the Medford-Ashland 1983 particulate control strategy, what can be done to correct any implementation problems, and what can be done to prevent similar problems in the future.

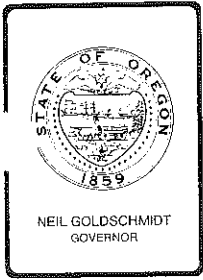
Total Suspended Particulate (or TSP) levels in the Medford area did not improve as much as expected during 1984-87 principally because of lack of follow-through by local governments on key woodburning ordinance requirements.

The staff report discusses a number of options available to individual citizens or units of government to motivate or force implementation of woodheat control measures in the Medford-Ashland area:

- (a) Citizen suits against EPA to implement the approved State Implementation Plan or develop a Federal Implementation Plan;
- (b) State-imposed industrial growth moratorium;
- (c) State Legislature authorization of a ban on new woodstove or fireplace installations, or removal of woodstoves and fireplaces upon home sale or rental;
- (d) Federal sanctions such as an industrial growth moratorium or restrictions on sewage treatment, highway, or air planning grants;
- (e) Federal enforcement action, which could include orders, injunctions or civil penalties, against local governments for failure to implement ordinances in the State Implementation Plan.

The Department believes that locally shaped and enforced strategies to deal with residential woodsmoke pollution problems are still highly preferable over state or federal actions. Potential financial incentive programs may help achieve the necessary pollution reductions. However, in order to prevent similar implementation problems in the future, either EPA may need to pursue its legal remedies or state authority may be needed from the Oregon Legislature to impose automatic restrictions that would effectively reduce future residential woodsmoke emissions in areas that failed to develop or implement the necessary control strategy.

AD2829



## Environmental Quality Commission

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

### MEMORANDUM

TO: Environmental Quality Commission

DATE: May 27, 1988

FROM: Director

SUBJECT: Agenda Item M, June 10, 1988, EQC Meeting

Informational Report: Implementation Status of the Total Suspended Particulate Air Pollution Control Strategy in the Medford-Ashland Air Quality Maintenance Area.

### BACKGROUND

In January 1980, the Medford-Ashland Air Quality Maintenance Area (AQMA) was designated as an area in nonattainment with the federal primary (or health-related) and secondary (or welfare-related) ambient air quality standards for Total Suspended Particulate (TSP). This designation was based on TSP levels measured during 1976-79.

A special airshed study was conducted in 1979-80 to better identify the particulate sources contributing to the problem. In 1981, a local air quality advisory committee worked with the Department and local governments to identify the most appropriate and acceptable control strategy to meet air quality standards. The overall State Implementation Plan (SIP), including the necessary local ordinances, state rules, and interagency agreements, was adopted by the Commission in 1983 and approved by the U.S. Environmental Protection Agency (EPA) in 1984.

TSP levels during 1984-87 have not improved as much as projected in the 1983 strategy principally because of local governments not following through on key woodburning ordinance requirements. If the TSP strategy had been implemented as designed, the Medford area should not only meet the primary TSP standards but also be very close to meeting the new air quality standards for inhalable particulate matter (PM<sub>10</sub>) adopted by EPA in July 1987 (0-10 PM<sub>10</sub> violation days per year instead of the current 20-25 violation days per year).

At the EQC meeting in Medford on April 29, 1988, the Commission directed the Department to prepare a report on what occurred in the implementation of the Medford-Ashland 1983 particulate control strategy, what can be done to correct any implementation problems, and what can be done to prevent similar problems in the future.

EVALUATION

Responsibilities and Implementation

The major elements of the Medford-Ashland particulate control strategy adopted in 1983 were:

1. Industrial emission control requirements, including controls on:
  - (a) Veneer driers,
  - (b) Fiber driers,
  - (c) Particle driers,
  - (d) Wood-fired boilers,
  - (e) Charcoal furnace,
  - (f) Air conveying systems,
  - (g) Fugitive dust,
  - (h) Operation and maintenance;
2. Residential woodsmoke control requirements, including:
  - (a) Mandatory weatherization before new woodstove installation,
  - (b) Mandatory weatherization of homes with woodstoves prior to sale,
  - (c) Mandatory woodstove and fireplace curtailment during pollution episodes,
  - (d) Woodstove certification program for new woodstoves and inserts; and
3. Additional industrial or non-industrial control requirements to be determined in 1988.

A number of other control measures were also included in the strategy but these other measures were less critical to the success of the strategy than those listed here.

The Department was responsible for enforcement of the industrial control requirements outlined in 1a through 1h. The Commission adopted the necessary state rules in March 1978 and February 1983. These requirements have all been implemented. The industrial controls resulted in about 40% of the annual TSP reduction and 30% of the peak-day TSP reduction needed to meet the primary TSP standards.

Local governments (Jackson County and the cities in the Rogue Valley) were responsible for the residential requirements outlined in 2a through 2c. These residential requirements were expected to provide about 50% of the annual TSP reduction and 70% of the peak-day TSP reduction needed to meet the primary TSP standards. Local ordinances were adopted in 1982 by Jackson County, the City of Medford, and the City of Ashland. The history of these ordinances is outlined in Attachment 1.

The City of Medford weatherization ordinances (covering items 2a and 2b) were repealed by the Medford City Council in the spring of 1985. Jackson County repealed the weatherization-upon-sale ordinance (2b) in December 1985. The local weatherization ordinances were repealed primarily due to opposition by



persons who argued that the weatherization requirements would unduly complicate and delay real estate sales, especially during and immediately following the economic recession when real estate sales were poor.

The City of Ashland curtailment ordinance (2c) was repealed by a voter initiative in August 1982. The Ashland curtailment program was not critical to the success of the Medford-Ashland particulate strategy but the repeal of the Ashland ordinance contributed to the reluctance of Medford and Jackson County officials to enforce curtailment ordinances in the more critical particulate problem areas.

The Jackson County and Medford woodburning curtailment ordinances (2c) were scheduled to become effective in January 1985, but both the County and the City chose to implement the curtailment program as an advisory program without enforcement. The local woodburning curtailment ordinances were not enforced because of concerns that enforcement would be unpopular and because of the Ashland initiative. The Department worked with the City and County to make the voluntary Rogue Valley Woodburning Advisory Program (daily red/yellow/green advisory reports) as successful as possible. This program was operated from November through February during 1985-86, 1986-87, and 1987-88.

The state was responsible for the woodstove certification program (2d). The 1983 Oregon Legislature authorized the Commission to implement a woodstove certification program. The Commission adopted the necessary state rules in June 1984 that required woodstoves or fireplace inserts sold after July 1986 to meet specified emission standards; tighter emission standards become effective in July 1988. As of the end of 1987, the Department had certified 190 units of which 150 units met the 1988 standards.

The strategy adopted in 1983 also indicated that additional industrial or non-industrial control measures should be developed by 1988 to insure attainment of both the primary and secondary particulate standards. The 1987 Jackson County Woodburning Task Force has recommended additional residential woodsmoke control measures as discussed later in this report. The Department has identified additional potential control requirements for wood products industry in the Medford-White City area: Tighter emission requirements for veneer driers; tighter emission requirements for wood-fired boilers upon modification or replacement; more comprehensive industrial requirements for continuous emission monitoring and/or operation and maintenance; and more restrictive offset requirements. State rules would be needed for these industrial measures; the Department has drafted these rules and intends to request authorization from the Commission to hold a public hearing on these rules once local governments have firmed up the woodheating strategies.

The other elements of the strategy have generally been implemented: Local ordinances on open burning, and dirt trackout control; and interagency agreements on public education, shifting of firewood cutting to the spring months, winter sanding and cleanup, and paving of unpaved roads and shoulders (93 blocks in Medford during 1981-88). Some citizens expressed concern to the Commission at the April 28-29, 1988, meetings in Medford that open burning and

trackout control have not been given high priority for followup and enforcement in the unincorporated parts of Jackson County; these control measures are not as critical as the weatherization and curtailment ordinances, however.

In summary, the key control measures in the 1983 particulate strategy that have not been implemented to date are the local weatherization ordinances (2a and 2b) and the local woodburning curtailment ordinances (2c). Particulate levels in Medford in 1985 (the worst year during 1984-87) were 7% above the annual primary TSP standard and 52% above the peak-day primary TSP standard.

#### Efforts to Make Up the Strategy Shortfall

The Department and EPA have been aware of the lack of local government actions to implement certain components of the Medford-Ashland particulate strategy since 1985. This was discussed in the Oregon annual SIP implementation progress reports required by the Clean Air Act (Attachment 2) submitted to EPA and the Commission and made available to other interested persons.

No legal actions were taken by either agency to stimulate local actions because of the "imminent" adoption of new federal particulate standards (PM<sub>10</sub>), that would better address health effects, and the knowledge that the TSP strategy would have to be revised to address PM<sub>10</sub>. EPA and the states began monitoring specifically for PM<sub>10</sub> in mid-1983. EPA proposed PM<sub>10</sub> standards in the March 20, 1984, Federal Register. At that time, EPA proposed that the annual PM<sub>10</sub> standard be in the range of 50 to 65 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ) and the peak-day PM<sub>10</sub> standard be in the range of 150 to 250  $\mu\text{g}/\text{m}^3$ . At the higher end of these PM<sub>10</sub> ranges, little additional controls would have been needed to meet the PM<sub>10</sub> standards in the Medford area and therefore the full implementation of the local weatherization and curtailment ordinances would have been less essential. At the lower end of these PM<sub>10</sub> ranges, substantial reductions would be needed to meet the PM<sub>10</sub> standards in Medford. EPA proposed regulations for implementing the new PM<sub>10</sub> standards in the April 2, 1985, Federal Register. EPA adopted PM<sub>10</sub> standards at the lower end of the ranges (that is, annual standard of 50  $\mu\text{g}/\text{m}^3$  and peak-day standard of 150  $\mu\text{g}/\text{m}^3$ ) and adopted the regulations for implementing the standards in the July 1, 1987, Federal Register.

During this period of PM<sub>10</sub> standards development, the Department chose to pursue cooperative efforts with local governments to obtain financial incentives and more public support for implementation of the controversial residential woodburning control measures.

In order to help make up the weatherization and curtailment shortfalls in the strategy, the Department and local governments supported clean air utility rates (to encourage less woodburning through greater use of electricity or natural gas for home heating) and pursued financial incentive projects (to replace existing woodstoves with cleaner burning units). Regarding clean air utility rates, the Pacific Power clean air electric rate proposals were

rejected by the Public Utility Commission in 1984, 1986, and 1987. Regarding financial incentives, the City of Medford received a \$50,000 Community Development Block Grant last year to add retrofit afterburners to some existing woodstoves and Jackson County was awarded a \$485,000 Block Grant this year to replace woodstoves in low-income homes with cleaner burning units. This funding could address the woodheating problem in the most critical 1-4% (depending on the actual average cost per home) of the woodheated homes in the problem area. The Department had proposed a \$985,350 project in 1986 to replace or retrofit existing conventional woodstoves with cleaner burning technology; unfortunately, oil overcharge funds were not available for this project due to other pressing state energy needs. The Department is working with other state and local agencies on similar proposals for future oil overcharge and other funds.

In May 1987, the Jackson County Board of Commissioners appointed the Jackson County Woodburning Task Force to re-evaluate the particulate air quality issues and advise local governments on the most appropriate woodburning control measures. The Task Force made the following recommendations in December 1987:

1. Mandatory curtailment of woodstove and fireplace use (with limited exemptions) during periods of air stagnation;
2. Comprehensive public education program;
3. Clean air utility rates for electricity and natural gas;
4. Financial incentives and subsidies for cleaner woodburning units; and
5. Ban on installation of non-certified woodstoves.

The Task Force report was forwarded to the Jackson County Board of Commissioners and cities in the Rogue Valley. The Jackson County Commissioners adopted an action plan and schedule on April 21, 1988, to implement the Task Force recommendations except that they replaced the mandatory curtailment program with a more active continuation of the existing voluntary program. Jackson County has initiated efforts with the cities of Medford and Central Point for a coordinated action plan.

#### Legal Authority for Forcing Implementation

There are a number of options available to individual citizens or units of government to motivate or force implementation of woodheating particulate control measures in the Medford-Ashland area.

Citizens could sue EPA under Section 304 of the federal Clean Air Act which could result in a court order to EPA to enforce the current TSP State Implementation Plan (SIP) provisions (using orders, civil penalties, or injunctions) or promulgate and implement a Federal Implementation Plan (FIP). There has been a recent action in Arizona to require a FIP under court order to get the carbon monoxide strategy implemented. Because of the EPA transition from TSP to PM<sub>10</sub> standards, it is not totally clear what a court or EPA would really require or do if faced with legal action on an existing TSP SIP. A citizen suit under Section 304 dealing with PM<sub>10</sub> deficiency (in

contrast to a TSP deficiency) could more clearly result in a court order for EPA to promulgate a Federal Implementation Plan.

Even without citizen suits, EPA could initiate the TSP actions cited in the previous paragraph or pursue the following PM<sub>10</sub> actions. Under the new PM<sub>10</sub> standards and implementation schedules, EPA could promulgate its own PM<sub>10</sub> control strategy as a Federal Implementation Plan under Section 110 of the Clean Air Act since the state and local governments did not meet the May 1, 1988, date for submission of an adequate PM<sub>10</sub> strategy as a State Implementation Plan. EPA could propose sanctions such as an industrial growth moratorium or restrictions on sewage treatment or air planning grants.

The Commission has no legal means of forcing local governments to enforce ordinances in the SIP since the Commission does not have authority to regulate woodheating except for the woodstove certification program. The Commission could impose or pursue state sanctions on local areas as a means of forcing local implementation of woodheat controls. The Commission could impose an industrial growth sanction, in effect, by adoption of more restrictive industrial new source construction requirements in the Medford-White City area. The Oregon Legislature could be asked to provide authority to ban the installation of new woodstoves or fireplaces and/or require the removal of woodstoves upon house sale or rental in areas of the state that failed to develop or implement an adequate particulate control strategy.

#### Where to Go from Here

In the Department's opinion, locally shaped and enforced strategies to deal with residential woodsmoke pollution problems are still highly preferable over state or federal actions. Local governments are still making some progress toward developing acceptable solutions and the Department is hopeful that significant financial incentive programs can be put in place within the next year or so to help ease the burden of compliance.

The key short-term control measure to meet particulate standards is curtailment of woodburning during air pollution episodes. Special utility programs would help get more public support for such a strategy. The Commission and the Department do not have statutory authority to implement woodburning curtailment programs. Thus, the success of the particulate strategy is largely dependent on the commitment of citizens and local governments to effectively curtail woodburning on air stagnation days.

The key long-term control measure is the removal of existing woodstoves or their replacement with cleaner burning units. Large-scale removal or replacement with cleaner burning units will greatly reduce, but probably not totally eliminate, the needed number of days of curtailment per year in the Medford area. The Department is working with local governments, the Department of Energy, the Public Utility Commission, and private utilities to develop financial incentives for replacement of existing woodstoves. Legislative actions to provide tax credits, incentive utility programs, and oil overcharge

funds would greatly help get more local support to implement effective curtailment programs especially if receipt of this aid were tied to having an adequate local plan in effect.

However, it is probably not possible to gain full public support and provide complete financial subsidy of woodheat control strategies. So the key question that must be faced is how long do the local state and federal governments wait to act to rid the airshed of a significant health hazard. The new federal PM<sub>10</sub> requirements which call for adequate plans by May 1, 1988, and attainment by September 1, 1991, provide potential new targets for consideration of more rigorous regulatory approaches.

The following program should assure that air quality health standards are met within the time frame required by federal law while giving maximum flexibility and assistance to local areas to voluntarily solve their air pollution problems.

#### Potential PM<sub>10</sub> Compliance Program

The PM<sub>10</sub> strategies proposed for the Medford-White City, Klamath Falls, and Grants Pass areas are similar in that they include pursuit of financial incentives for replacement of existing woodstoves with cleaner burning units, pursuit of special utility programs to encourage less woodburning, comprehensive public information programs to explain what homeowners can do to reduce woodsmoke and why it is important that they do so, and voluntary woodstove/fireplace curtailment programs during pollution episodes. Local governments should commit to implement mandatory curtailment programs if the voluntary participation is not sufficient to meet the health standards. The financial incentives and special utility programs should be conditioned on local willingness to do so. Some financial assistance will be available by the next heating season (1988-89). Additional financial assistance could be available for the 1989-90 heating season if the 1989 Legislature supports tax credits and/or special utility programs.

State restrictions on woodheat installations could be imposed, if authorized by the 1989 Legislature, automatically in areas where voluntary curtailment programs were insufficient to meet health standards and local governments were unwilling or unable to enforce mandatory curtailment programs. These could include a ban on new (non-replacement) woodstove or fireplace installations, or the removal of woodstoves and conversion of fireplaces to natural gas (or made inoperable) prior to home sale or rental.

SUMMATION


1. The Medford-Ashland total suspended particulate (TSP) control strategy (including the necessary local ordinances, state rules, and interagency agreements) was adopted by the Commission as a part of the State Implementation Plan in 1983 in order to address the serious air pollution problem. This strategy was approved by the U.S. Environmental Protection Agency (EPA) in 1984. The major elements were:
  - (a) Industrial emission control requirements, including controls on veneer driers, fiber driers, particle driers, wood-fired boilers, charcoal furnace, air conveying systems, fugitive dust, and operation and maintenance;
  - (b) Residential woodsmoke control requirements, including mandatory weatherization before new woodstove installation, mandatory weatherization of homes with woodstoves prior to sale, mandatory woodstove and fireplace curtailment during pollution episodes, and woodstove certification program for new woodstoves and inserts; and
  - (c) Additional industrial or non-industrial control requirements to be determined in 1988.
2. The particulate strategy was not fully implemented and ambient particulate concentrations during 1984-87 did not improve as much as projected in the 1983 strategy. The Medford area continues to have very serious particulate air pollution. The major problems with implementation of the control strategy involved:
  - (a) Retraction of local weatherization ordinances (requiring cost-effective weatherization upon sale of homes); and
  - (b) No enforcement of local curtailment ordinances (requiring curtailment of woodstove and fireplace use during air pollution episodes).
3. The local weatherization ordinances were repealed due to opposition by persons who argued that the weatherization requirements would unduly complicate and delay real estate sales; the local woodburning curtailment ordinances were not enforced because of concerns that enforcement would be unpopular.
4. The other key elements of the control strategy have been implemented.
5. The potential legal means to motivate or force implementation of the local woodheat control measures include:
  - (a) Citizen suits against EPA to enforce or implement the approved TSP State Implementation Plan or develop a Federal Implementation Plan;
  - (b) State-imposed industrial growth moratorium;
  - (c) State Legislature authorization of a ban on new woodstove or fireplace installations, or removal of woodstoves and fireplaces upon home sale or rental;

- (d) Federal sanctions such as an industrial growth moratorium or restrictions on sewage treatment, highway, or air planning grants;
  - (e) Federal enforcement action, which could include orders, injunctions or civil penalties, against local governments for failure to implement ordinances in the State Implementation Plan;
  - (f) Citizen suit against EPA for failure to meet new PM<sub>10</sub> requirements and schedules which could result in EPA promulgation of a Federal Implementation Plan.
6. In order to work towards a cooperative solution to the particulate problem, the Department and local governments supported clean air utility rates (to encourage less woodburning through greater use of electricity or natural gas for home heating) and pursued financial incentive projects (to replace existing woodstoves with cleaner burning units).
  7. In May 1987, the Jackson County Board of Commissioners appointed a task force to advise local governments on the most appropriate woodburning control measures. The Task Force report was completed in December 1987 and forwarded to the Jackson County Board of Commissioners and cities in the Rogue Valley.
  8. The key short-term control measure to meet particulate standards is curtailment of woodburning during air pollution episodes. The Department does not have statutory authority to implement woodburning curtailment programs. Thus, the success of the particulate strategy is largely dependent on the commitment of citizens and local governments to effectively curtail woodburning on air stagnation days.
  9. The key long-term control measure is the replacement of existing woodstoves with cleaner burning units. Large-scale replacement with cleaner burning units will greatly reduce, but probably not totally eliminate, the needed number of days of curtailment per year in the Medford area.
  10. Locally shaped and enforced strategies to deal with residential woodsmoke pollution problems are still highly preferable over state or federal actions. Potential financial incentive programs may help achieve the necessary pollution reductions. However, in order to prevent similar implementation problems in the future, either EPA may need to pursue its legal remedies or state authority may be needed from the Oregon Legislature to impose automatic restrictions that would effectively reduce future residential woodsmoke emissions in areas that failed to develop or implement the necessary control strategy.

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June 10, 1988  
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DIRECTOR'S RECOMMENDATION

This report is provided for information only; no Commission action is required at this time. However, the Commission may want to give specific direction to the Department on the implementation issues.



Fred Hansen

Attachments:           1.   History of Jackson County Air Quality Ordinances.  
                          2.   Oregon Annual Progress Reports to the U.S. Environmental  
                                  Protection Agency.

