

**OREGON  
ENVIRONMENTAL QUALITY  
COMMISSION MEETING  
MATERIALS 07/21/1994**



**State of Oregon  
Department of  
Environmental  
Quality**

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## NOTICE

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### Special Meeting

Thursday, July 21, 1994

1:00 p.m.

Conference Room 3A  
Department of Environmental Quality  
811 S. W. Sixth Avenue  
Portland, Oregon

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### **SPECIAL MEETING OF THE COMMISSION TO CONSIDER A REQUEST FROM THE NATIONAL MARINE FISHERIES SERVICE (NMFS) FOR A TEMPORARY RULE**

- 1:00 p.m.            Call to order
- 1:10 p.m.            Summary of Results and Impacts of 1994 National Marine  
Fisheries Service Supplemental Spring Spill Program  
(Gary Fredericks, NMFS)
- 1:30 p.m.            Summary of Results and Recommendations of the National  
Marine Fisheries Service Panel on Gas Bubble Disease  
(NMFS)
- 1:45 p.m.            Rationale for National Marine Fisheries Service Request  
for Temporary Rule on Total Dissolved Gas (NMFS)
- 2:15 p.m.            Staff Report on Request for Temporary Rule on Total  
Dissolved Gas (Robert Baumgartner, DEQ)
- 2:45 p.m.            Comment Period
- 3:30 p.m.            Commission Discussion and Action

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**A G E N D A**  
**ENVIRONMENTAL QUALITY COMMISSION MEETING**

**Friday, July 22, 1994**

Pacific University  
Multi-Purpose Room  
University Center  
2043 College Way  
Forest Grove, Oregon

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**REGULAR MEETING**

**REGULAR MEETING BEGINNING AT 9:00 A.M.**

*Notes:*

*Because of the uncertain length of time needed for each agenda item, the Commission may deal with any item at any time in the meeting. If a specific time is indicated for an agenda item, an effort will be made to consider that item as close to that time as possible. However, scheduled times may be modified if agreeable with participants. Anyone wishing to be heard or listen to the discussion on any item should arrive at the beginning of the meeting to avoid missing the item of interest.*

***Public Forum:** The Commission will break the meeting at approximately 11:30 a.m. for the Public Forum if there are people signed up to speak. The Public Forum is an opportunity for citizens to speak to the Commission on environmental issues and concerns not a part of the agenda for this meeting. Individual presentations will be limited to 5 minutes. The Commission may discontinue this forum after a reasonable time if an exceptionally large number of speakers wish to appear.*

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- A. Approval of Minutes
  - B. Approval of Tax Credits
  - C. Boundary Expansion for Portland Area Vehicle Inspection Program

- D. Proposed Adoption of Rule Amendments to On-Site Sewage Disposal Fee Rules
- E. DEQ v. Garcia: Appeal of Hearings Officer's Decision (1:00 p.m.)  
*(This item is scheduled for 1:00 p.m. and may be taken out of order).*
- F. Proposed Policy on Calculation of UST Tax Credit when Applicant Previously Received UST Financial Assistance Grant
- G. Information Item: Report on the Role of the Building Orientation in Affecting Travel Behavior
- H. EQC Member Reports (Oral)
- I. Director's Report (Oral)

*Hearings have already been held on the Rule Adoption items; therefore any testimony received will be limited to comments on changes proposed by the Department in response to hearing testimony. The Commission also may choose to question interested parties present at the meeting.*

*The Commission has set aside August 25 and 26, 1994, for their next meeting. The location has not been established.*

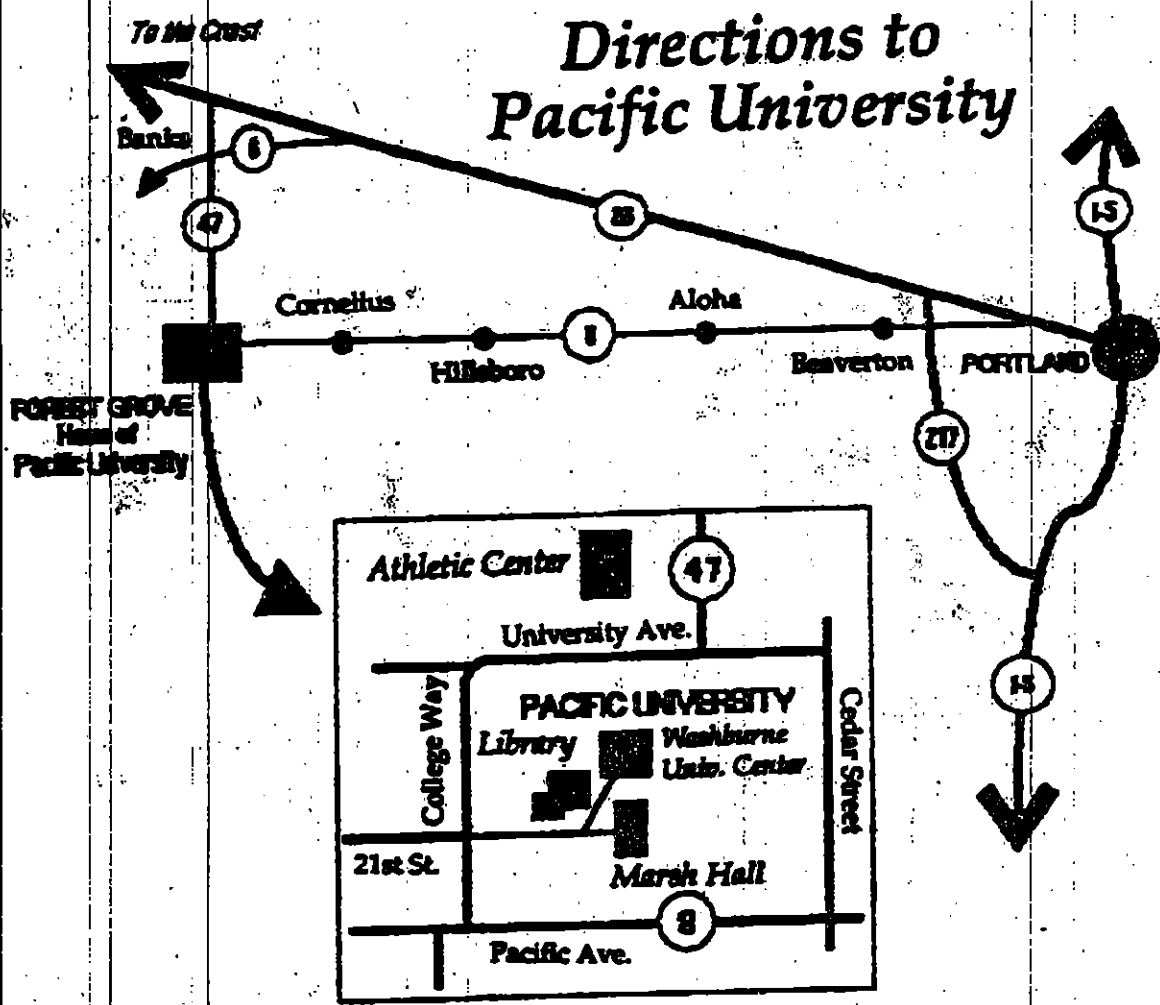
*Copies of staff reports for individual agenda items are available by contacting the Director's Office of the Department of Environmental Quality, 811 S. W. Sixth Avenue, Portland, Oregon 97204, telephone 229-5395, or toll-free 1-800-452-4011. Please specify the agenda item letter when requesting.*