Merlyn L. Hough  
(229-6446)  
May 27, 1988  
EQCPM8  
AD2822



# Attachment 2

RESOLUTION NO. 6253

A RESOLUTION adopting a plan for voluntary air quality improvement in the Medford-Ashland Air Quality Maintenance Area.

WHEREAS, the U. S. Environmental Protection Agency has adopted rules for particulate air pollution, known as the "PM10" standard; and

WHEREAS, the air in the Medford-Ashland Air Quality Maintenance Area violates the health standard for PM10 on about 20 days each year; and

WHEREAS, a plan for Voluntary Air Quality Improvement has been developed through the cooperative effort of the staffs of Jackson County, the cities of Medford and Central Point, and the Oregon Department of Environmental Quality; and

WHEREAS, the city council of the City of Medford is committed to provide healthful air quality for all citizens of the City; and

WHEREAS, the plan is both a requirement of federal law, and a prerequisite for the acquisition of a \$700,000 grant for a program to replace noncertified woodstoves with more energy efficient, cleaner burning heat sources;

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF MEDFORD, OREGON that:

The document entitled "Plan for Voluntary Air Quality Improvement in the Medford-Ashland Air Quality Maintenance Area Beginning with the 1988-89 Woodburning Season" (November 1, 1988 - February 28, 1989), attached hereto as Exhibit A and incorporated herein by reference, is hereby adopted. Exemptions for the 1988-89 heating season shall be granted for those whose sole source of heat is wood burning.

PASSED by the Council and signed by me in open session in authentication of its passage this 1st day of December, 1988.

ATTEST: Kathleen Ishiara  
City Recorder

Joseph S. Lawrence  
Mayor

(AIRQUAL.RS)

STATE OF OREGON )  
                          ) ss.  
COUNTY OF JACKSON )

I, Kathleen Ishiara, City Recorder of the City of Medford, do hereby certify that I have prepared the foregoing copy of Res. No. 6253, have carefully compared the same with the original thereof on file in my office, and that it is correct, true and complete transcript therefrom and of the whole thereof.

Dated at Medford, Oregon, this 1st day of December, 19 88.

Kathleen Ishiara  
City Recorder

BEFORE THE BOARD OF COUNTY COMMISSIONERS  
STATE OF OREGON, COUNTY OF JACKSON

IN THE MATTER OF ADOPTING )  
A PLAN FOR VOLUNTARY AIR )  
QUALITY IMPROVEMENT IN THE )  
MEDFORD-ASHLAND AIR QUALITY )  
MAINTENANCE AREA )

ORDER NO. 364-88

WHEREAS, the U.S. Environmental Protection Agency has adopted rules for particulate air pollution, known as the "PM10" standard; and

WHEREAS, the air in the Medford-Ashland Air Quality Maintenance Area violates the health standard for PM10 on about 20 days each year; and

WHEREAS, the Jackson County Woodburning Task Force has studied the PM10 problem at length, and has recommended strategies for attaining compliance; and

WHEREAS, a number of the Task Force recommendations have been incorporated into a plan for Voluntary Air Quality Improvement through the cooperative effort of the staffs of Jackson County, the cities of Medford and Central Point, and the Oregon Department of Environmental Quality; and

WHEREAS, the Jackson County Board of Commissioners is committed to provide healthful air quality for all citizens of the County; and

WHEREAS, the plan is both a requirement of federal law, and a prerequisite for the acquisition of a \$700,000 grant for a program to replace noncertified woodstoves with more energy efficient, cleaner burning heat sources.

Now, therefore,

The Board of County Commissioners of Jackson County ORDERS:

That the document entitled "Plan for Voluntary Air Quality Improvement in the Medford-Ashland Air Quality Maintenance Area Beginning with the 1988-89 Woodburning Season" is hereby adopted.

Dated this 30<sup>th</sup> day of November 1988, at Medford Oregon.

APPROVED AS TO FORM:

[Signature]  
County Counsel

JACKSON COUNTY BOARD OF COMMISSIONERS

[Signature]  
Jeff Golden, Chairman

ATTEST:

Donna Bladek  
By: Recording Secretary

absent  
Hank Henry, Commissioner

[Signature]  
Stewart McCollom, Commissioner

1-ORDER

Date Typed: November 29, 1988

RESOLUTION NO. 509

A RESOLUTION ADOPTING A PLAN FOR VOLUNTARY AIR QUALITY  
IMPROVEMENT IN THE MEDFORD-ASHLAND AIR QUALITY MAINTENANCE AREA

WHEREAS, the U.S. Environmental Protection Agency has adopted rules for particulate air pollution, known as the "PM10" standard; and

WHEREAS, the air in Medford-Ashland Air Quality Maintenance Area violates the health standard for PM10 on about 20 days each year; and

WHEREAS, the Jackson County Woodburning Task Force has studied the PM10 problem at length, and has recommended strategies for attaining compliance; and

WHEREAS, a number of the Task Force recommendations have been incorporated into a plan for voluntary Air Quality Improvement through the cooperative effort of the staffs of Jackson County, the cities of Medford and Central Point, and the Oregon Department of Environmental Quality; and

WHEREAS, the Central Point City Council is committed to provide a healthful air quality for all citizens of Central Point; and


WHEREAS, the plan is both a requirement of federal law, and a prerequisite for the acquisition of a \$700,000 grant for a program to replace noncertified woodstoves with more energy efficient, cleaner burning heat sources,

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF CENTRAL POINT, that the document entitled "Plan for Voluntary Air Quality Improvement in the Medford-Ashland Air Quality Maintenance Area Beginning with the 1988-89 Woodburning Season" is hereby adopted.

Passed by the Council and signed by me in authentication of its passage  
this 1st day of December, 1988.

  
MAYOR

ATTEST:

  
Council Secretary

Approved by me this 1st day of December, 1988.

  
Mayor

PLAN FOR VOLUNTARY AIR QUALITY IMPROVEMENT  
IN THE MEDFORD-ASHLAND AIR QUALITY MAINTENANCE AREA  
BEGINNING WITH THE 1988-89 WOODBURNING SEASON

It is the intent and purpose of this plan to provide for the reduction in wood heating emissions necessary to attain the national ambient air quality standard for PM10 within the Medford-Ashland AQMA as expeditiously as practicable, but not later than June 1, 1991.

I. VOLUNTARY CURTAILMENT PROGRAM

The participating governments will implement a voluntary cordwood heating curtailment program. This program will be comprised of:

A. Comprehensive Public Information Program

Part of Jackson County's regional strategies grant for air quality was earmarked for a public information program concerning PM-10 during the upcoming woodburning season. Following a request for proposals process, the County has retained the services of Laurel Communications, a local advertising and public relations firm, to coordinate the program. The final contract was in the amount of \$45,000.

Laurel has conducted a telephone survey to provide the basis for the remainder of the work. Public information messages will be presented through broadcast and print media, direct mail, billboards, bus cards, and other means to be developed. Several related items have been prepared or are under discussion, including the following:

- A local TV station (KDRV) has prepared a ten minute video concerning air pollution for the county. Laurel is investigating the possibility of expanding the video to 30 minutes for use as a sponsored documentary for television use. The short version would be used for group presentations where speakers are available to answer questions.
- A speakers' bureau would be available to make presentations and answer questions. Several members of the Woodburning Task Force have volunteered for this effort.
- We have a brochure that discusses air quality and the Woodburning Task Force. This and a variety of DEQ brochures will be distributed in quantity throughout the winter.
- There has been preliminary discussion of a possible volunteer effort at the neighborhood level. If coordination could be provided by an organization such as the Oregon Lung Association, organizing citizens to canvass their neighborhoods for clean air would have a good effect.

B. Advisory

The Rogue Valley Woodburning Advisory will continue to be based on the combination of measured air pollutant concentrations and forecasted meteorological conditions. Residents will be advised that woodburning is okay during "green" advisories. Reduced woodburning will be requested during "yellow" advisories. Residents will be requested to stop all woodburning

EXHIBIT A

(unless exempt) during "red" advisories. The advisories will be made available daily by recorded telephone messages and the news media from November 1 through February 28 of each year.

#### C. Exemptions

The number and type of exemptions from the voluntary curtailment program will not preclude the woodsmoke reduction needed to meet PM10 health standards. The Jackson County Woodburning Task Force targeted a 70 to 75 percent woodsmoke reduction in order to meet the 24-hour PM10 standard on worst winter days; therefore, the exemptions of the voluntary curtailment program must not exceed 25 to 30 percent of the 1984-86 baseline woodsmoke emissions in order to achieve the 70 to 75 percent reduction goal. The woodsmoke reduction target and the maximum exemptions possible will be periodically updated in consideration of other strategies that may affect industrial, transportation, agricultural, and silvicultural emissions. The formula shown in Attachment 1 (or as may be amended through future study) will be used to calculate the potential effects of proposed exemptions.

#### D. Residential Woodsmoke Survey

Another facet to this program is the monitoring of residential woodburning during poor air quality conditions, as well as during a limited number of good air quality periods. This monitoring will consist of observations of a statistically representative number of homes having cordwood heating capabilities within the affected areas of each participating governments' jurisdiction. These observations will establish the baseline for woodstove use (emissions) during good air quality conditions and the degree of participation with voluntary curtailment during poor air quality conditions. Additionally, the surveys would also include brief stops at residences or subsequently mailed packets to provide information about woodburning and air quality in order to encourage cooperation with the voluntary curtailment program. Ideally, this effort would be carried out by all cities in the AQMA as well.

#### E. End of Season Review

At the end of each heating season local governments will compile and evaluate data collected from the residential woodsmoke survey. A collective determination will be made of the compliance rate with the voluntary advisory. If their compliance rate is less than the needed amount, this plan will be revised for the following heating season in an effort to increase the compliance rate. An example of a future plan revision would be to eliminate the 88-89 exemption for certified stoves under a red advisory.

## II. BAN ON THE INSTALLATION OF NONCERTIFIED WOODSTOVES

The Oregon woodstove certification program prohibits the sale of noncertified stoves after July 1986, but does not control the installation of noncertified units in the home. Thus, it is presently legal to purchase a used stove or new stove from another state, and utilize it for space heating within Oregon. The

adoption of local ordinances prohibiting this practice would benefit the long-term reduction of particulate from wood heating sources. This plan includes the adoption of such ordinances by the county and cities in the Medford-Ashland Air Quality Maintenance Area.

### III. FINANCIAL SUBSIDIES/INCENTIVES FOR CLEANER WOODBURNING UNITS

In March, Jackson County received a grant in the amount of \$485,000, as a part of the 1988 Oregon Community Development Block Grant Program. This grant has been the necessary catalyst for a growing fund to provide financial incentives to low income residents for the replacement of noncertified woodstoves. The program is operated through a contract with the Jackson County Housing Authority (see CLEAR program below). This fund has grown by an additional \$150,000 received as a part of the Regional Strategies Program funded by lottery dollars; and \$300,000 supported by the local Access Program. The city of Medford has \$100,000 available from a HUD grant. An additional \$700,000 is available from the oil settlement funds. It is important that all local governments in the AQMA pursue additional monies to build upon this foundation.

### IV. CLEAR PROGRAM

This program, already operating in Jackson County, addresses the needs of low income families within the target area of the Cooperative Local Effort for Air Resource (CLEAR) program<sup>1</sup> who presently utilize wood heat for their homes. Families whose annual income falls below 80 percent of the local median income may apply to have their old wood heaters removed and replaced with either electric, gas, DEQ certified wood pellet, oil unit, or best existing cordwood stoves (BEST) when designated by DEQ. The program has a cap of \$2,000 for the installed heat plant expense, but families who wish to install a more expensive unit may augment their grant. The program will also insulate ceilings to a factor of R-38 and floors to R-19.

These reasonable program costs are free to owner-occupants with the exception of a small (50 percent) lien on wood pellet stoves, due to the potential portability of those units. Each participant is expected to provide \$100 as a participation fee when the contract is signed. This may be waived for hardship, and may be conditionally refundable at the option of the municipality. For tenant occupied properties, the total cost becomes a lien against the property which reduces at a rate of 10 percent per year over a ten-year period. Sale or other transfer of the property will cause the prorated remaining principal to be due and payable to the fund.

Each benefitted property employing a cordwood to alternate heat source replacement will have a covenant recorded in the county records which prohibits the installation of conventional cordwood heating devices at that address in the future, applicable to present and all subsequent owners.

The oil settlement funds will be directed in the following manner: First priority will be given to requests from homes located within the city of

Medford, however, each participating local government will receive a minimum benefit of \$75,000. In the event that a local government is unable to accommodate the needed administrative cost, the money may be reallocated to the remaining jurisdictions.

#### V. DRY WOOD PROGRAM

This voluntary, nonregulatory program is designed to promote the burning of dry wood to help reduce local air quality problems. Woodcutters, firewood dealers, and anyone who burns wood can have five samples from their supply tested at any of six locations. The testing can have five samples from their supply tested at any of six locations. The testing program is operated by the five agencies in the county.

A certificate is issued showing the average moisture content for the five samples as indicative of the moisture content of the load. The recommended drying time, based on a drying guide developed by the Oregon State University Extension Service, is also listed on the certificate. Firewood with a moisture content of 20 percent or less is certified as suitable for burning.

One key to the program's success will be the creation of a demand for certified wood. Woodcutters and firewood dealers could then advertise that they sell certified wood. The certificate has no specific dollar value; it will be in demand to the extent that it increases the wood buyer's confidence in the product. The testing program will provide a convenient and accurate method of woodstove users to determine if their firewood is of sufficient dryness for efficient burning.

#### V. SUMMARY

The above plan is designed to provide the best opportunity for voluntary air quality compliance to work. If a positive and aggressive campaign is waged by local governments, affected agencies and the public, it may be possible to resolve our problems at the voluntary level.

<sup>1</sup>The target area is roughly that area encompassed by South Stage Road from Pacific Highway to Arnold Road, then north to the intersection of Hanley and Jacksonville Highway. From that intersection, north to include all Central Point zip codes (97502) which are south of the Rogue River. All White City zip codes (97503) are eligible. The incorporated areas of Medford are also eligible to participate.



ATTACHMENT I

WORKSHEET

Stove Population X Emission Rate = Airshed Emissions  
 (% of baseline) (% of conventional (% of baseline)  
 stove emissions)

Exemptions From Curtailment

Conventional stoves	100	
BEST pellet stoves	10	
BEST cordwood stoves	40	
Existing certified woodstoves	70	
Future certified units (replacements)	70	
New certified units (population growth, 1988-1992)	70	
Conversions From Wood	0	
Noncompliance With Curtailment	100	
Compliance With Curtailment	0	0

---

Total 100  
 (Note: Maximum emissions to achieve 70% reduction goal = 30)

Footnotes:

HOUSING AUTHORITY OF JACKSON COUNTY  
DEVELOPMENT DEPARTMENT  
2231 TABLE ROCK ROAD MEDFORD, OR 97501  
779-6186

KEEP THIS PACKAGE FOR YOUR RECORDS AND GENERAL INFORMATION.

OVERVIEW OF JACKSON COUNTY WOOD SMOKE ABATEMENT PROGRAM, CLEAR

A. You should know:

1. In order to participate in this program, your total household income must fall below these limits:

1 person	2 persons	3 persons	4 persons	5 persons	6 persons
\$15,250	\$17,400	\$19,550	\$21,750	\$23,100	\$24,450

2. YOUR JACKSON COUNTY PROPERTY TAXES ON THE BENEFITED HOUSE MUST BE PAID CURRENT.

3. Your family must use and have a history of using wood as a heat source in your home during the heating season. This may be either a fireplace used solely for heat or a non-certified wood stove, fireplace insert, barrel stove or burner.

4. Your home must be located be in the target area, roughly outlined as that area encompassed by South Stage Road from Pacific Highway to Arnold Road, then north to the intersection of Hanley and Jacksonville Highway. From that intersection, north to include all Central Point zip codes (97502) which are SOUTH of the Rogue River. All White City zip codes (97503) are eligible. The incorporated areas of Medford are also eligible to participate.

5. The True Cash Value of the home only (exclusive of land value) as represented at the Jackson County Tax Assessor's Office must be under \$45,000. This figure can be found on your tax bill under the heading of Improvements. If there are other structures on the property, contact staff for eligibility. Value of the land is usually not a factor.

6. After you submit your application to the Housing Authority, staff will:

- a. verify your income, assets, property taxes and home value
- b. schedule and perform a site inspection and analyze your heating needs
- c. photograph your wood stove
- d. give your name and address to the electric company and the gas company as well as any interested oil fuel dealers and wood pellet or BEST certified stove dealers.

This program is limited to a maximum of \$2,000 per house for the heat plant. Insulation includes ceilings to R-38, floors to R-19 plus weather stripping and caulking.

If you cannot settle on an acceptable heating source within this \$2,000 maximum limit, you will pay the balance yourself or contact the electric or gas company for their excellent financing programs.

Since the best selection of an alternate heat source for your home must be based on intelligent research, these energy/fuel suppliers will be allowed adequate time to furnish you with information about their heating fuel/energy and the advantages of their heating systems. You will be asked to select either gas, electricity, wood pellets, wood or oil as your new heat source. You will also be asked to solicit a minimum of two bids from installers in order to select the contractor that will be able to furnish you with the best cost for a suitable heating system that will be compatible with your home, life-style and ability to purchase heating fuel in the future. Note: If you should opt for a new heat pump, your present electrical system may be inadequate to supply power to the new heating system, a 200 amp breaker service box may need to be installed. Please be sure to have your contractors include electrical upgrades in your bid(s) if necessary.

BEST certified cordwood stoves may be allowed after they have been designated by the Department of Environmental Quality. These heating devices are recommended primarily for those families who can clearly demonstrate that they cannot afford to heat with any fuel except wood.

Staff will assist you in all phases.

7. Your home must be in habitable condition and able to pass HUD's basic inspection for habitability, the Housing Quality Standards test. For example, it must have hot and cold running water, sanitation facilities, locking doors, and a kitchen and sleeping room(s).

8. Every applicant is expected to contribute \$100 to delivery costs of the program. This is due when the Contract is signed and all estimates have been submitted. For exceptions to this requirement, contact staff.

9. Low income-owner occupied homes whose families heat solely with wood will be the first to participate. After the qualified families who are presently using wood as their only source of heat have been assisted, funds would be used to assist homes used as rentals and families who use wood and other heating sources (mixed use).

10. In order for a tenant occupied home to participate, the tenants must be income eligible. The landlord applies, on the basis of having a low income tenant, and the landlord pays the expenses, if any, of participating.

**B. Your responsibility as a participant in the program:**

1. You will be required to relinquish your present wood stove. This will be removed, as well as metal chimney pipes, supports, thimbles, mounts, bases and heat foils, backing and other associated components of the wood heater. The program will repair your ceiling, roof, walls and floor to match existing construction as much as possible.

All wood burning heaters at your residence must be turned in to the program regardless of whether they are in use.

2. After your new heating system is installed, your home will be insulated to conserve heat. Insulation will include bringing ceilings and floors into conformance with air infiltration standards of the weatherization programs backed by CP National, Pacific Power and Light and SHOW. Caulking and weather stripping are included.

3. The address of every participating home will be noted at the Jackson County Planning Department, Central Point City Hall or Medford Building Department and a 'flag' placed on the file for that address. This notation means that no cordwood heating device may ever be installed and used at that address. Members of the Building and Planning Department inspection team will conduct routine exterior inspections of the dwelling for several years to ensure conformance. If an exterior inspection indicates that a cordwood heating device has been installed, this would constitute grounds for further inspection and implementation of sanctions, fines, repayment or other action by the county or city. No permits will ever be issued for the installation of a cordwood heating device if the home has had an electric, gas, wood pellet, BEST DEQ certified or oil unit installed under this program. In order to have this file 'flag' removed, ALL costs incurred at that address for a heating device must be repaid to the program. Costs of insulation need not be repaid. This is binding on present and subsequent owners.

**C. Who can receive a wood pellet stove?**

1. After the \$100 fee is paid, there are NO OTHER COSTS for owner-occupant participants whose homes are in good condition, have paid their taxes, meet income requirements and convert to gas, electric, wood pellet, DEQ designated BEST or oil heating, provided that the cost of the new unit, installed, does not exceed \$2,000. Note: overages are absorbed by owner's funds, a personal loan, financing from the gas or electric company or other source.

2. If a family can clearly demonstrate that its financial condition makes it impossible to pay gas, electric or oil bills for the new system, they would be eligible to receive a pellet wood stove or DEQ designated BEST unit. The program would buy only 50% of the new BEST or wood pellet stove. The remaining 50% would

become a lien against the property, which would dissolve at 10% per year over a period of ten years. On an annual basis, a county representative may inspect the device to ensure that it is in place and functioning as per the agreement. If the device is overtly damaged, removed and replaced with a dirtier burning unit, sold or otherwise taken out of service and heat derived from a more polluting replacement, repayment of the lien, fines and other sanctions would be triggered. If a family removes the stove and installs an acceptable alternative heat source that is not polluting, the lien is forgiven. If the DEQ certified BEST or pellet stove is properly maintained for the full ten years, the lien will be forgiven. If the owner sells, trades, grants, loses, gives the property as a gift, or otherwise alienates the property during that ten year period, the prorated balance of the loan is due and payable. These loans are not assumable by the new owner.