*If special physical, language or other accommodations are needed for this meeting, please advise the Director's Office, (503)229-5395 (voice)/(503)229-6993 (TDD) as soon as possible but at least 48 hours in advance of the meeting.*

*July 12, 1994*



Forest Grove is located just 25 miles west of Portland. While it may look longer, we recommend you take the Highway 26 route.



## ENVIRONMENTAL QUALITY COMMISSION

### Minutes of the Special Conference Call Meeting May 9, 1994

Those attending the conference call at the Department of Environmental Quality (DEQ) offices were Fred Hansen, Director; William Wessinger, Chair, Environmental Quality Commission (EQC); Neil Mullane and Greg McMurray of the Department's Water Quality Division (WQ); and Mike Downs, Administrator, Water Quality Division. Attending the meeting by conference telephone were Michael Huston, Assistant Attorney General; Emery Castle, member, EQC; Linda McMahan, member, EQC; Henry Lorenzen, member, EQC; Russ George, U. S. Army Corps of Engineers; and Donna Darm, National Marine Fisheries Service (NMFS).

Chair Wessinger called the special telephone conference call meeting to order. Director Hansen provided a brief explanation about why the meeting was called. He said that Anne W. Squier, Senior Policy Advisor to the Governor for Natural Resources, had relayed a request from Major General Ernest Harrell of the U. S. Army Corps of Engineers. Major General Harrell had asked for authority to spill additional waters for assisting smolt movement downstream in the Snake and Columbia systems. The spilling was needed to ensure that the principal method of moving smolts downstream by barge would not be solely relied upon and to have additional water go over the dams where the smolts have been collecting behind the four dams on the lower Columbia River.

Director Hansen said that the issue of additional spilling does produce a problem of supersaturation which is excess dissolved gases in the water column. The Department's current rule provides that the amount shall not exceed 110 percent saturation of dissolved gases in the water column. The request for spilling would increase that level and, consequently, the request was received from Major General Harrell about addressing the water quality standards. Director Hansen indicated that what was being proposed for the Commission's consideration was a temporary rule that would deal with total dissolved gas (TDG) in the Columbia River system only. He said that the discussions today would be about draw downs that are reflective of what is currently being done relative to power generation, with the only difference between whether the water goes through the turbines or being spilled for the smolts. He said that 60 percent of the smolts have been moved in one fashion or another downstream. The request would affect all of the remaining 40 percent or some portion thereof.

Commissioner Castle asked why this has come up so suddenly and about the unusual circumstance of this request. Director Hansen said that discussions had occurred through the weekend due to requests from the NMFS and U. S. Fish and Wildlife Service to increase the spill program. Their request to spill additional water would result in dissolved gases higher than the state standards and U. S. Environmental Protection Agency (EPA) criteria.

Commissioner Castle wondered about the emergency of the request. Ms. Darm replied that adult runs of spring chinook and concern about the extremely low numbers were driving the emergency; she said that if 1994 and 1995 adult runs are failures that the juveniles migrating this year and next year were the hope of the species. She indicated that NMFS was looking for any other available measures to improve the survival of the juveniles outmigrating. The increased spills at the projects were being considered (including all eight dams) because more of the fish would be going over the spillways instead of through the turbines. Ms. Darm added that fish do not move out evenly, and they are still coming out from the higher elevations. Wild fish are still coming through even though the bulk of the migration has passed. Director Hansen said that discussions had been going on over the weekend, and it was not until Saturday afternoon that the federal agencies concurred on the course of action.

Commissioner McMahan asked why the 110 percent total dissolved gas rule existed. Mr. Mullane replied that the rule was first established in 1967 and later revised in 1976. For that particular standard, the Department took information from EPA criteria documents which suggested the 110 level to protect the fisheries.

Commissioner Lorenzen asked what level was proposed. Director Hansen said there were several issues concerning the rule. He said the level being proposed is a maximum of 130 percent but that amount would be revised after significant monitoring if mortality or gas bubble disease became evident. Commissioner Lorenzen said there was some history coming in from the Lower Granite Dam which indicated some problems with nitrogen supersaturation. He said recent studies indicate problems with spilling. Ms. Darm replied that there was some evidence of that last year when spill levels were very high because the Snake River flow was so high. She said it was not clear that the damage was the result of supersaturation or delay; there were a number of adults with head burns but there was no significant evidence of gas bubble trauma in juvenile fish last year when spills were high, in excess of 130 percent.

Commissioner Lorenzen asked if an estimation had been made on the expected fish mortality of engaging in a more aggressive barging program as opposed to spilling the water and running the risk of increased nitrogen saturation. Ms. Darm said that the analysis made assumptions about the benefits of transportation, high, medium and low, but that risks associated with barging are not as well known. Ms. Darm said the concern was that what was being done so far is not working, and the number of fish are continuing to decline, therefore, it was worth taking the risk.

Commissioner Castle said that increased nitrogen affects not only the smolts but other fish. He asked how the original standard had been based and what would happen if the rule were to be thrown out. Mr. Mullane said any change would still need to protect beneficial uses.

He said the Department did not have the time to review the literature or make a deliberate technical review as to potential impacts on the resource at 120 or 130 percent levels. Dr. McMurray added that a great deal of literature existed about salmon adjusting to avoid supersaturation by sounding or by going deeper in the water. He said organisms in the upper foot of water are subjected to the higher total dissolved gases and cannot avoid it.

Chair Wessinger asked if the Commission and Department had received any written request from the Oregon Department of Fish and Wildlife (ODFW) as to their position on this issue. He indicated it would be very helpful to see what the fishery agencies were saying about this situation. Director Hansen said he had not seen anything in writing. He indicated the ODFW have been in contact with Mr. Mullane and have argued the desirability of spilling as a way to have, in their opinion, a greater confidence in smolt survival. Mr. Mullane said he received a call last Friday, late in the afternoon, on this issue and had talked with the ODFW. He said that over the telephone they discussed some of the conclusions but that the Department had not received anything in writing or any studies to that effect.

Commissioner Castle asked why the Commission was not asked to change the rule before the emergency arose; that is, if the data was available, why did the agencies wait until 60 percent migration occurred before asking for action. Ms. Darm indicted that there was uncertainty about the tradeoffs of the different methods and that it was only a week ago Friday that NMFS received information that 1994 adult runs were going to be a failure and the 1995 runs would also very likely be a failure. She said that it was in that context that NMFS began looking for alternatives that would create a slight survival increase in 1994.

Director Hansen said that at the federal level a difference of opinion has occurred between the Army Corps of Engineers and Bonneville Power who argue very strongly that barging is effective and will continue; the fishery agencies on the other side have a very real concern about that and believe fundamentally that spilling is a substantially more likely way to produce a higher survival rate. He said the differing opinions have meant that there has been no action taken. However, he said, that during this weekend there had been a coming together of the federal agencies to agree not necessarily that the spilling is preferable; but that given the 60 percent of the smolts have passed already, principally by barging, that the concept is to have at least other alternatives available to provide a greater chance of a higher survival rate. Director Hansen added there is a shift within that federal community of what the answer is. From the Department's perspective, he said, while we have not done a lot of work on the saturation levels, the Department is open to having spillage used as a way to improve smolt survival rates as long as there is an effective use and quick monitoring program in place for the Department to assess effects of that supersaturation and to take corrective action quickly.

Commissioner Lorenzen said he had read that a turbine operated at optimal level would pass smolts without an inordinately high mortality rate. He asked if anyone had an idea about the survival rate of fish going over the spillway with potential to exposure to supersaturated waters as compared to going through a turbine operated at optimal level for smolt passing. Ms. Darm replied that mortality has been 15 percent and that it varies from project to project. Director Hansen remarked that swift passage through supersaturated water produces relatively low levels of mortality. However, he said, the Department was concerned enough about it to have a detailed monitoring program for evaluation. Mr. Mullane indicated that from a phone conversation he had Friday, it was ODFW's opinion that they would not have a significant problem with the smolts. Dr. McMurray added that there is uncertainty around the magnitude of total dissolved gas impacts and gas bubble disease.

Commissioner Lorenzen asked about the length of time that NMFS wanted to engage in the spill. Ms. Darm replied until June 20, then the NMFS would be examining whether to request continuation of additional spills through July 31, 1994.

Director Hansen told the Commission that he had just received a letter addressed to Governors Lowry and Roberts from the Columbia River Alliance, which consists of Pacific Northwest Waterways Association, Kaiser Aluminum and Chemical Corporation, Northwest Utilities Conference Committee and the direct services industries. In the letter, the Alliance indicated concerns that supersaturation would cause mortality, that barging was working now and should be continued rather than the traditional diversion of spills.

Commissioner Castle asked if beneficial uses would be sacrificed. He said if additional water is discharged and does not generate some electricity, there would be some revenue lost. He asked if an estimate had been calculated about how much money would be lost and for how long. Ms. Darm replied that the estimate for the June 20 deadline is \$25 million; for continuing through July 31 would be an additional \$15 to \$25 million in lost revenue from not generating power. Commissioner Castle asked if there are any other uses. Director Hansen replied that in regard to fish and wildlife, the upper one foot of supersaturation would affect aquatic life within that area.

Chair Wessinger indicated he would like to hear about the monitoring program and speed in which information could be developed. Ms. Darm said that the technical staff working on the monitoring program were not present on this conference call. However, they propose extensive monitoring programs at all the projects. She said they have two on-going research programs, one below Ice Harbor and one below Bonneville. The monitoring program would be examining salmonids for evidence of gas bubble disease and, thus, be capable of immediately reducing the amount of spill.

Director Hansen clarified Chair Wessinger's question by asking if the results of that monitoring was not available for three or four dams. He asked if there was an ability on an hourly and daily basis to obtain an assessment to slow those spills, if necessary or possible.

Commissioner Lorenzen asked how could the Commission make a knowledgeable decision if they did not know what was being measured or what the standards would be. He said that historically the Corps had tried to minimize the amount of nitrogen saturation.

Commissioner Lorenzen asked if the Commission could adopt the temporary rule and sunset it in one week so that an orderly presentation could be made with the opportunity to hear both pros and cons regarding this situation. Director Hansen indicated the Commission could sunset the temporary rule and could schedule another meeting at which point the Commission could repeal the rule if a sunset date was not included.