D. All participants must have paid property taxes and a \$100 participation fee before being prioritized into one of the following categories:

Priority One: Low Income family in owner occupied dwelling,  
(Sole Source) Sole source of heat = wood.

OWNER OCCUPIED Conversion to gas, electric or oil  
plus insulation = free to a maximum \$2,000.

Installation of wood pellet stove or DEQ certified  
BEST unit is 50% free + 50% lien.

DEQ certified BEST and Wood pellet stove installations are subject to annual inspections by the county Planning Department.  
The 50% lien forgives at a rate of 10% per year over a 10 year period, provided the agreement is not broken.

NOTE: Sale, grant, loss, gift or other alienation of property by the owner will cause the prorated balance to be due and payable upon transfer. This loan is not assumable by subsequent owners.

TENANT OCCUPIED Low income family in rental (tenant occupied)  
Sole source of heat = wood

Conversion to gas, electric, wood pellet, DEQ certified BEST unit or oil heat is a 100% loan to the property owner.  
There is a \$2,000 maximum for the heat plant.  
This loan forgives at the rate of 10% per year for ten years. Terms are the same as above.  
Costs of insulation are not subject to repayment.

Priority Two: Owner occupied OR tenant occupied, low income.  
(Mixed Use) Family heats with wood and another heat source.

Conversion to gas, electric, wood pellet, DEQ certified BEST unit or oil plus insulation = free to owner occupants, up to \$2,000 for the heat plant, plus floor and attic insulation.

For tenant occupied homes see Priority One, Tenant Section.

Participation will be decided by your Priority level and the time and date that your application is received in the Housing Authority. Complete your four page application and submit it early for inclusion in the program. Funds will be spent on a Priority basis.

The goal of the program is to increase the quality of our air in Jackson County by removing uncertified wood stoves from use as heating devices in residences. Citizens realize the need to have other heat sources in their homes, but those with limited incomes are not able to purchase the new cleaner burning heating devices, and are forced to continue heating with wood. The program proposes to replace the old wood stoves with either alternative systems, DEQ designated BEST devices or wood pellet heaters, thus removing and destroying the old polluting low efficiency heaters.

If you have further questions about this program, please contact the Development staff at the phone listed on page one.

# Attachment 3

## A BILL FOR AN ACT

Relating to air pollution; creating new provisions; and amending ORS 468.275, ORS 468.290(5) and ORS 455.440.

Be it enacted by the People of the State of Oregon:

SECTION 1. ORS 468.275 is amended to read:

468.275. As used in [ORS 448.305, 454.010 to 454.040, 454.205 to 454.255, 454.405, 454.425, 454.505 to 454.535, 454.605 to 454.745 and] this chapter, unless the context requires otherwise:

(8) "PM<sub>10</sub>" means fine particulate of less than 10 micrometers in diameter.

(9) "PM<sub>10</sub> non-attainment area" means the area designated by the commission as not attaining PM<sub>10</sub> standards."

(10) "Mandatory Woodheating Curtailment Program" means a program under which local government regulates the practice of residential woodheating based on measured and projected amounts of PM<sub>10</sub> pollution and meteorological conditions, for the purpose of preventing unhealthful levels of PM<sub>10</sub> pollution. Such a program includes compliance surveillance and enforcement provisions.

SECTION 2. ORS 468.290 is amended to read:

468.290. Except as provided in this section and in ORS 468.450, 476.380 and 478.960, the air pollution laws contained in this chapter do not apply to:

(5) Heating equipment in or used in connection with residences used exclusively as dwellings for not more than four families, except woodstoves, which shall be subject to regulation under ORS 468.630 to 468.655 and this Act.



SECTION 3. Section 4 of this Act is added to and made a part of ORS Chapter 455.440.

SECTION 4. Upon notification by the Department of Environmental Quality, pursuant to section 10 of this Act, the Building Codes Agency shall not allow installation of woodstoves in new or existing residences located within the specified PM<sub>10</sub> non-attainment area. This restriction shall not apply to replacement of existing woodstoves with department-designated best existing wood stove technology (BEST).

SECTION 5. Sections 6 to 11 of this Act are added to and made a part of ORS chapter 468.

SECTION 6. Before August 1, 1990, the commission shall establish by rule a state-wide opacity standard to be used in regulation of residential woodstove emissions as provided in section 7 of this Act.

SECTION 7. After August 1, 1990 a person shall not cause or allow emission of a smoke plume from any woodstove to exceed the state-wide residential woodstove opacity standard established by the commission. The provisions of this requirement shall:

(a) Be enforceable by local government upon validated written complaint.

(b) Not apply during the starting of a new fire for a period not to exceed twenty minutes in any four hour period.

SECTION 8. (1) The commission is hereby authorized to make findings regarding local government actions necessary to meet EPA requirements for attainment of federal ambient air quality PM<sub>10</sub> standards. (2) Each local government exercising jurisdiction over a PM<sub>10</sub> non-attainment area shall implement a mandatory woodheating

curtailment program, if the commission finds that such a program is necessary to meet EPA requirements for attainment of federal ambient air quality PM<sub>10</sub> standards.

SECTION 9. (1) The commission is hereby authorized to make findings regarding the adequacy of woodstove emission control strategies developed and implemented by local governments.

(2) If, the commission finds that a local government exercising jurisdiction over a PM<sub>10</sub> non-attainment area fails to develop and implement a woodstove emission control strategy adequate to attain federal PM<sub>10</sub> standards by applicable deadlines, then all woodstoves and associated structures and appliances shall be permanently removed at the time of sale of residences used exclusively as dwellings for not more than four families. (3) The commission shall, by rule, develop the process by which the department will be notified that woodstoves and associated structures and appliances are removed from a residence.

SECTION 10. In the event that local governments or authorities exercising jurisdiction over PM<sub>10</sub> non-attainment areas fail to develop and implement strategies adequate to meet federal PM<sub>10</sub> standards by applicable deadlines, the commission shall notify the Building Codes Agency that they shall not allow any new installations of woodstoves in the affected areas. This restriction shall not apply to replacement of existing woodstoves with department-designated best existing wood stove technology (BEST).

SECTION 11. (1) Persons living within PM<sub>10</sub> non-attainment areas, who certify to department specifications that they have replaced a woodstove with a non-wood burning heating system, or a

new woodstove meeting department-designated best existing stove technology (BEST), and provide the department with the replaced woodstove, shall receive a tax credit proportional to the amount of emissions reduction achieved by the new system. (2) Tax credits shall not exceed 40% of the cost of the replacement with a maximum of \$400 for a non-wood burning system, \$360 for a BEST wood pellet stove, \$240 for a BEST cord wood stove and \$100 for a BEST woodstove retrofit system.

SECTION 12. (1) Beginning January 1, 1990, a flat fee not to exceed five dollars is hereby imposed upon the retail sale of all woodstoves sold in this state. The fee shall be imposed on retail dealers at the time the retail dealer sells a woodstove to the ultimate consumer. (2) The fee imposed on retail sale of woodstoves shall be paid by each retail dealer to the Department of Revenue on or before the last day of January, April, July and October of each year for the preceding calendar quarter.

(a) The amount remitted to the Department of Revenue by the retail dealer for each quarter shall be equal to 85 percent of the total fees due and payable by the retail dealer for the quarter. Fifteen percent shall be retained by the retail dealer.

(b) With each quarterly payment, the retail dealer shall submit a return to the department, in such form, and containing such information as the department shall prescribe.

(c) The fees and interest imposed by section 11 of this Act shall be a personal debt, from the time liability is incurred, owed by the retail dealer to the State of Oregon until paid.

(d) The returns required of retail dealers under this section

shall be filed by all such retail dealers regardless of whether any fee is owed by them.

(e) The department for good cause may extend for not to exceed one month the time for making any return and paying any fee due with a return under section 11 of this Act. The extension may be granted at any time if a written request therefor is filed with the department within or prior to the period for which the extension may be granted. When the time for filing a return and payment of fee is extended at the request of a retail dealer, interest at the rate established under ORS 305.220, for each month, or a fraction of a month, from the time the return was originally required to be filed to the time of payment, shall be added and paid.

(3) The Department of Revenue shall transmit the moneys to the department for deposit in an account to be used for woodstove education and local government enforcement activities.

*Water Rights*

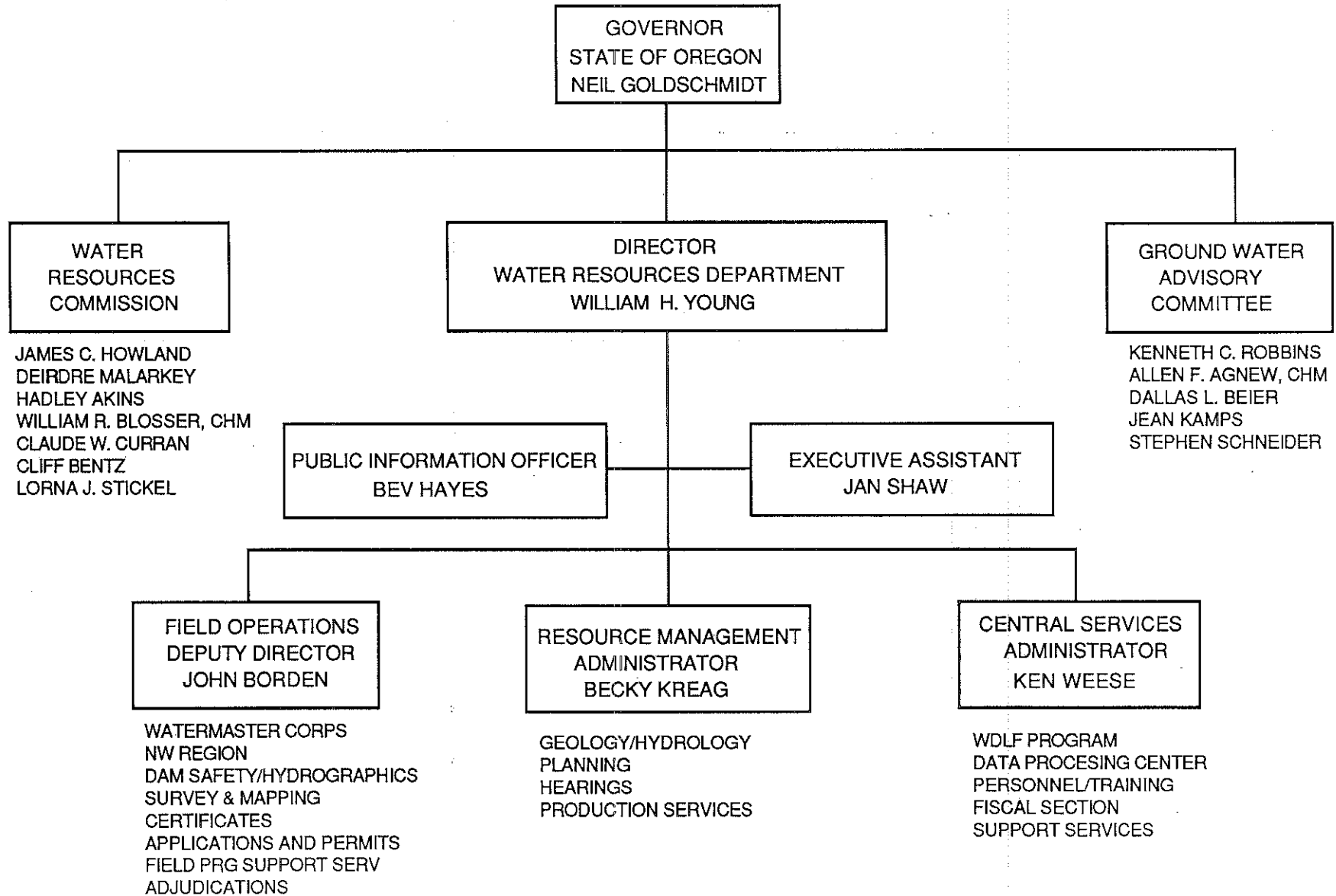


**OREGON'S  
WATER RIGHTS  
SYSTEM**

STATE OF OREGON  
WATER RESOURCES DEPARTMENT  
1988



# OREGON WATER RESOURCES DEPARTMENT



AUGUST 1988

# BOGLE & GATES

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LAW OFFICES

1400 KOIN Center  
222 S.W. Columbia  
Portland, OR 97201

Seattle  
Anchorage  
Bellevue  
Tacoma  
Washington, D.C.  
Yakima

JAMES C. BROWN

D.I.D.: (503) 273-2606  
(503) 222-1515  
Fax: (503) 227-2207

November 4, 1988

DELIVERED BY MESSENGER

Fred Hansen, Director  
Oregon Department of Environmental Quality  
811 S.W. Sixth  
Portland, Oregon 97204

**RE: Proposed Rulemaking Hearing  
Delisting of Facilities with Confirmed Releases of  
Hazardous Substances  
Request for Change of Hearing Date**

Dear Mr. Hansen:

On November 3, 1988, Bogle & Gates received Volume 28, No. 9, issue date November 1, 1988, of the Secretary of State's "Oregon Bulletin." Page 16 contains a notice for a proposed rulemaking hearing on Oregon Administrative Rules (OAR) 340-122-310 to 340-122-340, regarding delisting from and modifications to the Department's Environmental Cleanup Division's Inventory of facilities with confirmed releases of hazardous substances. The proposed hearing date is December 6, 1988.

The Environmental Cleanup Division's Inventory of facilities with confirmed releases of hazardous substances, as well as the procedure for delisting, modifications and hearings, will be of concern to a large number of Oregon businesses. Bogle & Gates represents companies potentially impacted by these rules. Additionally, Northwest Pulp & Paper supports Bogle & Gate's comments on the proposed hearing date.

Bogle & Gates requests that the proposed hearing date of December 6, 1988 be rescheduled to a later date for the following reasons:

- o The "Oregon Bulletin" listing the proposed hearing was received on November 3, 1988.

Fred Hansen  
November 4, 1988  
Page 2

- o The "Oregon Bulletin" listed the proposed hearing prior to approval by the EQC.
- o Inadequate time has been provided for development of comments on the proposed rules.
- o The fifth annual "Hazardous Waste Law and Management Conference," co-sponsored by the Environmental Protection Agency, Northwestern School of Law/Lewis and Clark College and the Federal Bar Association, is scheduled in Portland on December 6-7, 1988. Many of the environmental consultants and attorneys interested in the proposed rules have scheduled to participate and attend the conference. A number of Department staff are scheduled speakers.
- o On December 6, 1988, joint hearings are scheduled in Vancouver, Washington, by the Oregon Interim Committee on Environment and Hazardous Materials and the Washington Legislature, concerning regional environmental and energy issues.

This letter has been expedited due to the timeliness and importance of these issues to Oregon business. Your consideration is appreciated.

If you have any questions, or if Bogle & Gates can be of assistance in any way, please do not hesitate to call.

Very truly yours,

BOGLE & GATES

**/s/ JAMES C. BROWN**

James C. Brown

ccs: Douglas S. Morrison, Northwest Pulp & Paper  
William P. Hutchison, Jr.

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BOGLE & GATES



MEMORANDUM

To: Environmental Quality Commission  
From: Director  
Subject: Agenda Item F, November 4, 1988, EQC Meeting

Request for Authorization to Conduct a Public Hearing on Revisions of Oregon Administrative Rules Chapter 340, Division 12, Civil Penalties, and Revisions to the Clean Air Act State Implementation Plan (SIP).

ERRATA

Attachment D, Proposed Division 12

Page D-17, numbering error. "(b) Class Two" should be "(2) Class Two".  
Page D-43, statutory authority. Reference to ORS Chapter 459 is shown as a deletion. This reference was actually deleted in September when the last group of amendments of Division 12 was approved.

Attachment F, Public Notice

Date of public hearing. The notice shows December 15, 1988, as the date of the public hearing. No room was available for the hearing on this date. The hearing has now been scheduled for December 16, 1988, at 2 pm in the DEQ offices.

Close of comment period. The notice shows January 15, 1989, as the comment period closing date. This date should be changed to January 17, 1989, as the fifteenth is a Saturday.

Correct copy

EQC Agenda Item I  
Technical Amendment

The attached Technical Amendment changes subsections (1), (3) and (4) of the Scope and Applicability section (340-122-215) of the proposed petroleum UST cleanup rules (EQC Agenda Item I, Attachment I, page 4).

The changes in 340-122-215 (1) are to clarify that all sections of the proposed rules apply to the persons identified in (1) (a) and (b).

The changes in 340-122-215 (3) are to clarify the intent of the rules in regards to cleanup of regulated substances other than petroleum. Cleanup of other regulated substances will be handled through the Remedial Action Cleanup Rules or other applicable laws. The wording related to "hazardous wastes under 40 CFR Part 261" is removed because it is specifically stated in the definition of petroleum that petroleum does not include these substances.

The addition of "petroleum" in line two of 340-122-215 (4) is inserted to clarify the applicability of this subsection to petroleum UST systems only.

These changes are made to clarify the original intent and applicability of the petroleum UST cleanup rules.

Attachment I  
EQC Agenda Item I  
November 4, 1988

Technical Amendment

The Department proposes the following technical amendments to subsections (1), (3) and (4) of the Scope and Applicability section of the petroleum UST cleanup rules (340-122-215) to correct unintended effects of the previous language.

340-122-215 Scope and Applicability

- (1) [Except where otherwise noted in this section, this section applies] Sections 340-122-205 to 340-122-260 of these rules apply to:
  - (a) An owner or permittee ordered or authorized to conduct cleanup or related activities by the Director under ORS 466.705 to 466.835 and 466.895; or
  - (b) Any person ordered or authorized to conduct remedial actions or related activities by the Director under ORS 466.540 to 466.590.
- (2) Notwithstanding OAR 340-122-215(1)(b), the Director may require that investigation and cleanup of a release from a petroleum UST system be governed by OAR 340-122-010 to 340-122-110, if, based on the magnitude or complexity of the release or other considerations, the Director determines that application of OAR 340-122-010 through 340-122-110 is necessary to protect the public health, safety, welfare and the environment.
- (3) [Corrective actions for] Cleanup of releases from UST systems [substances identified as hazardous wastes under 40 CFR Part 261, and] containing regulated substances under ORS 466.705 other than petroleum shall be governed by OAR 340-122-010 to 340-122-110 or as otherwise provided under applicable law.
- (4) The Director may determine that the investigation and cleanup of releases from petroleum underground storage tank systems which are exempted under ORS 466.710(1) through (10) inclusive, shall be conducted under 340-122-205 to 340-122-260, based upon the authority provided under ORS 466.540 to 466.590.

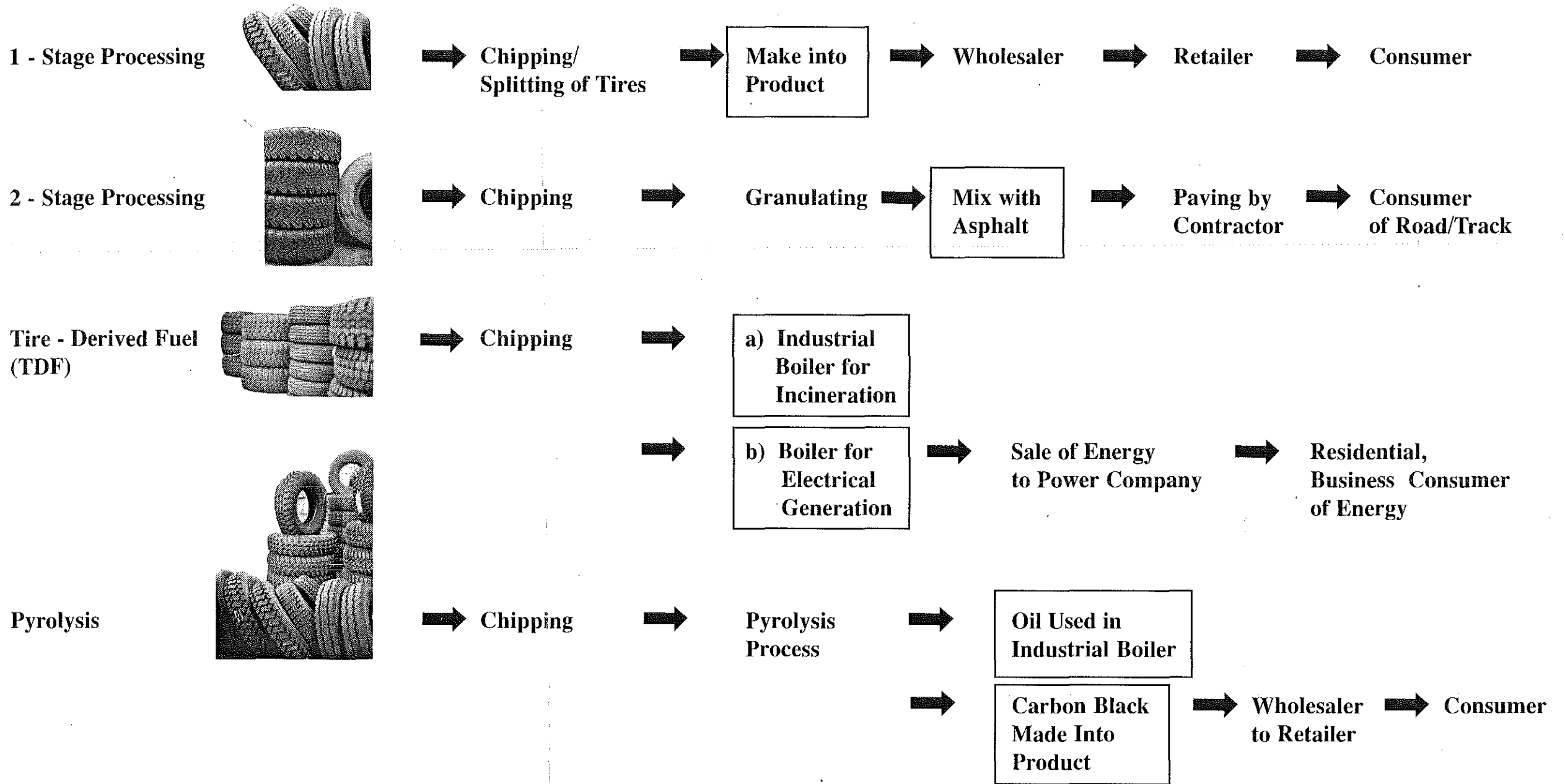
Proposed change in definition of "End User"  
Section 340-62-010 (6) (b).