Commissioner Castle said he needed to question some of the assumptions made. He said he had not heard any evidence that the loss of smolts was going to be greater one way or the other. Ms. Darm replied that in respect to the nitrogen problem, the request assumes that the NMFS would be able to avoid mortality through monitoring. Commissioner Lorenzen asked how monitoring prevents mortality. Ms. Darm indicated that if evidence of gas bubble disease was seen that the spill level could be reduced. Commissioner Castle replied that the damage had already occurred at that point and that although additional damage could be prevented, past damage had happened.

Director Hansen said there are about 20 percent of the total smolt population expected to move downstream in the next three or four days. He said the question was whether those are barged or are over the dam through the additional excess spill. He said that percent, if it was evenly distributed over the four-day period and even if a monitoring program was able to determine a problem on a daily basis, one third to one quarter of those smolts are at risk before the difference can be determined by the monitoring. Commissioner Lorenzen asked if the monitoring program would be designed to work immediately below the dam and if the program would be able to pick up on an hourly or daily basis whether significant injury was occurring. Ms. Darm replied that the proposal for the immediate operation does call for an increase in spill levels of 120 percent dissolved nitrogen and no increase in that level until additional monitoring is obtained.

Commissioner Whipple said she was still a little puzzled about the monitoring program and asked that if everything was in place for the monitoring, why not just do it. She questioned why the NMFS and Corps still have to get together on what they are going to do. Further, Commissioner Whipple asked if the spilling occurring now violates the water quality standards. Ms. Darm said that last year when uncontrolled spills occurred at all the projects, the gas levels throughout the river were well in excess of 120 percent, some places in excess of 130 percent.

Director Hansen said the Commission had several options before them, first, to put the request on a very fast track and try to do something with it; second, that with a fairly short timeframe, to revisit the issue; or, to take the action requested. He added that there could be numerous alternatives.

Director Hansen said the Department has been concerned with the issue of barging as a sole way of being able to move the smolts. Although the DEQ has not been able to review and evaluate in depth the dissolved gas standards, the Department does have an understanding for the position being brought forward by the fishery agencies and their expertise and best professional judgement. He said that as a result, the Department would support and recommend that a temporary rule be put into place allowing for those spillages to occur as soon as possible. The Department would, however, make that recommendation with some very clear parameters. One would be with the understanding by the NMFS that until the monitoring program is fully in place, the numbers would not exceed 120 percent; two, that the rule would be provided to the Department, upon receiving the monitoring results on a daily basis or even multiple times during the day, the authority for adjusting the level downward if unacceptable levels or mortality or other effects of gas bubble disease were evident. Director Hansen added that with those protections, the Department believes merit does exist to proceed, based on the professional judgement of the fishery agencies who are making that recommendation.

Commissioner Lorenzen said he was very uncomfortable. He said that based on the information presented today, he was not even sure if a monitoring program had been designed and would be put in place tonight that would be able to pick up the problems in a timely manner for responding if injury to fish should occur. Director Hansen replied that the Department was confident that those issues can be worked out with the NMFS and Corps to have such procedures in place so that monitoring begins tomorrow. Director Hansen said, however, the NMFS may not even begin spilling tonight because of the lateness of the hour of these decisions, this determination being only one of them. Commissioner Lorenzen said that it takes time getting staff out to monitor in the river, dispatching and determining how testing will be accomplished.

Commissioner Whipple said she felt Commissioner Lorenzen's level of discomfort. She stated that this was a complex issue and that there are so many issues around this fish problem but that the Commission was being asked again to examine the whole system on far less than adequate information. She said she would not want people making these kinds of decisions based on the level of information now before her. Commissioner Whipple said that it would be easy for her to say if there is any chance that one extra fish could be saved by allowing this request she would say yes. However, she acknowledged the fish and wildlife professionals' judgement and believed it that would be worthwhile but she was a little skeptical.

Commissioner McMahan commented that she also felt uncomfortable. She wondered if some short-term option could be determined and then the Commission could consider the request again. Director Hansen said the Department would expect to receive the gross monitoring results and more of the detailed monitoring.

Commissioner Castle said he was still not satisfied about how this request would change the original standard. He asked if the standard would be disregarded because our best professional judgement tells us now that it is not an appropriate standard. Dr. McMurray said that no information submitted indicates that the standard is not a good standard; rather, that this is an extraordinary situation. He said that in 1993 involuntary spilling occurred at the 120 and 130 percent level. Dr. McMurray said that whatever impacts that may have developed, the results would have been seen. He said the impacts he was referring to were about those organisms that cannot sound or go down to compensation depth due to overpressure of gas. He said that in his professional opinion that for a fairly short period of time the impacts would be relatively minor on the ecology of the river given that spilling has been frequent.

Mr. Sawyer said that when the total dissolved gas standard was originally proposed there had been concern about the effects on the salmon. He said the core focus was on the very high levels that existed in the Columbia River as a result of the design of the dams, spillways, water depth in the river and the way it was retained on down stream. He said the major purpose of adopting any standard was to provide a basis for forcing the Corps of Engineers to modify the spillway structure for reducing nitrogen levels in the river. He said that no one at that time was convinced that any magic number was a perfect level. Mr. Sawyer added that Oregon originally adopted a 105 percent standard; Washington adopted a 110 percent standard; the EPA at one time set out to relax Oregon's standard to be consistent with Washington's. He said that ultimately the standard was modified to 110 percent to be consistent across the river although Oregon retains a 105 percent standard for shallow water.



Commissioner Lorenzen asked that if the Commission does not authorize the modified change, what percentage of the remaining 40 percent of fish would go over the spillway in any event. Director Hansen replied that probably the remaining fish would travel through the turbines if spilling did not occur. Commissioner Lorenzen stated that smolts are going over the spillways right now even as a result of operation modifications. Ms. Darm replied that there are fish going over the spillways; otherwise, fish are going through either the turbines or the bypass systems. He asked how much benefit was being achieved and what additional number would be going over the spillways. Ms. Darm said calculations made by staff is that the 50 percent of the fish remaining, if the spill operation is not allowed, 2 percent will travel in the river. She said that if the spill operation occurs, approximately 17 percent will remain in the river.

Commissioner Lorenzen asked about the role of the Commission. He said that his comfort level would be to authorize up to seven days and then have the Commission examine the request with more information; at that time, the Commission could come to the same conclusion. He said he did not have the information to make a wise decision.

Chair Wessinger said he agreed that the Commission did not have enough information but that he was sure that no one else did either. Commissioner Lorenzen said that the Commission was being asked to spend \$50 million of the region's money on an issue that at best might have some net positive benefit but may hurt the adult salmon which may result in decreasing the run.

Director Hansen said that one of the issues that could be accomplished was that the Chair's recommendation could be modified either as Commissioner Lorenzen suggested; that is, that the request come back to the Commission, or as originally thought, to come back to the Department. However, he said, an important factor that should be captured was that the Department must determine if a monitoring program is sufficiently in place to give the Department enough information to make the judgement being asked by the Commission today. Commissioner Whipple said this is such a difficult issue that she would want to look at the issue further and be able to vote on it again. She suggested the Commission revisit the temporary rule in seven days to make a decision on extending the request to spill.

Commissioner Castle said he believed the Commission was balancing one risk against another. He said he had no objections to after seven days taking another look at the request. Commissioner Castle commented that he did not think a great deal more information would be available in seven days and that any monitoring program would not yield enough information to be very helpful. He added that on the other hand, he did not think the Commission would create a lot of damage by adopting this rule for seven days. He said that the important issue was not to make a major mistake.

Director Hansen summarized that the Commissioners' wishes on this issue would be to have several things. First, that the maximum saturation level would be no more than 130 percent but that the Department would expect that the level would begin at 120 percent until a full monitoring program would be in place; if the level was increased, the increases would occur at 2.5 percent increments. Second, the monitoring program would be acceptable to the Department. The proposed rule would include wording that this authority is valid for seven days from adoption but may be extended by affirmative action by the Commission of a period so determined; the rule would be expected to expire within seven days unless there is additional affirmative action by the Commission.

The Commissioners agreed that a special meeting would be held for further consideration of the rule past the seven-day limit. The meeting was scheduled for Monday, May 16, 9:00 a.m., at the Department offices, Conference Room 3A, 811 S. W. Sixth Avenue, Portland, Oregon.

Director Hansen added that the Corps would not violate either states' standards; Washington will have to take action or the Corps would not move ahead. Mr. George indicated that the 120 percent limit was specified and asked if the level would be measured instantaneously or on an average. Director Hansen replied that would be as determined by the Department but that the Department would have to work with the NMFS about the calculation.

Commissioner Whipple moved that the Commission adopt the temporary rule that would be in place for seven days and will be revisited on Monday morning, May 16. Commissioner Lorenzen suggested adding that the proposed rule expire at midnight on Monday. That wording was added to the motion.

Director Hansen read the following proposed rule for Commissioner consideration.

**340-41-155**

Effective on filing, and for seven consecutive days thereafter, ending on midnight on the seventh day. This rule supersedes paragraph 340-41-205(2)(n), 340-41-445(2)(n), 340-41-445(2)(n), 340-41-445(2)(n), 340-41-545(2)(n), 340-41-565(2)(n), 340-41-605(2)(n) and 340-41-645(2)(n) as these paragraphs apply to the Columbia River. In the Columbia River, the total dissolved gas (TDG) concentrations relative to atmospheric pressure at the point of sample collection shall not exceed 130 percent saturation as determined by the Department. The purpose of this temporary rule is provide for emergency assistance to outmigrating salmon smolts in the mainstem of the Columbia River by increased spills over the mainstem dams. The responsible agency or agencies shall develop a monitoring program acceptable to the

Department. The responsible agency or agencies shall conduct monitoring for TDG concentration and for incidents of gas bubble disease sufficient to determine whether the resulting gas bubble disease concentrations causes significant increase in gas bubble disease mortality in salmon populations. If such a significant increase in mortality is documented as determined by the Director, the Director shall make such alterations in the maximum allowable TDG levels until a satisfactory level is achieved.

Commissioner Castle asked about level percentages. Director Hansen said that the NMFS indicated that until a full monitoring program was in place, they would expect to remain at 120 percent and then spill at 2.5 percent increments not to exceed 130 percent. He said the Department inserted the 130 percent level into the proposed rule but the monitoring program must be acceptable to the Department, and the allowable levels could be decreased by the Department.

Commissioner Lorenzen seconded the motion. The Commission voted unanimously with five yes votes to accept this proposed temporary rule.

Mr. Huston, Assistant Attorney General, read the attached temporary rule justification and statement of need. An attorney for the Corps said that failure to agree with this temporary rule justification would subject them to violation of the federal court order. He said there was no requirement in the order that they operate at these saturation levels. He said he did not think they could concur with the Department's description of a need for the rule. Mr. Huston agreed that nothing in the federal court order compelled the spill program or relaxation of the total dissolved gas standard, and he further indicated the wording did not have to be included.

Commissioner Whipple moved adoption of the statement of need; Commissioner Lorenzen seconded the motion. The statement of need and justification were unanimously approved with five yes votes.

There was no further business, and the special conference call meeting was adjourned.

ENVIRONMENTAL QUALITY COMMISSION SPECIAL MEETING  
DEQ Headquarters, Room 3A  
811 SW Sixth Avenue  
Portland, Oregon  
July 21, 1994

## Revised Agenda

- 1:00 p.m. Call to Order
- 1:10 p.m. Summary of Results and Impacts of 1994 National Marine Fisheries Service Supplemental Spring Spill Program (**Gary Fredericks**, NMFS)
- 1:30 p.m. Summary of Results and Recommendations of the National Marine Fisheries Service Panel on Gas Bubble Disease (**Steve Grabowski**, NMFS)
- 1:45 p.m. Rationale for National Marine Fisheries Service Request for Temporary Rule on Total Dissolved Gas (**Merritt Tuttle**, NMFS)
- <sup>1</sup>2:15 p.m. Rationale for State and Tribal Fisheries Agencies Request for Temporary Rule on Total Dissolved Gas (**Lewis Pitt**, Confederated Tribe of the Warm Springs Reservation, and **Bob Heinith**, CRITFC)
- 2:45 p.m. Staff Report on Request for Temporary Rule on Total Dissolved Gas (**Robert Baumgartner**, DEQ)
- 3:15 p.m. Comment Period
- 4:00 p.m. Commission Discussion and Action

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<sup>1</sup> Please note the time set aside for State and Tribal Fisheries Agencies.