For other eligible uses of waste tires; the ~~last~~ (first) person who (purchases "tire derived products") ~~uses the tires, chips, or similar materials~~ to make a product with economic value (or realizes economic value from "tire derived products" received.) If the waste tire is processed by more than one person in becoming a product, the "end user" is the ~~last person~~ (first) person to use (purchase) ~~the tire as a tire, as tire chips, or as similar materials.~~ (a "tire derived product".) ~~A person who produces tire chips or similar materials and gives or sells them to another person to use is not an end user.~~

The change in definition accomplishes:

- 1) True identification of market as point of value added.
- 2) Treats all processors or manufactures of tire derived products equally.
- 3) Establishes simple fact that if multiple processors are involved, then the first person to purchase a tire derived product is the point at which a value is added and justifies reimbursement.
- 4) Emphasizes the word "purchase" and "economic value" to assure a true market, i.e. a buy and sell relationship.
- 5) Incorporates the term "tire derived products" which is already properly defined in Section 340-62-010 (22).

# Waste Tire Reimbursement Recipients



CIRCLE W RANCH  
RIDGE ROAD  
P. O. BOX 8  
IONE, OREGON 97843

A. Weatherford-Harper  
Richard E. Harper  
Joyce Weatherford  
Irene Weatherford

W. W. Weatherford 1845-1926  
M. V. Weatherford 1886-1962  
H. M. Weatherford 1925-1979

November 1, 1988

Environmental Quality Commission  
811 SW 6th Avenue  
Portland, OR 97204

Hazardous & Solid Waste Division  
Dept. of Environmental Quality

RECEIVED  
NOV 03 1988

Members of the Commission:

I support the DEQ's recommendation to adopt a 180 day temporary rule amending OAR 340-61-060 to prohibit wastes which are hazardous under the law of the state of origin from being managed at solid waste disposal sites when transported into Oregon.

As a citizen, I have two major concerns on this issue. First, I wish to see this type of waste managed properly "from cradle to grave," and second, I feel the responsibility for disposing of this type of waste should not fall solely on Oregon's shoulders while other states adopt orders or measures to discourage such a scenario from occurring inside their own borders. For our states to share the disposal responsibility equally, the disposal policy of the state in question (Oregon) should be at least as stringent as those across her borders. Otherwise, with a less stringent policy, one state becomes a "dumping ground."

I urge the Commission to take decisive leadership with this "grey area" of waste disposal and support the adoption of a temporary rule.

Very truly yours,

*Alice Weatherford-Harper*

Alice Weatherford-Harper

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FEDERAL RESERVE BANK OF SAN FRANCISCO

101 MARKET STREET, SAN FRANCISCO, CALIFORNIA 94105

November 4, 1988

DOUGLAS R. SHAW  
VICE PRESIDENT AND COUNSEL

Environmental Quality Commission  
c/o Bob Danko  
Oregon Department of Environmental Quality  
FAX #503-221-3391

Commissioners:

The Federal Reserve Bank of San Francisco formally requests an exemption from the temporary rule set forth today as Agenda Item 0 for your consideration.

While we would appreciate an exemption until the final rule is promulgated, if that is not possible, we would greatly appreciate a delay of whatever duration you deem appropriate in the implementation as to our shredded currency and food coupons waste stream so that we could make alternate arrangements for disposal. Due to a confusion on the comment procedure we have been delayed in making alternate arrangements.

Your assistance in this matter is greatly appreciated. Naturally, if for policy reasons it is impossible to accommodate us, we will fully comply with the commission's order.

Cordially,

*Douglas R. Shaw*

Richard A. Parrish  
Attorney at Law  
215 S.W. Washington St., #200  
Portland, Oregon 97204  
(503) 228-5222

Hazardous & Solid Waste Division  
Dept. of Environmental Quality

RECEIVED  
NOV 03 1988

November 3, 1988

Bob Danko  
Department of Environmental Quality  
811 S.W. 6th Avenue  
Portland, Oregon 97204

Re: Point of Origin Hazardous Waste

Dear Bob,

I am writing on behalf of Klamath County environmentalists who are concerned about the proposed medical waste incinerator outside of Klamath Falls. We strongly support the adoption of a rule to prohibit wastes which are hazardous under the law of the state of origin from being managed as solid waste within Oregon. This rule would prevent the operator of the incinerator, if it is built, from importing medical waste from California, where it is designated as hazardous waste, for disposal in Oregon. Regardless of the designation of this or other special wastes, there are risks to public health and the environment from the transportation, handling and disposal of such material. Oregon should not become the dumping ground for such wastes simply because there is less regulation and disposal is cheaper here.

The proposed rule would defer to determinations made by neighboring states that certain wastes require special care in their management and disposal. These determinations may reflect more recent or detailed analyses of the wastes, or they may reflect a difference in judgment regarding appropriate waste management, but we must presume they represent sincere efforts to protect public health and the environment. Oregon should not undercut those determinations, especially in light of the constant evolution (usually in the direction of greater care) of waste management standards and technology.

For instance, both Congress and the EPA are currently considering appropriate management regimes for medical waste and incinerator ash. California and Washington, respectively, have decided to require greater care in handling those wastes than we currently require in Oregon. But, Oregon has not decided with any finality how to regulate either. We should not authorize management of such wastes in a manner inconsistent with the regulations of the state of origin unless we can conclusively demonstrate that the less stringent federal and Oregon standards are not subject to change in the near term and are fully protective of public health and the environment.



Bob Danko, DEQ  
November 3, 1988  
Page 2

There are numerous practical reasons we should defer to the determination of the state of origin in managing special wastes. Obviously, the state of origin has more control over safeguards regarding mixing of special wastes, such as medical wastes, with other hazardous wastes at their source; we would have a limited role in inspection and enforcement (especially with medical wastes where handling is kept to a minimum); transportation of such materials presents additional concerns (discourage handling of asbestos, ash, medical wastes); and so forth.

The proposed rule is fully consistent with the federal waste management statute, the Resource Conservation and Recovery Act (RCRA), which specifically allows states to adopt standards which are more stringent than the federal standards.

In fact, we would encourage the agency to go beyond the proposed rule and adopt a moratorium on new disposal facilities for those waste streams, such as medical wastes, that are undergoing intense review at either the state or federal level. Absent a disposal crisis, which has not been demonstrated in the case of medical waste in the Klamath Falls area, it makes little sense to grant long-term permits for a facility to manage a waste when the standards governing the facility may be changing in the near future.

Thank you for this opportunity to comment on the proposed rule. We look forward to working with DEQ to ensure proper management and disposal of solid and hazardous wastes.

Sincerely,



Richard A. Parrish

cc: Nancy Roeder, Klamath Falls

## INFORMATIONAL REPORT TO THE COMMISSION

Work Session, December 8, 1988

### Informational Report: DEQ Education Programs

#### ISSUE

The Department maintains several on-going information programs and plans to increase its efforts in the area of public education and schools. Does the Commission feel that these efforts should be increased even more?

#### SUMMATION

At its Silver Falls retreat, the Commission asked the Department to explore ways to "ratchet up a notch or two" its public education program. DEQ has found some new areas to increase its public education efforts including:

- Willamette River 50 Year Celebration  
The Department is planning several activities to celebrate the 50 year anniversary of the creation of the State Sanitary Authority.
- Oregon Environmental Atlas  
The Oregon Environmental Atlas will be made available to teachers and the general public for a small charge. The Department will evaluate the usefulness of a teacher's guide using the Atlas as a base.
- Wood Heating Teacher's Packet  
As part of an EPA grant to develop informational materials on wood stove pollution, the Department is writing a teacher's packet on wood smoke and other air pollution problems.
- Teacher Materials  
The Department has purchased classroom materials from the Water Pollution Control Federation that will be made available to teachers. The Department will also distribute copies of an EPA publication for children.
- Portland Water Quality Curriculum  
As part of its penalty mitigation, the City of Portland is developing curriculum material for use in Portland public schools. DEQ will review and comment on this material, and explore ways to adapt the curriculum for state-wide use.

#### DIRECTOR'S RECOMMENDATION

Continue efforts to expand public education activities.

MEMORANDUM

To: Environmental Quality Commission

From: Director

Subject: Work Session, December 8, 1988

Informational Report: DEQ Education Programs

BACKGROUND

Public understanding of the goals and importance of environmental quality is vital to the success of DEQ. The public needs to understand the control strategies that will be needed to maintain our environment. People also need to understand how they contribute to pollution problems and what they can do to help solve these problems.

Children can begin gaining an understanding of their environment at school. Environmental education programs can teach children to be good environmental citizens.

The Department now has a variety of educational programs to help both adults and children gain a better understanding of environmental issues. These on-going programs are aimed at three primary audiences - the general public, special interest groups and schools.

1) The General Public

● News releases

The primary method of communicating with the general public is through the news media. DEQ issues an average of ten news releases each month and responds to questions from reporters.

● Special publications

The Department publishes a variety of brochures for the general public. DEQ's SACKS Catalog, for example, was distributed in 113,000 copies of the Oregon last November. (attachment C)

● Special events

DEQ participates in special events such as conference displays, exhibits and recycling awareness week activities.

2) Special Interest Groups

● Newsletters

The Department publishes three regular newsletters - Beyond Waste, RE:Recycling and Tankline.

● Advisory groups

The Department appoints members of special interest groups to task forces and other advisory groups.

● Fact Sheets and Information Bulletins

The Department publishes several fact sheets each month that are mailed to a variety of special interest groups. Some of the most recent fact sheets include - nonpoint source pollution, Tualatin River, field burning, Grants Pass landfill, Drug labs and environmental cleanup rules.

● Open houses and workshops

The Department sponsors open houses and workshops to explain complex environmental issues to members of special interest groups. Recent workshops include meetings with citizens in Arlington on the CSSI facility, a meeting with residents in Grants Pass on the local landfill and an open house in Klamath Falls at the DEQ air monitor.

● Public hearings

DEQ holds public hearings on all rule-making and on many permits and permit renewals. These hearings are an opportunity for special interest groups voice their concerns.

● EQC meetings

Special interest groups frequently take advantage of the public forum or a specific agenda item to talk directly with the Commission. This is also an opportunity for Commission members to explain their decisions to the public.

3) Schools

- Recycling curriculum

In 1986, the Department hired a contractor to write a curriculum on recycling for grades K-12. The curriculum has been updated and reprinted. The curriculum is distributed by DEQ, Metro and local watershed education coordinators. DEQ regularly participates in teacher in-service days to offer training on curriculum use.

- Articles

The Department offers information to teachers through the science teacher's publication Clearing magazine. (see attachment B)

#### NEW EDUCATIONAL ACTIVITIES

In addition to these on-going activities, the Department will increase its efforts in the area of public education and plans several special activities in the coming year. A brief description of some of these activities follows.

#### Willamette 50 year Anniversary

In 1938, outraged citizens supported an initiation petition to create a State Sanitary Authority to clean the Willamette River and set statewide water pollution controls. Next year we celebrate the 50 year anniversary of the State Sanitary Authority. DEQ is planning several activities throughout the Willamette basin. Many of these activities will be in cooperation with other agencies. The description of activities is included as attachment A.

The primary products of DEQ's effort are:

- Slide Show

A slide show is being prepared for use in state parks. It will also be transferred to VHS video tape for use by schools or other groups.

- Pamphlet

A pamphlet will be produced in cooperation with other state agencies including - Fish and Wildlife, Water Resources, State Lands and State Parks.

- Special Event

DEQ will sponsor a special event in Portland's Tom McCall Park. The Department plans to ask several other groups to participate.

### Wood Heating Materials for Schools

The Department is developing classroom materials on air pollution under a grant from EPA. The focus of the teacher's guide is PM10 pollution, but it will also include general information on air pollution along with classroom activities.

### Teacher Materials

DEQ's Recycling Curriculum has received praise from teachers around the state and across the country. The Department plans to participate in teacher in-service days to train teachers in using the curriculum. The Department encourages local governments to work with schools in their areas to get recycling into the classroom. Next year the curriculum will be updated and reprinted.

The Department has purchased classroom materials from the Water Pollution Control Federation and will explore ways to encourage teachers to use the materials.

The City of Portland is developing a Water Quality Curriculum as part of its penalty mitigation. The city has established a task force of curriculum experts and has drafted a curriculum. DEQ will comment on this material and explore ways to adapt the curriculum for state-wide use.

### Special Events

The Department will participate in a variety of special events including the second Conservation Day at Washington Park Zoo. Last year's event drew several hundred people to displays on all aspects of conservation. Last year the Department's display focused on air pollution and recycling. (Stickers we developed for the event are included with the attachments)

### Oregon Environmental Atlas

The Department has just printed the Oregon Environmental Atlas. The Atlas represents several months of research and production effort by DEQ staff and the cartography lab at Portland State University. The Atlas was funded by grants from EPA. The Atlas describes the history of environmental regulation, the state of Oregon's environment and looks at areas that will be further environmental problems.

The Atlas will be made available to the public for a small charge. The Department is exploring the possibility of dedicating part of the funds from the Atlas to its educational activities.

### Alternatives

1) Maintain existing educational efforts

Under this option the Department will continue its educational efforts and continue to look for new ways to increase efforts within existing resources. This will include exploring ways to work with other agencies to reduce costs and making materials available to groups who can distribute the materials.

2) Expand efforts

An expansion of efforts would require either new resources or a shift from on-going activities. New resources may be available after the upcoming legislature. One legislative concept would require a \$10 fee on new woodstoves to establish an education fund. Another legislative concept would allow business to take a tax credit for paying for public education materials approved by DEQ.

A shift from ongoing activities would not result in increased educational activities because all of the on-going activities in the Public Affairs section are already directed at public education. The top priorities for the Department must be to keep the public informed of DEQ and EQC actions.

3) Increase staff

The Department is exploring the possibility of creating a new position of education coordinator. Funding for the new position has not been identified.

### Recommendation

The Department should make environmental education a priority and look for ways to increase efforts within existing resources as outlined in this informational report. In addition, the Department should increase staff as provided in number three above and should explore ways to encourage other agencies and groups to increase environmental education efforts.

Carolyn Young  
229-6271  
November 28, 1988

**WILLAMETTE RIVER  
FIFTY YEAR ANNIVERSARY ACTIVITIES**

**GOALS:**

- 1) Provide information to the public on Oregon's role as a leader in environmental awareness and action.
- 2) Join in a cooperative informational effort with other state agencies to educate the public about the role of each agency.
- 3) Enhance DEQ's image as an agency that cares about environmental protection.
- 4) Provide information on the success of past environmental efforts while at the same time looking at what still needs to be accomplished - Willamette River Study, Greenway and so on.
- 5) Produce and distribute environmental education materials for schools.

**PRODUCTS:**

Slide Show on Willamette River Clean-up

A slide show will be produced by DEQ on the history of the clean-up and the challenges ahead. The slide show can be shown at visitors centers in state and city parks and other locations. It can be used by DEQ staff and other agencies in presentations. It can also be used by schools.

A VHS tape of the slide show will be produced by DEQ and made available to other state agencies, schools and other groups.

Pamphlet on Willamette River

A colorful but not too expensive pamphlet with information on clean up, beneficial uses and how state agencies manage the river. DEQ will be the primary contributor. Other agencies may be able to provide graphics, text, a map, partial funding and help with distribution.

Special Event - Tom McCall Park

July/August

Plaque placed in park. This could be a media event with the Governor heading the list of celebrities. Other people on the program could include Tom McCall's wife, Straub for his work in the greenway, Atiyeh, the first Director of the Sanitary Authority, EQC members, others involved in the cleanup.

It may be possible to find a business willing to pay for the plaque etc.



Reception following special event

This could be a ride on the sternwheeler, a lunch, a open-house at DEQ etc. It may be possible to find a business to help with the cost of this event.

Poster on Willamette River

This could be art from the school competition or a photo contest.

The poster would explain the clean up success story. It could be used at campgrounds, visitors centers, parks, schools, exhibits and as a hand out.

Other Possibilities

OMSI - ask OMSI to do a special Willamette display as part of their move to the river.

**Exhibit:**

Provide an exhibit for events at the Zoo, Parks, Neighbor Fair and city fairs along the river.

**Newspaper Features:**

Work with papers to produce special features

**Historical Society Exhibit:**

Work with the Historical Society to provide an exhibit on the Clean-up and history of the Willamette.

Citizen's Guide to Environmental Quality

This brochure would provide information not only on the Department and our programs, but would offer tips for citizens on what they can do to help and how they can get involved in the process.

Article for Nov. - Dec. issue of Oregon Fish & Wildlife magazine

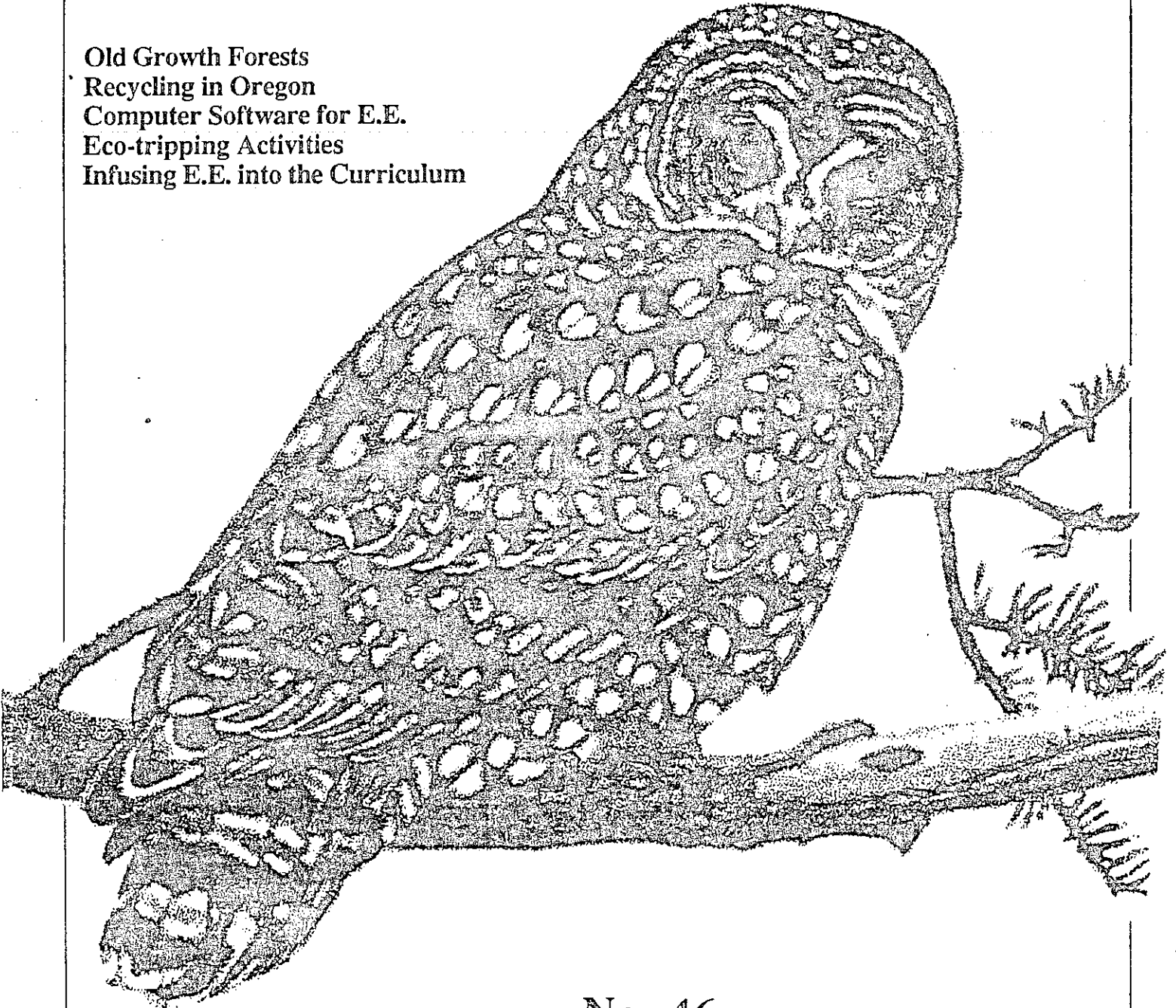
Ask the Governor to do a City Club speech on the Willamette - focus on fish and pollution

Contact boat clubs, counties along Greenway, State Lands, Corps, Marine Board.