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**Friday, July 22, 1994**

Pacific University  
Multi-Purpose Room  
University Center  
2043 College Way  
Forest Grove, Oregon

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**REGULAR MEETING**

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*†Hearings have already been held on the Rule Adoption items; therefore any testimony received will be limited to comments on changes proposed by the Department in response to hearing testimony. The Commission also may choose to question interested parties present at the meeting.*

*The Commission has set aside August 25 and 26, 1994, for their next meeting. The location has not been established.*

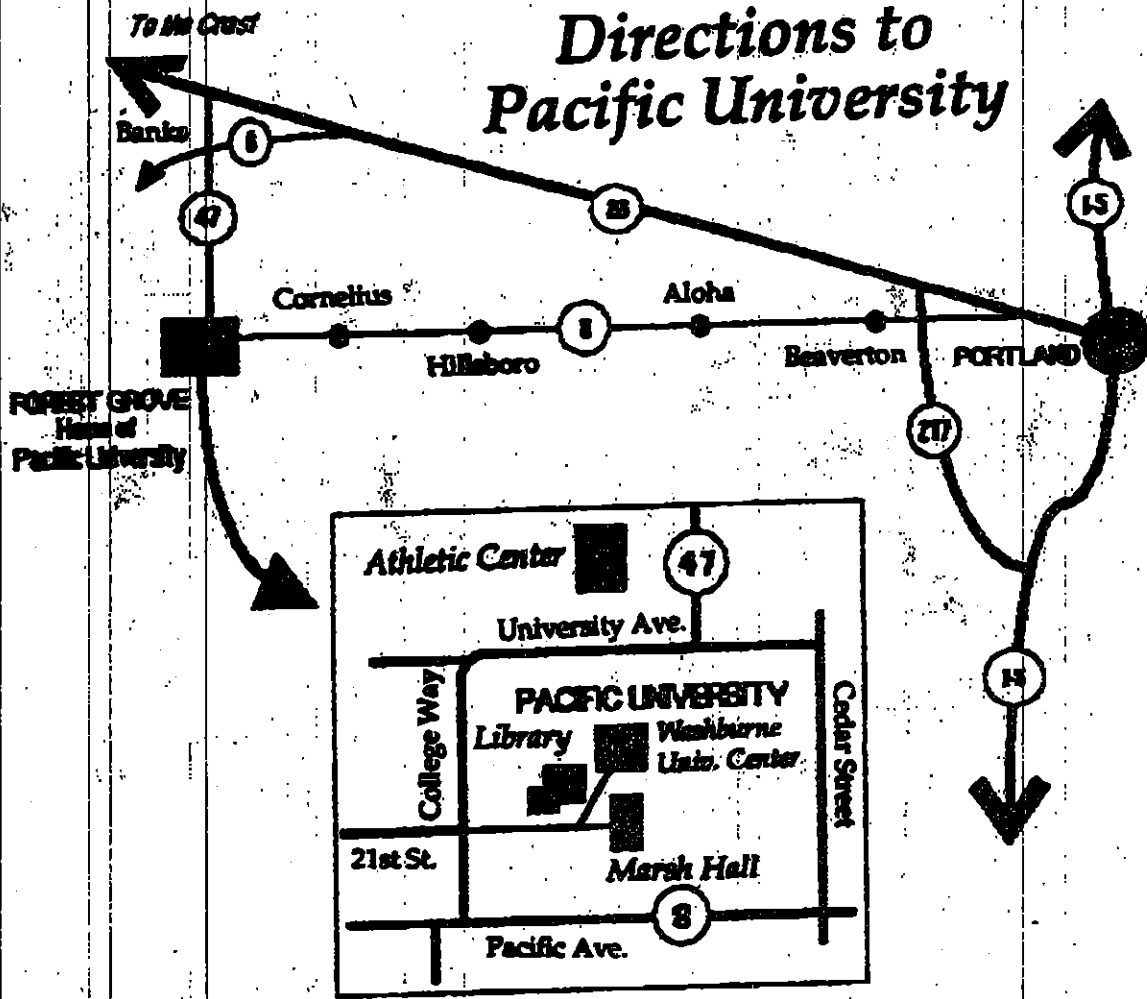
*Copies of staff reports for individual agenda items are available by contacting the Director's Office of the Department of Environmental Quality, 811 S. W. Sixth Avenue, Portland, Oregon 97204, telephone 229-5395, or toll-free 1-800-452-4011. Please specify the agenda item letter when requesting.*

*If special physical, language or other accommodations are needed for this meeting, please advise the Director's Office, (503)229-5395 (voice)/(503)229-6993 (TDD) as soon as possible but at least 48 hours in advance of the meeting.*

*July 12, 1994*

Forest Grove is located just 25 miles west of Portland. While it may look longer, we recommend you take the Highway 26 route.

# Directions to Pacific University





Approved _____
Approved with Corrections _____

*Minutes are not final until approved by the EQC*

## ENVIRONMENTAL QUALITY COMMISSION

Minutes of the Two Hundred and Thirty Sixth Meeting  
April 21 and 22, 1994  
La Grande, Oregon

### Field Trips

Commissioners Wessinger, Whipple, and McMahan traveled by van with staff from Portland to the Hermiston area. Commissioner Lorenzen joined the group for a tour of facilities at the Madison Ranch. Dean Madison explained their programs for utilization of sewage sludge from the City of Portland and Unified Sewage Agency and management of irrigation water.

The group then traveled to Pendleton for lunch with Department of Environmental Quality (DEQ) staff from the Pendleton office. Following lunch, the group convened at the Umatilla National Forest District Office in Pendleton. Commissioner Castle joined the group at this time.