# CLEARING

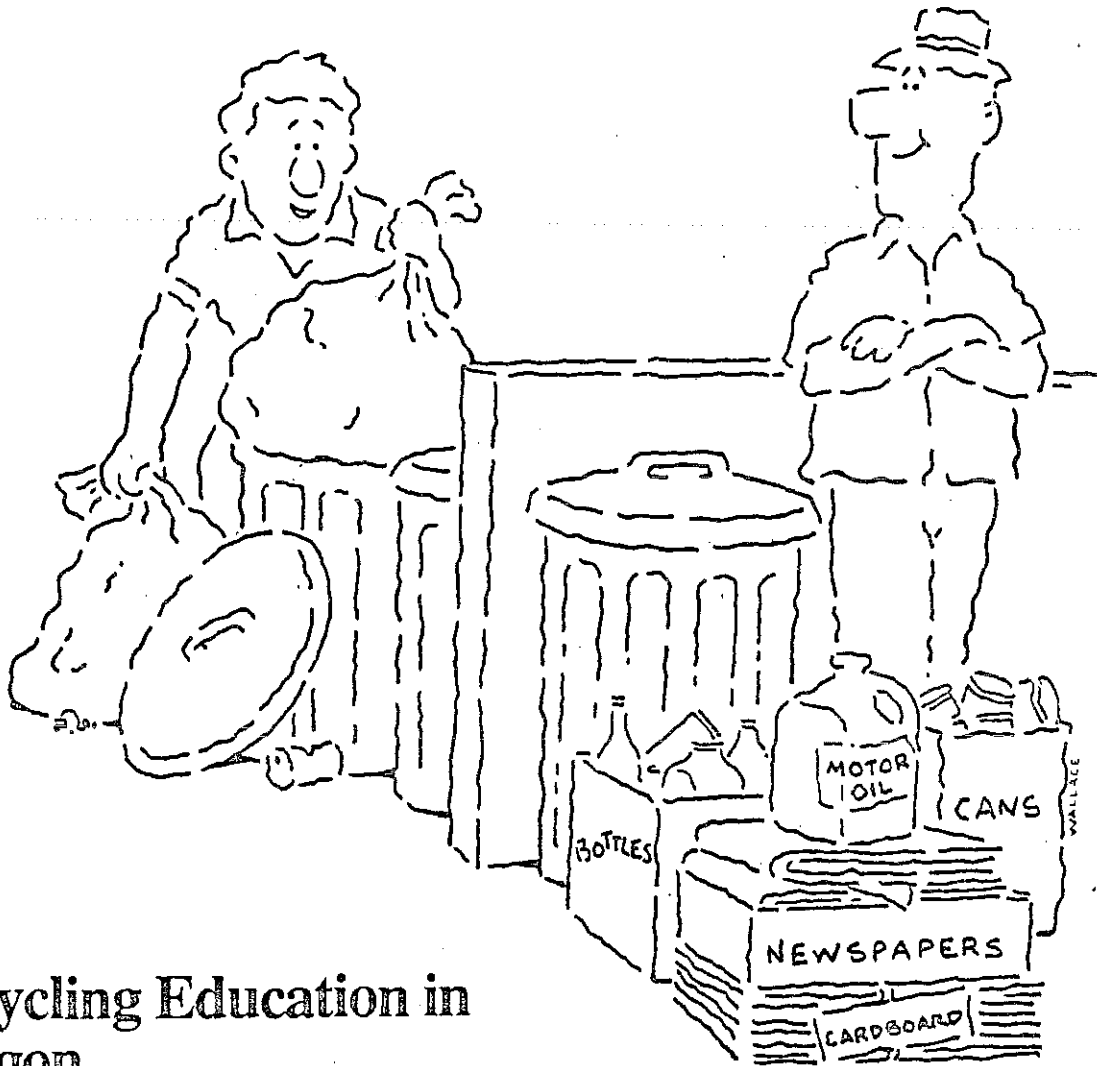
nature and learning in the pacific northwest

Old Growth Forests  
Recycling in Oregon  
Computer Software for E.E.  
Eco-tripping Activities  
Infusing E.E. into the Curriculum



No. 46  
November/December 1986

*The recognition has dawned that there is no "away" any longer, and the Recycling Opportunity Act is being hailed as the most comprehensive solid waste management plan in the nation.*



## Recycling Education in Oregon

by Alene Cordas  
Department of Environmental Quality

Oregonians who live in the state's 70 cities with populations over 4,000 now can make a statement about the future merely by taking their recyclable materials to the street in front of their homes. Convenient, regularly-scheduled "curbside" recycling is a major component of the Recycling Opportunity Act passed by the 1983 State Legislature. Sixty-five cities met the July 1, 1986 implementation deadline, and the Department of Environmental Quality, the watchdog agency for the Act, is working with the other cities to ensure that recycling programs soon will be established.

In addition to curbside pickup in cities over 4,000, the Act mandates recycling depots at all landfills and transfer stations,

or in locations more convenient to a rural population, e.g. at city hall.

Recycling is seen as a way of preserving our pristine state for generations to come, a solution to the alternative of burying Oregon in the tons of garbage that its citizens throw out every day. The recognition has dawned that there is no "away" any longer, and the Recycling Opportunity Act is being hailed as the most comprehensive solid waste management plan in the nation.

The Recycling Opportunity Act looks to the future. If everyone in Oregon recycled, we could reduce the flow of waste going to our landfills, ideally to a trickle. Thus recycling can be one solution to many waste-related issues: The need for new landfills and their locations; The high energy consumption in using virgin materials for manufacturing; The

*Accustomed to the recycling ethic, parents play a big role in the recycling program at Periwinkle School, transporting newspaper collected by fifth graders to a paper mill for resale. A signed statement that they recycle at home brings a student extra credit.*

resulting depletion of natural resources. It takes 17 trees to make one ton of paper. It takes no trees - and saves up to 70 percent of the energy expended - to make one ton of recycled paper.

In most instances, Oregon's garbage haulers collect the recyclables, although non-profit organizations continue to direct the recycling program in several towns, and recycling firms under contract to local governments offer pickup in other locations. Primary responsibility for managing solid waste falls on the local government in each "wasteshed," an area of the state which shares waste disposal facilities.

Ferrous and non-ferrous metals, glass, newspaper, cardboard, tin, aluminum, and motor oil are collected across much of the state. However, the list of recyclable materials may vary from wasteshed to wasteshed because of the distance to markets. (Other materials, such as tires, yard debris, batteries and plastic, are recycled in some locations but are not required by law.) Under the Act, a recyclable material is defined as any material or group of materials that can be collected and sold for recycling at a net cost equal to or less than the cost of collecting and disposing of that material.

The Recycling Opportunity Act is just that: an opportunity. It doesn't require Oregonians to recycle. Rather, it states that everyone is to be offered the opportunity to recycle. Thus education is vital to the success of the legislation. Recognizing that recycling would have greater acceptance if people were aware of the "hows" and "whys," the Legislature built an ambitious notification campaign into the program. According to the Act, education and promotion activities must be designed so notification reaches every household in the wasteshed.

Activities range from the Metropolitan Service District's advertising agency-produced multi-media campaign covering the tri-county Portland area to volunteer-written flyers delivered door-to-door by Astoria's Boy Scouts. Several communities utilize Block Leaders to motivate neighborhood recycling; others have hired education and promotion coordinators to present information both to school children and to adult groups.

Meanwhile, based on recommendations of a group of educators and environmentalists, DEQ currently is reviewing proposals for an Oregon-specific recycling curriculum for grades K-12. Many teachers now are using materials from other states.

Clackamas County education and promotion coordinators Susan Ziolko, a former elementary school teacher, and Carrie Heaton, formerly Clackamas Community College's program coordinator, have adapted California's "Trash Monster" and "Wizard of Waste" and Washington's "A-Way with Waste" to make them more relevant to Oregon children. (Neither state has a bottle deposit law, although California is in the early stages of establishing one.) Last year, Ziolko and

Heaton put on a statewide inservice that drew nearly 40 teachers. They are considering repeating it next spring.

The two note that children seem much more aware of recycling since curbside collection came to their neighborhoods; their observations are echoed around the state. Judy Honl's appearances in Astoria schools are aided by the number of students whose families already recycle, she reports. In Eugene, BRING (Begin Recycling In Neighborhood Groups) education coordinator Peter Guttchen finds that most children understand the recycling process long before he appears. BRING has been in operation since 1971, and his wasteshed has conducted a vigorous promotion campaign using both the media and informational brochures, Guttchen says.

Ziolko and Heaton, Honl and Guttchen are among the many educators who made recycling an integral part of classroom curricula long before the law went into effect. Doesn't every district have at least one teacher who preaches "waste not, want not," and instructs the children to use both sides of their wide-lined newsprint, itself a recycled material?

Predictably, most formal instruction is done at the elementary or junior high level, while poster contests or environmental clubs are offered in high schools. The Environmental Action Club at Parkrose High School, under the direction of Marilyn Pitts, places recycling boxes in each classroom and schedules environmental projects in the community.

Within the classroom, recycling units often are part of a larger whole. Dexter McCarty (Gresham) seventh and eighth grade teacher Norm Wachlin uses man's effect on the environment as the focus for his students. After a thorough study of the history of energy conservation, recycling is defined as one answer to today's pollution problems. Hands-on activities include papermaking and a prominently-displayed recycling box. (Many Oregon teachers place a box for recyclable paper in their classrooms, whether they include recycling in lesson plans or not). Letters sent to parents "help them participate in our studies and become more aware of energy conservation at home, too," Wachlin explains.

In Albany, the local garbage hauler, Albany-Lebanon Sanitation, has offered curbside recycling since 1982. Accustomed to the recycling ethic, parents play a big role in the recycling program at Periwinkle School, transporting newspaper collected by fifth graders to a paper mill for resale. A signed statement that they recycle at home brings a student extra credit.

"We call our unit Science of Recycling, but it involves everything from social responsibility to math to interpreting charts and graphs," says Periwinkle teacher Lynn Dunn. Dunn bases his unit on the "Trash Monster" materials, with a heavy dose of hands-on activities that culminate in a spring field trip to an Oregon site of historical interest. The trip is financed by newspaper recycling.

*In Yamhill County, the community groups who have been and are involved in recycling include Rainbow Girls, Camp Fire Girls, Boy Scouts, the high school Rodeo Team, and youth football.*

Long before the field trip, students are taught to weigh the paper and calculate how many pounds of newsprint can be made from one pulp tree. Students don't wait until spring for their reward: each time a child brings in enough paper to save a tree (that's 118 lbs., according to Dunn), he or she receives a Periwinkle Recycling Association tree pin. The pins are made up by the fifth grade teachers using the *Badge-A-Mini* machine. Since each pin is different, the children collect them eagerly. In fact, one student already has brought in two tons of paper, saving 30 trees this year.

It's obvious that the Periwinkle students - and their teachers - start early. Dunn, Burl Wheaton, and Ilynn Winn visit the fourth grade classes late in the spring, explaining the coming year's recycling unit and suggesting that students collect papers over the summer. Their suggestion is bound to get parents and neighbors thinking about recycling, too.

Role-playing at school is another way of influencing at-home activities. Many education coordinators discuss just where and how students can place recycling containers in their homes. Michele McKay of Klamath Falls arrives for her presentations with a stack of empty brown paper bags and a garbage can loaded with recyclables. One by one, students draw items from the can, discuss how they could be recycled, then label a bag and place the item in the proper bag. McKay also makes a statement about consumerism during her presentation, pointing out that a non-recyclable plastic shampoo bottle takes up valuable landfill space.

Like many teachers and coordinators around the state, McKay makes paper using ordinary household items: a blender, a wooden spoon, a picture frame and paper towels. The 30-minute project captivates children as young as pre-schoolers, she reports. (See *Clearing* #36 or #41 for paper-making instructions).

Audio-visuals always find a receptive audience. Several communities, such as Astoria, Lane County, and the city of West Linn, have developed or contracted for localized videos or slide presentations. Others use material supplied by DEQ, including a series of colorful posters by Diane Schatz which depict solid waste issues.


Marsha Priester, Eastham School (Oregon City) third grade teacher, uses the Dr. Seuss movie "The Lorax" to teach about natural resources. She combines the film with the curriculum developed by Ziolk and Heaton, and also takes advantage of geographical proximity to the Johns Inskeep Environmental Learning Center.

Some students remain a part of recycling activities after school and on weekends. In Yamhill County, the community groups who have been and are involved in recycling include Rainbow Girls, Camp Fire Girls, Boy Scouts, the high school Rodeo Team, and youth football.

Resources for recycling information are as varied as the activities. Local watershed representatives are excellent sources, and many libraries have books on recycling. DEQ can provide names of watershed representatives, order blanks for the Diane Schatz posters, and fact sheets for everything from papermaking to recycling vocabularies to guidelines for recycling projects in schools. Copies of the Recycling Opportunity Act are available, as are brochures explaining how to prepare materials for recycling. DEQ also has a library of curricula and films from other states available for loan. By next fall, an Oregon-specific recycling curriculum will be available.

The Recycling Opportunity Act is a great opportunity to involve Oregon's youth in Oregon's future. It's as easy as taking out the garbage!

**Recycling. Now it's as easy as taking out the garbage.**



Thanks to Oregon's new *Recycling Opportunity Act*, now you can have regular recycling collection right at your curb.

And that means recycling your unwanted glass, newspapers, cardboard, aluminum, tin cans and motor oil is easier than ever.

- No bother.
- No fuss.
- No special trips to the collection center.

Just a convenient opportunity to recycle. An opportunity to save energy. Conserve our natural resources. Reduce pollution. And make Oregon an even better place to live.

The Recycling Opportunity Act. Oregon's best idea since the Bottle Bill. Find out how it works in your neighborhood.

**Genevieve Pisarski Sage**

2834 Yvonne  
Medford, Oregon 97504

773-2064

*Hold for  
EQC  
work session*

November 9, 1988

Fred Hansen  
Director  
Department of Environmental Quality  
811 SW 6th Avenue  
Portland OR 97204

Dear Fred,

I read with interest the "new style" staff reports in our last agenda package. Having then taken them through an actual meeting and through some further consideration, I'd like to offer some suggestions. Review, comment, and discussion are all necessary, I believe, in order to achieve our goal of agenda item reports that are both readable and informative for the Commission and "do"-able for the staff.

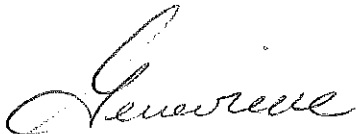
Beginning each report with a one-page summary is definitely helpful, very helpful. Several of the one-page summaries suffered, however, from redundancy and generalization. I'm enclosing annotated copies to illustrate what I mean. They can be easily improved by paying attention to the need to be specific, not generalize, and not repeat.

The remaining sections of most of the reports suffer from the same problems. I think it will be most useful if we take the time I requested at the next work session to go over both the one-page summaries and the reports themselves (the part ahead of the attachments) for some of the agenda items for the next meeting. The Commissioners will need to be prepared with their observations and comments.

I'll appreciate your office taking care of copying the other Commissioners in on this letter and enclosures.

Thanks!

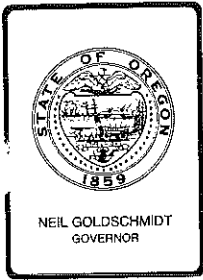
Sincerely,



Genevieve Pisarski Sage

State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
**RECEIVED**  
NOV 14 1988

OFFICE OF THE DIRECTOR



## Environmental Quality Commission

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

### REQUEST FOR COMMISSION ACTION

Agenda Item E, November 4, 1988, EQC Meeting

Request for Authorization to Conduct a Public Hearing on Proposed Environmental Cleanup Rules Regarding Delisting of Facilities Listed on the Inventory and Establishing a Process to Modify Information Regarding Facilities Listed on the Inventory. OAR 340-122-310 to 340.

<sup>ISSUE</sup>  
SUMMATION

In 1987 the Legislature enacted a provision in the Oregon superfund law to determine the extent and nature of hazardous substance releases throughout the state, ~~a portion of that~~ <sup>which</sup> ~~statute~~, codified as ORS Chapter 466, requires the Department to develop and compile an Inventory of confirmed releases of hazardous substances.

~~While the statute provided a detailed process for adding sites to the Inventory, the statute did not provide a mechanism for removing sites from the list or modifying information about the sites. To that end, the Department proposes that the Commission authorize the Department to take testimony at a public hearing on the proposed rules. These rules provide a procedure and criteria for delisting facilities from the Inventory and for modifying information contained in the Inventory.~~

SUMMARY [of the elements in the Rules]

### DIRECTOR'S RECOMMENDATION

It is recommended that the Commission authorize a public hearing to take testimony on the proposed rules to provide a procedure and criteria for delisting facilities from the Inventory and modifying information in the Inventory regarding facilities.

October 19, 1988

*The Title, #2 of the "SUMMATION" and the "DIRECTOR'S RECOMMENDATION" all say the same thing - for a total of 3 times - without ever actually summarizing the proposed rule.*



## Environmental Quality Commission

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

### REQUEST FOR COMMISSION ACTION

Agenda Item F, November 4, 1988, EQC Meeting

Request for Authorization to Conduct a Public Hearing on Revisions of Oregon Administrative Rules Chapter 340, Division 12, Civil Penalties, and Revisions to the Clean Air Act State Implementation Plan (SIP).

#### ISSUE SUMMATION

The Commission has directed the Department to incorporate its enforcement policy into its rules. The rules should include a classification of violations and a civil penalty assessment procedure. It is the Commission's desire to create a rule which affords penalty predictability to the regulated community yet retains a level of flexibility in the Department's enforcement discretion.

#### SUMMARY

The proposed rule attempts to implement the Commission's directive. In developing the rule, the critical issue revolved around the development of a civil penalty assessment procedure. The Department considered formula base systems similar to those used by the Oregon Department of Forestry and the Oregon Division of State Lands, and a box matrix system to similar to that contained in the Department's Hazardous Waste Program Enforcement Procedures and Guidelines (November, 1985). The proposed rule is an attempt to combine the strengths of both systems.

#### DIRECTOR'S RECOMMENDATION

Based upon the summation, it is recommended the Commission authorize a public hearing to take testimony on the proposed revisions to the civil penalty rules, OAR Chapter 340, Division 12, and proposed revisions to the SIP.

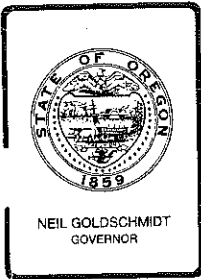
Yone C. McNally  
229-5152  
October 12, 1988  
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SUMMARY should include the description of the matrix and of the formula. That is, it should be a summary of what is actually proposed, rather than a general statement.

Aspects above

belongs in lower explanation in following section





# Environmental Quality Commission

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

## REQUEST FOR COMMISSION ACTION

Agenda Item G, November 4, 1988 EQC Meeting

Request for Authorization to Conduct a Public Hearing on Proposed Rules, OAR 340-160-005 through OAR 340-160-150, for "Registration and Licensing Requirements for Underground Storage Tank Service Providers" Rules and Modification to Existing Rules, OAR 340-150-010 and OAR 340-150-150 for "Requirements Under Which Regulated Substances May be Placed into Underground Storage Tanks."

### ISSUE

Federal regulations require that underground storage tanks containing petroleum and hazardous materials meet certain installation and operating standards to prevent contamination of ground water by leaks and spills from USTs. Leaks are more likely in improperly constructed and managed USTs.

### SUMMATION

Approximately 22,000 regulated USTs have been identified in Oregon. Up to 25 percent may be leaking, threatening public safety and the environment. The 1987 Oregon Legislature authorized the Commission to adopt rules for a comprehensive underground storage tank program. The Commission adopted interim rules in January 1988. New rules are required to reduce leaks caused by persons who service USTs and to insure that petroleum products and hazardous materials are not placed into USTs that do not have a permit. Licensing of Service Providers: A minimal program involving only education and inspection, and a comprehensive program requiring education, testing, licensing and inspection were considered. Proposed rules establish educational and licensing requirements for firms providing UST services and supervisors of UST services.

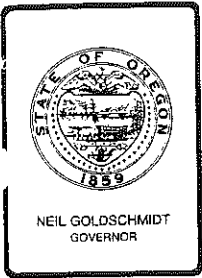
Depositors of Regulated Substances: Methods of identifying permitted tanks were considered, such as tags on fill pipes and displaying the permit at the UST site. Proposed rules require the tank owner or permittee to provide the permit number to those who deposit products into a tank. The product provider must keep records of the permit numbers for three years.

*should go to next section April 6*  
*just the rules should be in next section*

SUMMARY

### DIRECTORS RECOMMENDATION

Based upon the Summation, it is recommended that the Commission authorize public hearings to take testimony on the proposed underground storage tank rules as presented in Attachments A and B, OAR 340-160-005 through OAR 340-160-150, OAR 340-150-010(12), and OAR 340-150-150.



## Environmental Quality Commission

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

### REQUEST FOR COMMISSION ACTION

Agenda Item H, November 4, 1988, EQC Meeting

Request for Authorization to Conduct Public Hearings on New Industrial Rules for PM<sub>10</sub> Emission Control in the Medford-Ashland AQMA and Grants Pass and Klamath Falls Urban Growth Areas (Amendments to OAR 340, Divisions 20 and 30).

#### SUBMITTATION. ISSUE

A combination of new control requirements and strategies must be adopted to meet new standards for PM<sub>10</sub> in the Medford-Ashland, Grants Pass, and Klamath Falls areas.

Reasonable industrial control strategies will not be sufficient to achieve standards compliance in the three areas. Substantial reductions in residential woodburning emissions, and possibly other emission sources, will also be needed. The residential components of the PM<sub>10</sub> control strategy will be brought to the Commission when the necessary coordination and negotiation with local governments are completed.

#### SUMMARY

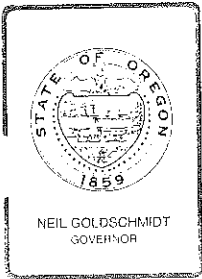
Industrial control rules have been drafted to: (1) Require more effective controls for plywood veneer driers and large wood-fired boilers in the Medford-Ashland and Grants Pass areas; (2) Increase the particulate emission offset ratio to 1.3 pounds of reduction in existing emissions for every one pound of new emissions, in the Medford-Ashland area; (3) Require additional source-testing and continuous emissions monitoring in the Medford-Ashland and Grants Pass areas; and (4) Reduce the significant emission rate for new or modified industrial sources to five tons per year (from 15 tons per year) in the Klamath Falls area.

Action now on industrial rules will provide the wood products industries with firm PM<sub>10</sub> targets in their current planning for pollution control and plant modernization.

#### DIRECTOR'S RECOMMENDATION

It is recommended that the Commission authorize public hearings to take testimony on the proposed amendments to Specific Air Pollution Control Rules for the Medford-Ashland Air Quality Maintenance Area, OAR 340, Division 30, and the definition of Significant Emission Rate for the Klamath Falls area, OAR 340-20-225(22).

AP1631.1



# Environmental Quality Commission

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

*No Summary of Rules*

## REQUEST FOR COMMISSION ACTION

Agenda Item I, November 4, 1988, EQC Meeting

Request for Adoption of Proposed Cleanup Rules for Leaking Petroleum Underground Storage Tank Systems, OAR 340-122-201 to 340-122-260 and Amendments to OAR 340-122-010 and 340-122-030.

### SUMMATION *ISSUE*

State legislation [ORS 466.705 to 466.835 and 466.895 (Senate Bill 115) and ORS 466.540 to 466.590 (Senate Bill 122)] requires protection of public health, safety, welfare and the environment, but does not specify the level of protection or the degree of cleanup necessary to do so. The proposed rules were developed in order to delineate these processes.

*SUMMARY [of the elements in the rules]*

The proposed cleanup rules, based on Subpart F of the Environmental Protection Agency's draft leaking underground storage tank regulations, were included in the extensive review and public comment process used for the remedial action cleanup rules. On October 4, 1988 the Remedial Action Advisory Committee reviewed the final regulations, found no substantive changes, and recommended their adoption.

*Should be in next section of report*

The primary alternative to adoption of these rules considered by the Department was to handle petroleum UST cleanup activities in the same manner as remedial action cleanups. Due to the fact that petroleum products can often be removed from soil and water more easily than other hazardous substances, it was felt that a less burdensome process was appropriate in most cases. The Department does, however, retain the option of using the more extensive remedial action cleanup process at the Director's discretion.

One significant issue that surfaced during public comment on these proposed rules concerned mandatory reporting requirements for home heating oil USTs. These systems are currently exempt from the reporting requirements in the UST statutes. The Department has modified the scope of the proposed rules in order to eliminate the mandatory reporting and initial abatement requirements. The Department does, however, retain the authority for cleanup of releases from these systems at its discretion.

### DIRECTOR'S RECOMMENDATION

It is recommended that the Commission approve the proposed cleanup rules for leaking petroleum underground storage tank systems, OAR 340-122-201 to 340-122-260 and amendments to OAR 340-122-010 and 340-122-030.



# Environmental Quality Commission

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## REQUEST FOR COMMISSION ACTION

Agenda Item K, November 4, 1988 EQC Meeting

Request for Approval of Changes in LRAPA Title 43, "Emission Standards for Hazardous Air Pollutants" and Adoption of LRAPA Title 34, "Air Contaminant Discharge Permits", as a Revision to the State Implementation Plan, OAR 340-20-047 (Asbestos Regulations)

### SUMMATION *ISSUE*

~~This agenda item proposes adoption of the Lane Regional Air Pollution Authority's (LRAPA) recently adopted asbestos regulations.~~

~~Following Commission delegation, the Department authorized LRAPA to conduct joint EQC/LRAPA hearings on the proposed changes to LRAPA titles 43 and 34 to bring LRAPA's rules into conformity with state and federal rules on asbestos.~~

### SUMMARY

These regulations have been found by the Department to be at least as stringent as, and consistent with corresponding Department regulations.

*[SUMMARY OF elements in the Rules]*

~~After holding hearings, the LRAPA Board of Directors adopted the new asbestos regulations, and LRAPA requested that the Commission approve the revisions to Title 43 and adopt the revisions to Title 34 as a revision to the State Implementation Plan (SIP).~~

LRAPA has requested approval of the Title 43 changes because they are not a part of the SIP, but contain standards that under ORS 468.535(2) must be approved by the Commission prior to LRAPA enforcement. LRAPA has requested adoption of the Title 34 changes because LRAPA Title 34 is a part of the SIP (OAR 340-20-047), and changes to the SIP must be adopted by the Commission as administrative rules.

The most reasonable alternative to be considered is that of approving the changes in LRAPA Title 43 and adopting the changes to LRAPA Title 34.

### DIRECTOR'S RECOMMENDATION

It is recommended that the Commission approve the amendments to LRAPA Title 43 and adopt the amendments to LRAPA Title 34 as a revision to the SIP.

AP1632



*[A DEQ word processing equipment capable of same kind of leading re changes? It's easier to read than the lining/bracketing we use now.]*

## Environmental Quality Commission

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

### REQUEST FOR COMMISSION ACTION

Agenda Item L, November 4, 1988 EQC Meeting

Proposed Adoption of LRAPA PM<sub>10</sub> Amendments, Including Changes to Title 14, 31, 38, and 51, and the Oakridge PM<sub>10</sub> Group II Committal SIP, as a Revision to the State Implementation Plan, OAR 340-20-047

#### SUMMATION *ISSUE*

~~This agenda item proposes adoption of the Lane Regional Air Pollution Authority's (LRAPA) recently adopted fine particulate (PM<sub>10</sub>) regulations.~~

~~Following Commission delegation, the Department authorized LRAPA to conduct joint EQC/LRAPA hearings on the proposed adoption of PM<sub>10</sub> amendments and the PM<sub>10</sub> Group II committal State Implementation Plan (SIP) for the Oakridge area.~~

#### SUMMARY *[of the elements in the Rules]*

These regulations were promulgated pursuant to federal requirements, have been found by the Department to be at least as stringent as state rules, and are necessary for a complete SIP.

After holding hearings, the LRAPA Board of Directors adopted the PM<sub>10</sub> amendments and Group II committal SIP, and LRAPA requested that the Commission adopt LRAPA's new PM<sub>10</sub> rules as a revision to the SIP. LRAPA has requested adoption of its new PM<sub>10</sub> rules because they are a part of the SIP (OAR 340-20-047), and changes to the SIP must be adopted by the Commission as administrative rules.

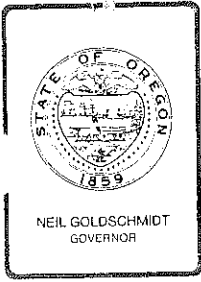
~~The most reasonable alternative to be considered is that of adopting LRAPA's new PM<sub>10</sub> regulations.~~

#### DIRECTOR'S RECOMMENDATION

It is recommended that the Commission adopt the new LRAPA PM<sub>10</sub> regulations as an amendment to the SIP.

AP1632.2

*what are they?*



~~Confidential~~  
~~Exempt from public release~~

## Environmental Quality Commission

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

*Reports submitted to Executive Summary!*

### MEMORANDUM

To: Environmental Quality Commission

From: Director *Neil*

Subject: Agenda Item M, EQC Meeting

Informational Report: Report to the Legislature on the Management of Solid Waste in Oregon

### BACKGROUND

House Bill 2619, passed by the Oregon Legislature in 1987, requires that the DEQ "shall study the management of solid waste throughout the state". HB 2619 further required that the study shall be made available to the Legislature by December 15, 1988 and shall include:

- a) A review of the capacity of all domestic solid waste disposal sites and the need for locating new sites;
- b) The identification of significant regional solid waste disposal problem areas; and
- c) A survey of local governments to determine their willingness to participate in regional solid waste management planning."

This report, prepared by the Solid Waste Section staff of DEQ, summarizes the information required by HB 2619. Some important findings are:

### CAPACITY AND NEED FOR NEW SITES

- There are 100 permitted municipal solid waste landfills in Oregon. For most regions of the state, landfill capacities are expected to be adequate for 10 to 15 years or more.
- Special wastes such as asbestos, incinerator ash and medical solid wastes currently do not provide significant management or capacity problems in the state. However, increasing public concern about these wastes, increasing operator liabilities, and closure of the St. Johns landfill pose a potential for capacity shortages for these wastes in the near future.

- Approximately 170 municipal waste disposal sites have been closed in the last 15 years; approximately 20 are expected to close in the next ten years.

SIGNIFICANT CAPACITY PROBLEM AREAS

- One region, the Willamette Valley region, shows significant landfill capacity used up by the year 2000 with no identified replacement. This is due to the anticipated filling of the Marion County ashfill in Woodburn, and to the anticipated filling of two landfills in Lincoln County.
- There are currently five counties with no municipal solid waste disposal facilities. These five counties, along with six others, have already decided upon regional disposal strategies. Two permitted sites, the Gilliam County site and the Coffin Butte landfill, are defined by statute as 'regional disposal sites'.

SURVEY RESULTS: REGIONAL PLANNING

- A DEQ survey of local governments indicated that the majority were willing to participate in regional solid waste management planning. Local governments in the central and eastern regions of the state were less willing to participate in regional planning.

OTHER RESULTS: ENVIRONMENTAL PROTECTION FACILITIES

- Disposal capacity in the state will be affected in the next several years by new design and operational criteria proposed by EPA. These regulations, along with state groundwater protection rules, will require lining systems, leachate collection, better top covers, and gas controls. In addition, requirements for groundwater monitoring and cleanup will significantly increase landfill costs and operator liabilities.
- Of the currently active municipal landfills in the state, only five sites have lining systems for leachate containment. Three have clay liners; two have composite liners made up of synthetic material backed by clay. The new N. Gilliam County landfill will also have a composite, clay and high-density polyethylene, liner.
- Six sites (Coffin Butte, River Bend, St Johns, Short Mountain, S. Lincoln, Tillamook) have leachate collection systems.
- Groundwater monitoring is being done on a regular basis at 15 active landfills, and at 12 inactive landfills.



## Environmental Quality Commission

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

### MEMORANDUM

To: Environmental Quality Commission

From: Director *Seel*

Subject: Agenda Item N, 11/4/88, EQC Meeting, EQC Meeting

Executive Summary of Staff Report Proposing Adoption of New Administrative Rules for the Waste Tire Program, OAR 450-62: Reimbursement for Use and Cleanup of Waste Tires

### BACKGROUND

*[should go in next section of report. Just the issue here]*

The 1987 Legislature passed HB 2022 establishing a comprehensive program governing the storage, transportation and reuse of waste tires. On July 8, 1988 the Commission adopted rules governing permitting of waste tire storage sites and waste tire carriers. The other part of the program deals with use of funds from the Waste Tire Recycling Account, funded by a \$1 fee on new replacement tires. Use of the Account is the subject of the present proposed rule. The Account may be used to partially reimburse persons who use waste tires, and to fund cleanup of some tire piles.

The Department developed the rule with the help of the Waste Tire Task Force. The Commission authorized public hearings on the proposed rule at its July 8, 1988, meeting. Four public hearings were held on the proposed rule in La Grande, Bend, Medford and Portland, from August 15 through 18, 1988.

### PROPOSED ACTION

The Department is requesting that the Commission adopt the proposed rule concerning use of the Waste Tire Recycling Account.

### SUMMARY OF KEY ISSUES IN RULE AND STAFF REPORT

1. Policy. Priority in use of the Account would be given to reimbursement over cleanup.
2. Reimbursement procedure. The reimbursement would be disbursed quarterly. Applicants could apply to the Department for "advance certification" as an eligible use. Applications would be approved by the Director. If insufficient funds are available in any quarter to



cover all reimbursements, some would be prorated and the excess rolled over and reimbursed in the following quarter.

3. Amount of reimbursement. Recommended level is \$.01 per pound of rubber used. The Waste Tire Task Force and the Department's economic consultant concur with this amount.
4. Eligible uses. The rule determines what uses of waste tires will be eligible for the reimbursement, including energy recovery (incineration) and using waste tires to produce new products. Comment was received that the reimbursement should follow the solid waste hierarchy in giving reuse and recycling an advantage over incineration. The proposed rule offers a flat rate to all uses. However, the rule gives an advantage to reuse and recycling by exempting such uses from the prorating requirement. Incineration would be subject to proration.
5. Recipient of reimbursement. The person receiving the reimbursement would be the last person to use the waste tires as a tire, tire chips, or similar materials to make a product with economic value. Consensus was not reached on the Task Force as to who this person should be in the case of a pyrolysis operation. The proposed rule defines the products of pyrolysis as "similar materials", giving the reimbursement to the customers of pyrolysis operators.
6. Cleanup funds. Priority in use of cleanup funds would be for sites with the greatest potential environmental risks. Use of cleanup funds to help permittees clean up waste tire storage sites must be approved by the Commission. The Department may order site owners to clean up sites which pose an environmental risk.

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299-5808  
September 25, 1988  
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# Environmental Quality Commission

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

## REQUEST FOR COMMISSION ACTION

Agenda Item O, November 4, 1988, EQC Meeting

Request for Adoption of a Temporary Rule Amending OAR 340-61-060 to Prohibit Wastes Which are Hazardous Under the Law of the State of Origin From Being Managed at Solid Waste Disposal Sites When Transported into Oregon.

### ISSUE

*Good*

Federal regulations define which wastes are hazardous nationwide. However, each state may opt to classify additional wastes as hazardous. Thus, a waste managed as hazardous (at state option) in one state may be managed as solid waste in a neighboring state. The unintended result of this allowed state flexibility can be interstate transport of waste to avoid legitimate regulatory requirements.

### SUMMATION

- The Department is currently facing a proposal to build an infectious waste incinerator 3 miles from the California border in Klamath County. Infectious waste is managed as hazardous waste in California but not in Oregon or adjacent states.
- Washington, Idaho, Nevada, and Alaska agree on a policy of managing waste as hazardous if, according to state law, the waste is determined to be hazardous at the point of generation.
- Options for implementing a similar policy in Oregon have been explored. Amendment of the Solid Waste rules appears to be the best option for implementation.
- *SUMMARY of elements of the Rule*

*why temp rule?*

*doesn't say anything*

### DIRECTOR'S RECOMMENDATION

The Department recommends that the Commission adopt a 180 day temporary rule amending OAR 340-61-060 to prohibit wastes which are hazardous under the law of the state of origin from being managed at solid waste disposal sites when transported into Oregon.

The Department also recommends that the Commission authorize the Department to proceed to permanent rulemaking.

STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE MEMORANDUM

DATE: November 23, 1988

TO: Environmental Quality Commission

FROM: Deanna Mueller-Crispin, Waste Tire Program Coordinator

SUBJECT: Structure of Waste Tire Reimbursement

During discussion at your November 4 meeting of the proposed new rule (OAR 340-62) on reimbursement for use of waste tires, several possible structures were mentioned. One option was for the reimbursement to go to all processors (or "chippers").

Chairman Hutchison asked to have an official reaction to that option from the Waste Tire Task Force.

This memo will give you some background information on legislative intent of the reimbursement, and the Task Force's consideration of that option as they developed their recommended reimbursement structure.

Legislative History

1987 Legislative Session. HB 2022 was the product of a balanced work group called together by Representative Wayne Fawbush during the first weeks of the session. The bill originally proposed a tax credit for a person purchasing waste tire chips. When heard by the House Environment and Energy Committee, the bill was referred to a subcommittee chaired by Representative Fred Parkinson. Bob Danko of the Department worked closely with the subcommittee. The subcommittee's clear understanding was that the principal use of wastetires would be in energy recovery (burning tire-derived fuel); and that the reimbursement would go to the mills that burn fuel, not to the processor. When the subcommittee presented their work to the full committee, that understanding was passed along, and the full committee concurred. The committee staff measure analysis said the Waste Tire Recycling Account would be used to "provid[e] refunds to recyclers."

During the Legislature's deliberations on the bill, there was little legislative intent on who should receive the reimbursement for other uses (such as rubber mat manufacturers or pyrolysis). It was felt that uses other than incineration were not really viable, so these uses received little discussion.

Task Force Consideration

Memo to: Environmental Quality Commission  
November 23., 1988  
Page 2

May 4, 1988: Reimbursement Subcommittee. This was the first meeting at which the structure of the reimbursement was discussed, together with the related issue of how to define "user" of the tire. Six Subcommittee members were present, and several representatives of pyrolysis operations. There was discussion of inserting the reimbursement where value is added. Giving the reimbursement to the producer vs. the purchaser of the product was also discussed. The Subcommittee recommended that the reimbursement go to the processor, at the point where the tire is no longer recognizable as a tire. Mark Hope of Waste Recovery, Inc., felt his firm (which chips tires for tire-derived fuel) should get the reimbursement if it were handled that way, although it was not the way he'd like it to go. Examples of who would get the reimbursement under the recommended structure are: a producer of tire-derived fuel, a pyrolysis operator, and a granulator making crumb rubber.

DEQ staff prepared a preliminary draft reimbursement rule incorporating the Subcommittee's recommended structure (Attachment A), together with a synopsis of their recommendations (Attachment B). These were sent to the next meeting of the full Task Force on May 17, 1988, for their consideration.

May 17: Meeting of Full Task Force. DEQ staff also prepared a discussion paper, "Possible Structures, Reimbursement for Waste Tire Use" (Attachment C), which was given to the Task Force at the meeting. The paper discussed some advantages and disadvantages of three possible definitions of "user": user as "processor," user as "end user," and user as "final processor." Keith Rowbotham of the Northwest Tire Dealers Assoc. made a very strong argument that the legislature had intended the reimbursement to go to people who use the energy value of the tire chips, and to manufacturers of new products. He felt that the structure recommended by the Subcommittee deviates from legislative intent. Mr. Rowbotham said that the legislature did not want to make it profitable for people to just grind tires, which could still cause a future problem. The problem of disposal of waste tires will remain until there is an end product.

There was some Committee concern that a "processor" might or might not pass along the reimbursement to the user. Other Committee discussion mostly centered on whether the end user should be the manufacturer, or the retail purchaser.

In the end, the Task Force recommended that the reimbursement go to the "end user" of the energy value in the case of energy recovery; and to the "final processor" in the case of manufacturing. (However, the Task Force never reached unanimity on where the reimbursement should go in the pyrolysis process.) Staff later developed a definition of "end user" which covered

Memo to: Environmental Quality Commission  
November 23, 1988  
Page 3

both concepts: the last person to use a tire, chip or similar material as a tire, chip, or similar material. This definition was used in the rule as adopted by the Commission.