Mr. Charlie Johnson, U. S. Forest Service (USFS) ecologist, made a presentation to the Commission on the forest health crisis in the Blue Mountains. He described how the absence of wildfire in the forest has resulted in the ecosystem being out of balance. He indicated that the current situation in the Blue Mountains is one where much of the forests are dead or dying, and the potential for catastrophic wildfire is high. Afterwards, the Commission toured a section of the Wallowa-Whitman National Forest (WWNF) to observe first-hand some areas of high tree mortality (damage).

The Commission next travelled to the La Grande Ranger District where the Department's air quality staff gave a presentation on the air quality issues and solutions related to the forest health crisis. John Kowalczyk, acting Air Quality Division administrator for the Department, described concerns about the threat to visibility in the Grande Canyon National Park posed by significant increases in burning in the Blue Mountains, and how the Department has been working closely with federal and state forest land managers to develop solutions which would satisfy federal Clean Air Act requirements. Brian Finneran, Air Quality Division, gave a presentation about the agreements and solutions that have been reached through the establishment of a mandatory smoke management and monitoring program in northeastern Oregon, similar to the program in western Oregon which has been largely successful in

reducing smoke impacts and protecting air quality in that area. Additional wildfire suppression efforts and use of non-burning alternatives such as slash utilization would also be part of the overall strategy to protect air quality in the Blue Mountains region.

**Evening Work Session, April 21, 1994**

**1. La Grande air quality non-attainment area: status report.**

At the evening Commission meeting at Eastern Oregon State College, Mr. Finneran summarized recent air quality improvements that have occurred in the La Grande PM<sub>10</sub> nonattainment area. He indicated that since 1989 when the area became nonattainment, the Department helped establish a citizens air quality committee, which began developing control strategies primarily for residential woodstoves and windblown dust that would bring La Grande into attainment by 1994. The result of these controls has been that no air quality violations have occurred since 1991, and the city is on track in meeting federal air quality standards and by the end of this year.

Mr. Finneran then introduced Bob Leonard, chair of the La Grande Air Quality Committee, who provided a brief summary of the committee activities since 1989. Chair Leonard described the extensive and innovative public education program that has been developed by the committee to increase public awareness of the air quality problem in La Grande, with emphasis on the need to reduce woodstove emissions. Chair Leonard mentioned that in addition to public education the committee was involved in La Grande's voluntary woodstove curtailment and woodstove change out loan programs and that all of these programs will need continued funding for future operation. Mr. Finneran commented that Chair Leonard and the committee have been instrumental in making these programs successful and reducing pollution levels in La Grande. Director Hansen offered his praise for the work and success that the La Grande Air Quality Committee has achieved.

**2. Grande Ronde watershed activities: information report.**

This was an informational item to give the Commission the opportunity to hear about the various activities underway in the Grande Ronde basin and to hear from some of the local officials on their perspectives of these activities. Andy Schaedel of the Department's Water Quality Division began the presentation with an introduction. Some of the major activities in the basin related to water quality include an intensive water quality study and the setting of total maximum daily loads (TMDLs) by the Department, a model watershed program with local, state, tribal and federal participation, and the Governor's Watershed Health Initiative program.

Debra Sturdevant, Water Quality Division, briefly provided some background on the basin, native fish species, water quality problems and timeline for establishing TMDLs. The Department conducted intensive water quality studies in the Grande Ronde and its major tributaries above Elgin in 1991 to 1993. The primary parameters of concern include pH, dissolved oxygen and temperature.

Mitch Wolgamott, the Department's staff person in La Grande, spoke about the watershed health program. The Grande Ronde is one of two basins in the state selected for interagency focus and funding to protect and enhance ecosystem health on a holistic rather than species-by-species basis. Mr. Wolgamott also mentioned some of the projects being funded in the basin by the watershed health program or with the Department's nonpoint source (319) funding from the U. S. Environmental Protection Agency (EPA).

Speakers from the basin included John Howard, Union County Commissioner and Chair of the Grande Ronde Model Watershed Board of Directors; Bob Horton, Director of the Model Watershed program; Arleigh Isley, Wallowa County Court Judge; and Ron Gross, Public Works Director from the City of La Grande. These speakers told the Commission about their participation in activity related to water quality and watershed health, as well as some of their interactions with the Department.

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### Breakfast and Regular Meeting, April 22

Members of the Environmental Quality Commission, Department staff and local officials met for breakfast at 7:30 a.m. in Room 203, Hoke College Center, Eastern Oregon State College, La Grande, Oregon. Informal discussion topics included introductions and remarks from local officials and a report from the Department's Eastern Region Office, Pendleton staff.

The Environmental Quality Commission regular meeting was convened at 9:30 a.m. on Friday, April 22, 1994, in Room 201, Hoke College Center, Eastern Oregon State College, La Grande, Oregon. The following commission members were present:

William Wessinger, Chair  
Emery Castle, Vice Chair  
Henry Lorenzen, Commissioner (arrived at approximately 11:30 a.m.)  
Linda McMahan, Commissioner  
Carol Whipple, Commissioner

Also present were Michael Huston, Assistant Attorney General, Oregon Department of Justice, Fred Hansen, Director, DEQ, and other DEQ staff.

**Note:** Staff reports presented at this meeting, which contain the Department's recommendations, are on file in the Office of the Director, DEQ, 811 S. W. Sixth Avenue, Portland, Oregon 97204. Written material submitted at this meeting is made a part of this record and is on file at the above address. These written materials are incorporated into the minutes of the meeting by reference.

Chair Wessinger called the meeting to order.

**NOTE:** Since two commissioner members did not receive the minutes, a quorum could not be obtained for voting until Commissioner Lorenzen arrived. Action was taken on the minutes following consideration of agenda item D.

**B. Approval of tax credits.**

The Department recommended issuance of the following tax credit applications:

Application Number	Applicant	Description
TC 3291	The Bag Connection	A Reclaimed Plastics facility consisting of an injection mold for plastic product.
TC 3906	The Bag Connection	A Reclaimed Plastics facility consisting of backing plates for plastic product molds.
TC 4136	Dayton Sand and Gravel	An Air Quality facility consisting of a Gencor-Bituma baghouse for controlling emissions from an asphalt plant.
TC 4187	Happy Danes Quality Auto Repair, Inc.	A Solid Waste pollution control facility consisting of an antifreeze recycling machine.
TC 4217	William J. Stellmacher	A Field Burning (Air Quality) facility consisting of a Rear's 15' grass vacuum implement to clean grass seed acreage after the majority of straw has been removed in baled form.