October 31, 1988: The full Task Force met to discuss comments received on the reimbursement rule during the public hearing process. Mark Hope had submitted comments to DEQ; and he brought up the issue of definition of "end user". Several Task Force members agreed that they were not comfortable with the reimbursement going to a pyrolysis operator. They agreed that it puts tire chippers such as Waste Recovery at a competitive disadvantage.

The Department changed its proposed draft rule to accommodate that concern. That change was not accepted by the Commission.

Attachments  
eqcreim.mem

P R E L I M I N A R Y

DRAFT RULE

REIMBURSEMENT, WASTE TIRE PROGRAM

Reimbursement for Use of Waste Tires

340-62-100 (1) Funds in the Waste Tire Recycling Account may be used to reimburse persons for the costs of using waste tires or chips or similar materials.

(2) A person may apply to the department for partial reimbursement from the Account for using waste tires. To be eligible for the reimbursement, the tires must:

(a) Be generated in Oregon;

(b) Be waste tires or tire chips or similar materials;

(c) Be used for energy recovery or other appropriate uses as specified in 340-62-110.

[(3) Costs eligible for partial reimbursement are:

(a) Cost of purchasing the tires or chips or similar materials;

(b) If the tires are not purchased, costs of using the tires or chips or similar materials.]

Uses of Waste Tires Eligible for Reimbursement

340-62-110 (1) Uses of waste tires which may be eligible for the reimbursement include:

(a) Energy recovery. Energy recovery shall include:

(A) Burning of whole or chipped tires as tire-derived fuel. The tire-derived fuel shall be burned only in boilers which have submitted test burn data to the department and whose air quality permits are not violated by burning tire-derived fuel in the quantities for which reimbursement is requested.

(B) Pyrolysis of whole tires or tire chips to produce combustible hydrocarbons and other salable products.

(b) Use of tire chips as road bed bases, driveway cover, and the like (but not as playground cover);

(c) Recycling of waste tire strips, chips, shreds, crumbs or buffings to manufacture a new product. The new product may be produced by physical or chemical processes such as:

(A) Weaving from strips of waste tires;

(B) Stamping out products from the tire casing;

(C) Physically blending tire chips with another material such as asphalt;

(D) Chemically bonding tire chips, crumbs or buffings with another material such as a polymer to form a new useful substance.

(d) Use of whole tires:

(A) In artificial fishing reefs.

(B) For the manufacture of new products which have a market value, such as breakwaters.

(2) If a proposed use of waste tires would in the department's opinion cause environmental, safety or health hazards, the department may disallow the partial reimbursement.

(3) The following uses shall not be eligible for the reimbursement:

(a) Reuse as a vehicle tire.

(b) Retreading.

(c) Use of tires as rip-rap.

(d) Use of whole or split tires for erosion control.

(e) Use of whole or split tires for tire fences, barriers, dock and racetrack bumpers, ornamental planters, agricultural uses such as raised beds, or other uses in which the user incurs little or no cost, the use is of limited economic value, or the use does not take place within a market.

(f) Use of tire buffings generated by tire retread operations.

#### Who May Apply for a Reimbursement

340-62-115 (1) A person who uses waste tires generated in Oregon may apply to the department for a partial reimbursement.

(2) To be eligible for the reimbursement, the user of a waste tire shall be the person who first processes the tire into a good with economic value. This processor need not be located in Oregon.

(3) For purposes of the reimbursement, "use" shall be documented by proof of sale of the waste tires, chips or similar materials to another person.

(3) Any one waste tire shall only be subject to one request for reimbursement.

[...]



REIMBURSEMENT: RECOMMENDED STRUCTURE

Recommended level: \$.01/lb. of rubber used.

All uses get same reimbursement. No hierarchy, no reserves for "non-energy" uses. (Roughly based on level of reimbursement needed to make tire-derived fuel [TDF] comparable in cost to hogged fuel: reduces current cost of TDF from \$40/ton to \$20/ton)

"Pounds" of rubber are calculated on waste rubber sold by the processor.

"User" is deemed to be the processor, who processes tires into something else, so they are no longer "tires".

(Or at the point where value is added?)

In all cases documentation for the reimbursement would include:

- Sale of the tire-derived product, with pounds of rubber in the product. (Billings, etc.)

- Origin of tires: must be Oregon. (Bill of lading, etc.)

Do not have to document costs, or whether they purchased or just used (or even got paid for taking) the tires.

Under this scenario, the reimbursement would go to:

1. Processor who makes tire-derived fuel out of tires.
2. Processor who makes small chips which are purchased by makers of rubberized asphalt.
3. Processor of production buffings who sells buffings to manufacturers of rubber products. (Buffings from retreads would be excluded.)
4. Processor who stamps otter trawls out of whole tires.
5. Constructors of artificial reefs. (For them we might say "no less than \$.01/pound of rubber used", and let them see if they could get more from ECQ)
6. Pyrolysis plant operator who uses whole tires or chips as raw material. (Based on oil/carbon black sold)
7. Chipper who produces tire chips for use as road base.
8. Exporter of tire chips to other state or country (for use as TDF or raw material).

DEQ would recommend and ECQ approve a "certification" to those wanting to apply for a reimbursement. The application would state what their use is, and about how many tires they expect to use in a year. Certification should be good for at least a year (maybe the duration of the program). Then the applicant would come in later (annually) and document their sales, and get the reimbursement.

If more applications than money, funds would be pro-rated among all applicants.

reimbpro

DISCUSSION PAPER  
POSSIBLE STRUCTURES,  
REIMBURSEMENT FOR WASTE TIRE USE

Issue: The intent of the partial reimbursement of costs is "to promote the use of waste tires by enhancing markets for waste tires or chips or similar materials." There are various ways that the program to reimburse users of waste tires could be set up. This paper outlines two options for determining the amount of the reimbursement, and three options for determining who the user is, which in turn governs where the reimbursement enters the market. The structure chosen should best enhance the market for waste tires.

Amount of Reimbursement

The statute states that persons using waste tires "may apply for partial reimbursement of the cost of purchasing the tires or chips or similar materials", or if the tires are used but not purchased, a person "may apply for a reimbursement of part of the cost of such use."

There are two ways to approach the amount of reimbursement: an across-the-board reimbursement set at a level which would partially reimburse users for the cost of using waste tires; or an individually-determined reimbursement, based on each user's costs of using the tires.

1. Across-the-board reimbursement

Reimbursement is based on a given amount per pound of rubber from waste tires used (e.g. \$.01).

All uses, energy recovery or materials recovery, get the same amount per pound of rubber.

Reimbursement based on amount of product sold (or purchased, depending on definition of "user"), as documented by receipts or billings showing pounds of rubber imbedded in product.

(The \$.01/pound is based on the estimated amount of reimbursement it would take to make the cost of the potentially largest near-term use of waste tires, tire-derived fuel, roughly competitive with the most common alternative, hogged fuel.)

Advantages:

- Easy to understand and apply for reimbursement.
- Predictable for applicant.

Disadvantages:

- Will not reflect any individual applicant's costs of using waste tires.
- May not reflect current market costs of using waste tires.
- Cumbersome to change amount of reimbursement as market changes (would require rule change, taking several months).

2. Case-by-case reimbursement

Reimbursement is based on cost differential between using waste tires and using an alternative product. Cost could be cost of purchase of the tires, or cost of use (extra handling, etc.) (Capital expenditures would not be eligible for reimbursement, such as the cost of additional equipment needed by a company to feed tires into their boiler.) Could set a maximum percentage of the cost differential that would be reimbursed, for example 80 percent.

Object: to make products using waste tires more competitive with rival products. (Note: Many of those involved with the legislation assumed the reimbursement would work this way.)

Amount of reimbursement:

- Based on cost differential. Amount of the reimbursement would be based on cost the user would have incurred for using the competing product vs. cost of the product using the waste tires.

For tire-derived fuel, the reimbursement would be based on the cost of purchasing the tire chips vs. cost of using hogged fuel, coal, or whatever the competing fuel is. (This would preclude the "user as processor" option for who the recipient is.)

For pyrolysis, the reimbursement would be based on the cost of the product with which the end products of pyrolysis compete, e.g. crude oil, carbon black.

- Or, based on a percentage of the cost to make the product more competitive with products using virgin or other alternative materials, or out-of-state products, etc. Amount of the reimbursement would be determined based on applicant's documentation of costs of using waste tires vs. costs of using alternative materials, or

price of competing products. Products which might seek this reimbursement:

- Manufacturer using finely ground tires to produce tire chocks, rail ties, etc. Basis of cost differential: competing products made with virgin materials.
- Manufacturer using tire strips or shreds to manufacture door mats, pickup bed liners, etc. Basis of cost differential: competing products not made with waste tires.
- School purchasing track constructed partially with finely ground tires. Basis of cost differential: normal materials.
- Manufacturer of commercial fishing gear (otter trawl). Basis of cost differential: cost of similar product imported into state.
- Artificial reefs. Basis of cost differential: cost of using tires.

Advantages:

- Closely geared to market; amount of reimbursement flexible as market changes.
- Better reimbursement for products further from being competitive in market; would encourage new uses.
- A product holding its own on the market without the reimbursement would not get reimbursement money.

Disadvantages:

- Would require sophisticated applications, perhaps involving much speculation.
- Reimbursement amount - or even whether they would get reimbursement funds - not predictable to applicant.
- EQC would likely have to review each application (as they do tax credits); thus reimbursement delay might be too slow to really help companies not already on firm ground.
- May benefit inefficient producers (they would have higher costs).

Recipient of Reimbursement

The statute states that a person who "uses...tires or chips or similar material for energy recovery or other appropriate uses may apply for partial reimbursement..." (Webster: to use means to "put into service".) The issue becomes at what point the waste tire is "put into service" for energy recovery or for another use.

1. "User" as "processor"

This option would define the "user" as the person who processes the waste tire into a product with a market value, and in whose hands the tire becomes something other than a tire (e.g. processor chipping tires for export as raw materials, for tire-derived fuel, for road bases, etc; maker of production buffings which can be sold as raw materials for manufacturing rubber products; user of whole tires to make breakwaters, or artificial reefs etc.).

Amount of reimbursement would be based on amount of product sold by the processor. The processor would receive the reimbursement, and could then lower his price to the purchaser to make the product competitive. (If this did not happen, the reimbursement would not serve its purpose.) In some cases the purchaser would be the consumer; in other cases the purchaser would process the tire-derived materials further into other products.

Advantages:

- Definition of "user" consistent across all uses.
- No delay for end user in getting reimbursement. End user (purchaser) gets instant incentive, as reimbursement should cause price he pays to be lower.
- *Less bookwork.*

Disadvantages:

- Reimbursement may get "swallowed" by the processor, and not be reflected in cost of end product. A reimbursement to the processor of, say, fine rubber granules, may never work its way along to the end purchaser of rubberized asphalt.

2. "User" as "end user".

This option would define the "user" as the end user or consumer of the product containing waste tires. This would be the last, or retail purchaser. For energy recovery uses, the "user" would be the person who actually uses the energy value of the waste tires. This would be the person incinerating them in a boiler. The reimbursement would go to

that person, based on their cost of purchasing the tire-derived fuel.

In some cases, the end user would purchase large amounts of tire products, such as paper mills using tire-derived fuel, or local governments purchasing rubberized asphalt. In other cases, the end user would purchase very small quantities, such as a single rubber mat. Reimbursement would be based on amount of product purchased.

Advantages:

- Better follows statutory language of "user" for energy recovery.
- Reimbursement goes directly to bottom line user; not siphoned off to processor.

Disadvantages:

- Consumer adsorbs delay in getting reimbursement.
- Small requests for reimbursement are very inefficient to process; transaction costs would be high for applicants also. Many would never know about the reimbursement, unless it were handled like a rebate. Proof of waste tire origin (Oregon) hard or impossible.

3. "User" as "final processor"

This option would take the "user as processor" one step further. The user would be the first person who processes the tires, chips or similar materials into the form in which they will have their end use. A user as processor might purchase these tire-derived materials (as a manufacturer purchasing production buffings), or they might obtain them free or even charge for accepting them.

Examples of the "user" under this option would be:

- Companies manufacturing and selling, at wholesale, rail ties, commercial fishing gear, breakwaters, rubber mats, and any other products containing rubber from used tires, or products produced from pyrolysis. Reimbursement would be based on sales of these products.
- Persons who use or purchase a product containing rubber from waste tires which will be manufactured into a final product "on site", such as a track partially constructed of rubber, a road resurfacing of rubberized asphalt, a roadbed base of tire chips, or an artificial reef. Reimbursement would be based on amount of product purchased or used.

(For processors of tire-derived fuel, this option is not different from option 1, "user as processor", as intermediate processing does not take place.)

Advantages:

- Fits statutory language well for uses other than energy recovery.
- Avoids inefficient reimbursement to individual retail purchasers.

Disadvantages:

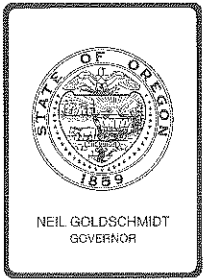
- Some risk that reimbursement will not get passed on to retail customer (but less than in option 1).

Staff Recommendation:

- Amount of Reimbursement:
  - Across-the-board for everyone (or for everyone except energy recovery, which would apply case-by-case)
- Recipients of Reimbursement:
  - "End user" for energy recovery (TDF)
  - "Final processor" for other uses

reburop





## *Environmental Quality Commission*

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

### MEMORANDUM

To: Environmental Quality Commission Date: December 9, 1988  
From: Director  
Subject: Identification of Water Quality Limited Stream Segments

### BACKGROUND

Water quality in each river basin is protected through a series of water quality standards and policies established in OAR 340 - 41. The standards are either numeric or narrative and they provide the basis for the water quality program in the state of Oregon. They are implemented through rules and policies of the Environmental Quality Commission and are designed to provide water quality levels capable of supporting identified beneficial uses of all state waters.

The Department of Environmental Quality implements a number of programs designed to control waste discharges to the state's waters to meet these standards. The Department maintains an ambient monitoring program and conducts special water quality assessments to obtain water quality data to determine whether these standards are being met. Every two years, the Department produces a status assessment report, which is required under Section 305(b) of the federal Clean Water Act, to evaluate the data collected and describe the current water quality conditions in the state. This report examines past data and compares it to current quality and identifies where standards are met and where there are standards violations.

The Department, when identifying where standards have been violated, evaluates how the violations are affecting beneficial uses. This evaluation is essential in determining the degree of water quality impact. The data variability is examined and factored into the assessment. The raw data may reflect sampling and analytical error, seasonal characteristics, diurnal variations, and other variations which need to be reviewed and judgments made as to whether beneficial uses are actually being impacted.

The 1986 Water Quality Assessment was the last status assessment completed. The 1988 assessment is currently being finalized. In the 1986 report, the

Department identified water bodies where beneficial uses were fully supported (standards being met); partially supported (standards being violated occasionally at certain times of the day or year, under certain weather conditions); and not supported (standards being violated routinely).

The Northwest Environmental Defense Center (NEDC) used this report as the basis of their law suit against EPA for the establishment of total maximum daily loads (TMDLs) on "water quality limited stream" (WQLS) segments. NEDC examined the water bodies identified as partially or not supported (uses not fully supported) and concluded that some of these water bodies were WQLS segments and that TMDLs and Waste Load Allocations (WLAs) and Load Allocations (LAs) needed to be established for these waters.

The federal Clean Water Act, under Section 303, requires that TMDLs be established on water quality limited stream segments. A TMDL is the maximum amount of a pollutant that a water body can receive without violating water quality standards. Once the TMDL is established, the load is distributed to the point sources (WLAs) and nonpoint sources and background (LAs) which make up the stream load. Water quality limited stream segments are defined as stream reaches that do not meet water quality standards, in either narrative or numerical form, even after technology-based effluent limits for industrial and sewage sources have been applied. For municipal waste, for example, technology-based effluent limits are those limits achieved with a conventional secondary treatment system. For industrial sources, the technology-based effluent standards vary from industry to industry. Although nonpoint sources were not specifically identified in the Act, it has been suggested that for nonpoint sources of pollution, technology-based controls would mean the implementation of "best management practices" (BMPs).

The NEDC law suit specifically identified the Tualatin River as a WQLS. In a subsequent letter of intent to sue, NEDC identified an additional 27 water bodies which they felt were also WQLS. In preparation for settling the suit, the Department reviewed the readily available information for the water bodies identified by NEDC and concluded that the Tualatin and ten other water bodies met the federal WQLS definition. These streams were subsequently identified in the settlement consent decree as WQLS segments and TMDLs were required to be established on 20% of these water bodies each year and not less than two per year.

The consent decree required that loading capacities be established on the eleven WQLS segments by June 1988. The Department established loading capacities (interim TMDLs) on all the WQLS segments with the exception of the Calapooia River, which, after detailed analysis of the data, was found not to be a water quality limited stream.

Also as part of the consent decree, the Department has, during the past year, taken a detailed look at 16 of the 17 remaining water bodies listed by NEDC in their notice of intent to sue, but not identified as WQLS segments in the settlement decree. (The 17th water body was the Willamette River and

the Department decided that because it is now conducting an extensive analysis of the Willamette within its biennial program, it would use the information from that assessment to determine if the Willamette was a WQLS segment.) The detailed analyses of these 16 water bodies was to determine if these should also be added to the list of TMDL streams. For this analysis, the Department assembled and evaluated all currently available data. It also established a set of criteria on which to make the WQLS determination. The criteria are described in detail in the Department's submittal to EPA contained in Attachment A. Briefly, the criteria used to arrive at a determination are:

- The amount of data available:

There must be at least 10 data points in the last five years on a water body to have sufficient information on which to make a decision.

- The percent of standards violation:

25% of the samples collected must exceed the standard (unless otherwise specified in the standard, e.g., bacteria).

Based on this review, the Department submitted a report to EPA (Attachment A) adding two segments to the TMDL list: the Coast Fork Willamette and the Columbia Slough. The report also identified continuing monitoring and assessment efforts on most of the remaining water bodies to gather sufficient data to make a determination.

The Department has taken a conservative approach to making additions to the WQLS list. We have been very deliberate in reviewing the available data to be as certain as possible that if a water body is added to this list it needs TMDLs/WLAs and LAs. The opposing view is that you add everything with a water quality standards violation and sort out which segments need TMDLs/WLAs and LAs afterwards. A detailed TMDL investigation is resource intensive. The Department wants to spend those resources on water bodies that are in need of this intensive effort.

### ISSUES

The WQLS determination submittal generated numerous discussions between the Department and EPA. There were several efforts to reach agreement on how to identify a water quality limited stream. Each agency has attempted to address numerous questions including:

- Is a 25% exceedance level appropriate?

Where do you draw the line on standards violations? Is just one, two, or more violations significant or is there an approach which would relate the percent of standards exceedances to impact on the beneficial uses? EPA guidance

for the biennial status assessment suggests that a 25% exceedance in standards would indicate that beneficial uses are not being supported. The guidance also suggests that a 10% exceedance would indicate that the uses are partially supported.

- Is requiring 10 data points too conservative?

How much data should be required for a decision to be made? Is 10 data points statistically defensible? Should there be more data points? Could there be less data points? The Department is committed to adding streams to the WQLS list if in fact the data shows a water quality problem, but we want to be certain that a stream belongs on this list. The commitment of time and resources are great, not only for the Department but for those sources discharging to a designated WQLS segment.

- What technology based controls are appropriate and how does this apply to nonpoint sources?

There is no issue between the Department and EPA concerning water quality standards violations caused by sources that have not applied technology-based controls. If water quality standards will be met with such controls, WLAs and LAs are not needed. However, there is some disagreement over how to apply the technology based controls criteria to nonpoint sources. The question is whether a stream, which has standards violations due to nonpoint sources, can be called water quality limited if best management practices have not been implemented.

- How do you emphasize the importance of some streams which have a suspected water quality problem while not imposing the requirement to develop TMDLs/WLAs and LAs?

The Department wants to identify stream segments which might have a suspected problem, but because of limited data and the uncertainty as to the nature and extent of the problem, the Department is not certain that TMDLs, WLAs or LAs will be necessary. Once on a WQLS list, the Department would be committing considerable resources to defining and establishing TMDLs/WLAs and LAs.

- Do you have to develop TMDLs/WLAs/LAs on all streams identified as WQLS?

There is some confusion over whether TMDLs/WLAs and LAs must be developed on all streams identified as WQL. The NEDC/EPA settlement decree suggests this approach. The federal

regulation, however, may in fact allow for the identification of WQLS that do not require TMDLs/WLAs and LAs. Section 303(d)(3) appears to give this opportunity. The requirement in this section is to develop "estimated TMDLs" but not develop WLAs and LAs. The idea being that you can establish the target and use available management programs to meet those targets. Both federal and state legal counsel have been asked to review this issue. A answer was not available at the time this report was drafted, but should be available for the workshop session. Legal counsel was also asked to determine the impact of the consent decree on the issue.

- Are the water quality standards used for the evaluation appropriate?

There has been some discussion over the use of current water quality standards for this evaluation as opposed to using current information that may indicate that the standard needs to be changed. The Department has held the position that this evaluation must be made using the current standards. If changes are made in the standards, then follow-up assessments can be made using the revised standards.

- How do you factor in professional judgement?

As stated above, there are those cases where data is insufficient to meet the data availability test but as professionals, we feel a stream needs additional attention.

The answers to these questions have very important policy and water quality program management implications. The Department actions to date have been conservative because of the potential resource demands for developing TMDLs, WLAs, and LAs.

#### ALTERNATIVE SOLUTIONS

In reviewing all the various answers to the above questions, the Department has identified three possible approaches to identifying water quality limited stream segments.

1. The Department can maintain its present position based on the current evaluation criteria and standards. This position requires a specific amount of data (10 points), a certain percent of samples must violate the standards (25% exceedance) and that the standards violations will not be resolved with the application of technology-based controls for point and nonpoint sources. All water bodies identified as WQLS under this criteria would require the development of TMDLs/WLAs and LAs.
2. The Department could develop a list based on approach #1, but also allow additional lists with different criteria that would require less data points, less exceedances of the standards, and allow professional

judgement as to the health of a stream. This would provide the Department the flexibility of developing lists of impacted waters for further assessment and control program development but would not necessarily require TMDLs. This list could then highlight where technology-based controls are not in place and further implementation is needed. The important consideration would be whether TMDLs/WLAs and LAs are required by federal law for waters on this list. EPA believes that the Clean Water Act does not mandate the development of WLAs and LAs for such a list and cites Section 303(d)(3) to make their case. The issue has been asked of legal counsel, but no answer is available at the time of this draft. We hope to have legal response available at the work session.

3. The Department could place all water bodies which have a water quality standards violation on a single list and proceed with detailed TMDL/WLA and LA determinations, as in the Tualatin and Yamhill Rivers, and Bear Creek, at a rate of 20% a year for those water bodies on the list. With current knowledge, the number on the list could be as much as 81. The Department, at best, believes it has the resources to do two TMDL, WLA and LA determination per year.

#### RECOMMENDATION

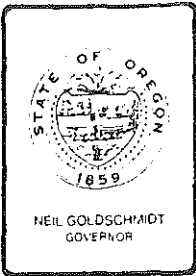
Implement Alternative 2. If the Department and EPA can reach agreement on what would be required on water bodies identified as WQLS segments under Section 303(d)(3), this alternative has many advantages.

The attached list (Attachment B) was developed to reflect a sorting of the state's water bodies into 303(d)(1) and 303(d)(3) lists.

  
for  
Fred Hansen

- Attachments: A. DEQ Submittal to EPA on WQLS Segments  
B. Draft Water Quality Limit Stream Segments List

Neil J. Mullane:kjc  
WJ1305  
229-5284  
December 1, 1988



## Department of Environmental Quality

811 SW SIXTH AVENUE, PORTLAND, OREGON 97204-1390 PHONE (503) 229-5696

September 27, 1988

Robert Burd, Director  
Water Division, Region 10  
Environmental Protection Agency  
1200 Sixth Avenue  
Seattle, WA 98101

Re: Civil No. 86-1578-Bu Consent  
Decree

Dear Mr. <sup>Bob</sup> ~~Burd~~:

This letter is in response to the effort required by the EPA/NEDC Consent Decree, filed June 3, 1987. Under this decree, the Department was required to determine whether sixteen (16) waterbodies are "water quality limited". Please find attached: (1) a summary of the status of the sixteen waterbodies; (2) a current list of water quality limited segments; and (3) a brief discussion of the methodology used to make these determinations. A report has been prepared for each waterbody and will be sent under separate cover.

Two waterbodies have been determined to be "water quality limited". The summary identifies the water quality parameter of concern. In some cases, the Department has noted that further sampling is necessary. This was noted for streams where: (1) natural factors may cause the standard to be exceeded (3 streams); (2) more samples are needed to meet conditions specified in OAR 340-41 for the fecal coliform standard (5 samples in a 30-day period and association with fecal source) or the nuisance phytoplankton growth rule (4 streams); or (3) shellfish growing waters where shellfish management or Resource Conservation and Development (RC&D) plans have been developed and on-going monitoring is needed (2 streams). Plans for gaining the needed data are identified in the summary.

We will utilize the State Clean Water Strategy to prioritize when we do the studies.

For further information, contact Neil Mullane, (503) 229-5284.

Sincerely,

Richard J. Nichols  
Administrator  
Water Quality Division

RJN:hs  
WH2967 (ALS)  
Attachments

cc: Northwest Environmental Defense Center (NEDC)  
John R. Churchill  
EPA-000

A-1

STATUS OF 16 WATERBODIES

<u>Waterbody</u>	<u>25% above DO/pH Std</u>	<u>FC/Chl Concern</u>	<u>Suffic. Data</u>	<u>Natural</u>	<u>Status</u>
Calapooia Creek	no	no	yes		not
Coast Fork Willamette R	DO, pH	no	yes	no	WQL
Columbia Slough	pH	Chl/FC	yes	no	WQL
Crooked River	pH	FC	yes	maybe	study (1)
Deschutes River	pH	no	yes	maybe	study (1)
John Day River	pH	no	yes	maybe	study (1)
Malheur River	no	Chl/FC	yes		study (2)
Marys River	no	no	yes		not
Neacoxie Creek	pH	FC	no	maybe	study (2)
Necanicum River	no	no	no		not
Nestucca River & Bay	no	FC	no	no	study (3)
N Florence Dunal Aq	no	no	no		not
Owyhee River	no	FC	yes	no	study (2)
Powder River	no	FC	yes	no	study (2)
Schooner Ck & Siletz Bay	no	no	no		not
Yaquina River & Bay	no	FC	yes	no	study (3)

Strategies to get needed data:

- (1) Natural factors may cause a significant portion of the pH violation, soils in these drainages have elevated pH. Further study of these factors will be conducted along with necessary studies in the WQL segments in the Umatilla and Grande Ronde (where the pH standard is also exceeded). Prioritization of this work will be through the State Clean Water Strategy (SCWS).
- (2) Data as required under the fecal coliform standard (5 samples in a 30-day period and association with a fecal source) was not available or further study is required to determine if nuisance phytoplankton growth exists as identified in OAR 340-41. Further study and implementation of necessary control strategies will be prioritized through the State Clean Water Strategy.
- (3) Shellfish Growing Waters. These bays are classified according to U.S. Food and Drug Administration (FDA) criteria as follows:

Yaquina Bay Conditionally Approved  
Nestucca Bay Closed due to lack of commercial activity and sufficient data for classification

DEQ will monitor both of these bays under its ambient estuary monitoring program. A Shellfish Management Plan has been developed for Yaquina Bay. A Resource Conservation and Development (RC&D) Plan has been developed, approved and is pending funding to address dairy animal waste the Nestucca Drainage.



## WATER QUALITY LIMITED DETERMINATION

BACKGROUND: Water quality limited waters are identified as those waters which do not meet water quality standards (and therefore impair beneficial uses). In EPA's 305(b) guidance, it is recognized that certain water quality standards have a margin of safety such that a single exceedence of a standard does not necessarily cause a segment to become water quality limited. Streams were divided into three categories: fully supporting uses, partially supporting uses and not supporting uses. For the water quality limited determination, criteria for the "not supporting uses" category (found in "Guidelines for the Preparation of the 1988 State Water Quality Assessment (305(b) Report") were used.

Parameters specified in the Standards (dissolved oxygen, pH, chlorophyll a, Fecal Coliform) were evaluated. A stream is considered water quality limited (impaired) when 25% of the pH or dissolved oxygen values measured during a season of concern exceeded the basin standard. For the purpose of this review, June through September was considered the season of concern as it is the period with the lowest flow (least amount of dilution for pollutants), highest temperatures (biological stress) and greatest recreational usage. It is also the period when the Department has the greatest amount of control over inputs into the stream.

In the case chlorophyll a and fecal coliform, data was evaluated to determine where further study is needed to determine if the use is impaired. This was due to the fact that sufficient bacteria data was not available to document violation of the standard (5 samples needed during a 30-day period and association with fecal sources). The chlorophyll a guideline was established under OAR 340-41-150 to indicate where further study is needed.

### METHODOLOGY:

The following methodology was used to assure that WQL determinations were based on sufficient data for parameters specified in the Oregon Water Quality Standards. Potential sources of waste or activity which may cause the standard to be violated were evaluated to eliminate those cases where natural causes may result in a standard being violated. Where natural quality is above the standard, the natural water quality becomes the standard. Where there is sufficient uncertainty to determine the cause, the Department will conduct further studies to determine causes and natural background quality. The State Clean Water Strategy (SCWS) will be utilized to prioritize monitoring needs.

The steps followed to determine water quality limited segments were:

1. Assemble available data (ambient, special studies, reports, etc).
2. Screen DO and pH data for standard exceedences:
  - a. if greater than 25%, go to #3.
  - b. if less than 10%, not water quality limited.
  - c. if between 10% and 25%, not water quality limited but of concern - utilize SCWS methodology.
3. Are there sufficient data - at least 10 data points for the season of concern collected in the past 5 years. This would require more than 2 years of data under monthly monitoring. (Note: data from WY77-WY87 were evaluated to provide a strong statistical data base):
  - a. yes - go to #4.
  - b. no - potentially WOL, high priority data need.
4. Are exceedences due to natural causes:
  - a. yes - not water quality limited.
  - b. no - water quality limited.
  - c. potentially (e.g. ecoregion pattern) - potentially WOL, high priority data need.
5. Screen Fecal Coliform and Chlorophyll a data:
  - a. if below standard/guideline - not water quality limited.
  - b. if above - potentially WOL, utilize SCWS methodology.

DRAFT OREGON SEGMENT SUMMARY - Water Quality Limited Stream Segments (11/29/88)

SEGMENT	Size (riv=mi; lks/est=ac)	303(d)(1)	303(d)(3) Short List	303(d)(3) Long List	COMMENTS
<b>WILLAMETTE BASIN</b>					
Coast Fk Willamette R	29	DO,pH	Bact		
Long Tom R	17			Bact	
Marys River	17		Bact		
Willamette R	95			Bact	
Willamette R	41			Bact	
South Santiam R	37			Bact	
Santiam R	11			Bact	
Luckiamute R	44			Bact	
Bashaw Creek	4		Bact		
Yamhill R	11	pH,Algae			
N Yamhill R	19			Bact	
S Yamhill R	25			Bact	
Pudding R	30	DO,Bact			
Tualatin R	39	DO,Algae,Nut,NH4		Bact	
McKay Ck	12	Nut,Bact			
Dairy Ck	11	Nut,Bact			
Beaverton Ck	10	Nut,Bact			
Rock Ck	13	Nut,Bact			
Fanno Ck	14	Nut,Bact			
Lake Oswego	395	Algae,Nut,DO,pH			
Springbrook Ck	2	Nut,Bact			
Willamette R	26		Bact		
Columbia Slough	15	pH,Bact,Algae			
Blue Lk	61			Weeds,Alg,DO	Clean Lakes Study
Smith & Bybee Lk	850			Bact,DO,Algae	
Sturgeon Lk	2928			Solids,Bact,Alg	Clean Lakes Study
<b>SANDY/HOOD BASINS</b>					

DRAFT OREGON SEGMENT SUMMARY - Water Quality Limited Stream Segments (11/29/88)

SEGMENT	Size (riv=mi; lks/est=ac)	303(d)(1)*	303(d)(3)* Short List	303(d)(3)* Long List	COMMENTS
<b>NORTH COAST BASIN</b>					
Nehalem Bay	2750		Bact		Shellfish Management Plan
Tillamook Bay	9220		Bact		Shellfish Management Plan
Miami R	5		Bact		
Kilchis R	8		Bact		
Wilson	7		Bact		
Trask R	9		Bact		
Tillamook R	15		Bact		
Nestucca River	15		Bact		
Little Nustucca R	5		Bact		
Nestucca Bay	1175		Bact		
<b>MID COAST BASIN</b>					
Yaquina Bay and Assoc River	4350		Bact		Shellfish Management Plan
Devils Lake	678			Wds,Algae,Nut	Clean Lakes Study
<b>UMPQUA BASIN</b>					
S Umpqua	15	DO,pH,NH4,Bact			
S Umpqua	32			Bact	
Cow Creek	27		pH		
Elk Ck	27		DO,Bact	pH	
Umpqua River	9			Bact	
Calapooya Creek	36			Bact	
Winchester Bay	6550			Bact	Shellfish Management Plan
Deer Ck	7		Bact		
<b>SOUTH COAST BASIN</b>					
Coos Bay	11000		Bact		Shellfish Management Plan
South Slough	2300			Bact	Shellfish Management Plan
Coquille River	39	DO		Bact	
N Fk Coquille R	10	DO			
S Fk Coquille R	62			Bact	
M Fk Coquille R	36			Bact	
Garrison Lake	90	pH,Weeds,Algae			Clean Lakes Study
<b>ROGUE BASIN</b>					
Bear Creek	27	DO,pH,Bact			
Little Butte Ck	17		Bact	DO	
Evans Ck	37		Bact		
Rouge River	103			Bact	

DRAFT OREGON SEGMENT SUMMARY - Water Quality Limited Stream Segments (11/29/88)

SEGMENT	Size (riv=mi; lks/est=ac)	303(d)(1)	303(d)(3) Short List	303(d)(3) Long List	COMMENTS
<b>DESCHUTES BASIN</b>					
Deschutes R	49		pH		may be due to natural causes
Deschutes R	95			DO	may be due to natural causes
Crooked R	47		pH		may be due to natural causes
Crooked R	117		Bact		
<b>JOHN DAY BASIN</b>					
John Day R	53		Bact		
John Day R	212		pH	Bact	may be due to natural causes
S Fk John Day	60			pH	may be due to natural causes
N Fk John Day	32			pH	may be due to natural causes
<b>UMATILLA/WALLA WALLA BASIN</b>					
Umatilla R	44	pH		Bact	
Umatilla R	35			Bact	
<b>GRANDE RONDE BASIN</b>					
Grande Ronde R	97	pH		Bact	
Wallowa R	50		Bact,pH		may be due to natural causes
<b>POWDER BASIN</b>					
Burnt R	42		Bact		
Powder R	131		Bact		
<b>MALHEUR/OWYHEE BASINS</b>					
Malheur R	69		Bact, Algae		
Bully Ck	14		Bact		
Willow Ck	27		Bact		
Owyhee R	18		Bact		
<b>MALHEUR LAKE BASIN</b>					
<b>GOOSE &amp; SUMMER LAKES BASIN</b>					
<b>KLAMATH BASIN</b>					
Link River	5	pH,Algae			
Klamath R	27	DO,Algae			
Klamath R	15			Algae	
Lost R	60		DO,Bact,Algae		
Upper Klamath & Agency Lk	61543			Algae,DO,pH	Clean Lakes Study
J. C. Boyle Res	381	Algae			

DRAFT OREGON SEGMENT SUMMARY - Water Quality Limited Stream Segments (11/29/88)

SEGMENT	Size (riv=mi; lks/est=ac)	303(d)(1)	303(d)(3) Short List	303(d)(3) Long List	COMMENTS
-----					
TOTALS:					
# Segments	81	22	34	33	

(Based on 1988 305b Assessment Report. Evaluation was made using DEQ data,  
OR Water Quality Standards and criteria specified in USEPA 305b guidance.  
This list is anticipated to change based on further evaluation of  
319 Nonpoint Source Problem Assessment and 304(l) toxics list).

\*

- 303(d)(1) = Greater than 25% exceedance of standard (unless otherwise specified) and greater than technology-based effluent limitations or best management practices are needed.
- 303(d)(3) Short List = Greater than 25% exceedance of standard (unless otherwise specified), but greater than technology-based effluent limitations or best management practices are not needed.
- 303(d)(3) Long List = Greater than 10% exceedance of standard (unless otherwise specified), but greater than technology-based effluent limitations or best management practices are not needed.

Proposed Criteria for Consideration of Increased Loadings from Expansion of Sewage Treatment Plants and Industrial Sources.

Oregon's water quality management policies and programs are based on the recognition that Oregon's water bodies have a finite capacity to assimilate waste. The strategy that has been followed in stream management has forced the development and application of technology that would not have otherwise occurred. As a result, some of the waters of Oregon have assimilative capacity above that which would exist if only minimal water quality standards were being met. This unused assimilative capacity is an exceedingly valuable resource that enhances in-stream values specifically, and environmental quality generally. Permitted use of this assimilative capacity should be based on explicit criteria.

The criteria for consideration of increased loadings will include the following:

1. Environmental effects:

a. negative out-of-stream environmental effects.

Generally, waste treatment and land application of waste is preferred to stream discharges. Nevertheless, there may be instances where the out-of-stream environmental effects of waste treatment or land application will be negative. Examples of such negative impacts include energy requirements of "high tech" treatment facilities and the degradation of ground water from land application of waste.

b. in-stream environmental effects.

(1) total stream effects.

Total stream loadings may vary inversely with the loadings coming from a particular source. For example, the expansion of a regional facility may replace small but less efficient plants -- total stream loadings are reduced even though loadings from the regional facility are increased.

(2) seasonal effects.

Increased loadings in seasons of high stream flow may make it possible to reduce loadings in periods of low flow. For example a new lagoon system may increase winter loads when the assimilative capacity of the stream is great but reduce or eliminate discharges during summer months from existing waste treatment systems.

2. Economic effects:

When assimilative capacity exists in a stream, and when it is judged that increased loadings will have the least damaging environmental effect, the economic effect of increased loading will be considered. Economic effects will be of two general types:

- a. the value of the beneficial use that would be sacrificed or foregone if the increased loading is not permitted.

The assimilative capacity of Oregon's streams are finite, but the potential uses of this capacity are virtually unlimited. Thus it is important that priority be given those beneficial uses that promise the greatest return (beneficial use) relative to the assimilative capacity utilized. In-stream uses that will benefit from assimilative capacity as well as potential future beneficial use will be weighted against the economic benefit associated with increased loading.

- b. the cost of treatment technology.

In those situations where land application of wastes is not possible or feasible, (slopes too steep for irrigation, for example) the economic cost of improved treatment technology resulting from growth may become a criterion in evaluating increased loadings. However, before loadings resulting from high economic costs are permitted, consideration will be given as to whether the growth causing the increased waste is occurring in the most appropriate geographic location.

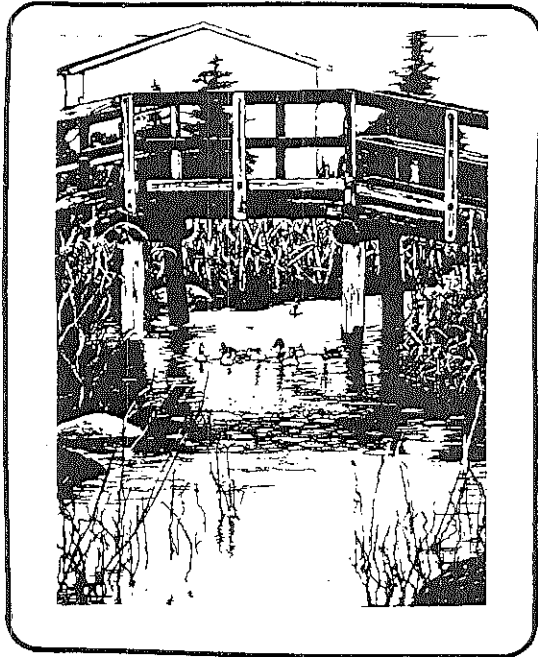
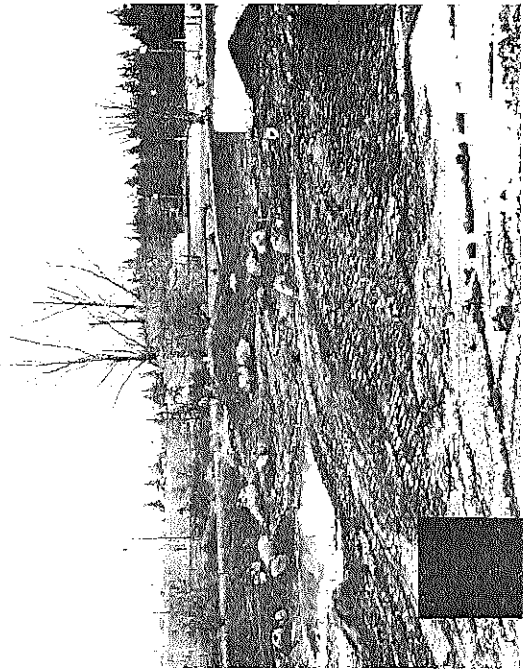
The above criteria are not necessarily mutually exclusive; more than one criterion may apply in a particular situation.

E. N. Castle  
11/15/88

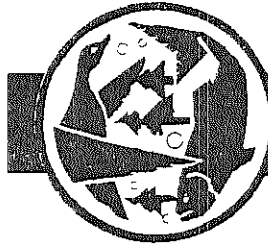
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