**Tax Credit Application Review Reports With Facility Costs Over \$250,000:**

Application Number	Applicant	Description
TC 4204	Wilco Farmers, Inc.	An Air Quality facility consisting of baghouses, ductwork and plastic stripping to control the emission of particulate generated from the processing and shipping of grass seed.
TC 4207	Eichler Hay Company	A Field Burning (Air Quality) facility consisting of straw storage buildings (5), balers (3), stackers (2), squeezes (2), trailers (2) and a truck for a custom baling business.

Commissioner Castle moved approval of the above-listed tax credit applications; Commissioner Whipple seconded the motion. The motion was approved with four yes votes.

**C. Information report: project for improving effectiveness in technical assistance and pollution prevention.**

Marianne Fitzgerald, Pollution Prevention Coordinator for the Department, provided an overview of this project. Ron Gross, Public Works Director for the City of La Grande, also provided comments on the Department's efforts to improve technical assistance delivery. This presentation was an informational item on how to incorporate pollution prevention incentives into all interactions so that the regulated community's choices favor pollution prevention over pollution control. Commissioner Wessinger asked how this is different from how the Department is currently operating. Director Hansen pointed out that most of the nation's environmental budget is spent on pollution control, and the Department is trying to encourage companies and individuals to make greater investments in pollution prevention efforts which go beyond meeting the letter of the law. Advances in technology and improved awareness among individuals make this more feasible now than several years ago. The Department is also taking more of a systems approach to environmental management instead of the traditional command and control approach to air and water quality and waste management programs.

**NOTE:** Agenda Item H was considered after Agenda Item J.

**E. Rule adoption: permanent Title V permit fee rules.**

These proposed rules were a required element of the Federal Operating Permit Program submittal package due to the EPA before November 15, 1993. In order to meet this federal deadline, the Department recommended that the Commission adopt these rules as temporary rules at their October 29, 1993, meeting. The Department then took the rules out to public hearing and is now returning to the Commission to propose permanent rule adoption.

In order to have a fully approved Federal Operating Permit Program submittal, the Department must have the authority to include all federally applicable requirements in permits. One of these requirements is the National Emission Standards for Hazardous Air Pollutants (NESHAP) for asbestos. While the Commission's existing asbestos rules meet or exceed the federal requirements in most respects, the rules do not include one provision of the federal asbestos NESHAP relating to asbestos surveys prior to demolition.

The Department recommended the Commission adopt the rules/rule amendments regarding Federal Operating Permit Program Fees, Enforcement, Federal Operating Permits and Asbestos Survey Requirements as presented in Attachment A of the Department's staff report.

Dave Berg of the Department's Air Quality Division provided a brief explanation about permitted versus actual levels of air contaminant discharges. Director Hansen and Mr. Berg explained that companies always have the opportunity to discharge at permitted levels but cannot sell any unused emission space.

Commissioner McMahan moved approved of the proposed Federal Operating Permit Program Fee rules and Asbestos Survey Rules; Commissioner Whipple seconded the motion. The motion was passed with four yes votes.

**F. Rule adoption: amendments to field burning rules (Willamette Valley).**

The proposed rules amend existing field burning rules (Division 26) specifically, the open field burning, propane flaming and stack burning portions of the rules. The rule amendments respond to legislation (House Bill 2211) and make clarifications intended to ease rule administration.

The Department recommended that the Commission adopt the rules/rule amendments regarding the open field burning, propane flaming and stack burning as presented in Attachment A of the Department's staff report.

Steve Crane from the Department's Western Region Office, Salem, was available for Commission questions. Mr. Crane also suggested a wording change to the rules. The proposed new wording is provided below.

**Page A-8 of the proposed rules, item 44 and Page A-15, (e):**

Old Language:

"Stack burning permit" means a permit issued by the Department pursuant to ORS 468A.575 ~~and~~ that ~~consisting of a validation number~~ identifies the responsible person, date and time of permit issuance, and specifies the ~~conditions and~~ acreage and location authorized ~~specifically registered~~ for stack or pile burning.

New Language:

"Stack burning permit" means a permit issued by the Department pursuant to ORS 468A.575 ~~and~~ that ~~consisting of a validation number~~ identifies the responsible person~~[-]~~ and date ~~and time~~ of permit issuance, and specifies the ~~conditions and~~ acreage and location authorized ~~specifically registered~~ for stack or pile burning.

Commissioner Castle moved approval as amended of the proposed amendments to field burnings rules for the Willamette Valley; Commissioner Whipple seconded the motion. The motion was pass with four yes votes.

**G. Rule adoption: amendments to solid waste rules to incorporate changes required for federal Subtitle D implementation, changes in "annual" permit fees and other housekeeping changes.**

This proposed rule would establish new dates by which all existing land disposal sites have to provide financial assurance for closure and post-closure care; would require self-reporting and quarterly payments of the annual solid waste permit fee for larger facilities; would establish a \$500 renewal fee for letter authorizations and a new \$500 permit exemption determination fee; and other housekeeping changes.

The Department recommended the Commission adopt the rule amendments regarding solid waste permit fees and other changes to solid waste rules required by 1993 legislation as presented in Attachment A of the Department's staff report.

Mary Wahl of the Department's Waste Management and Cleanup Division provided a brief background for the Commission.

Commissioner Castle moved approval of the proposed amendments to solid waste rules to incorporate changes required for federal Subtitle D implementation, changes in annual permit fees and other housekeeping changes; Commissioner McMahan seconded the motion. The motion was passed with four yes votes.

**NOTE: Agenda H was discussed after Agenda Item J.**

**I. Status update: Northern Malheur County and Lower Umatilla Basin groundwater management areas.**

Rick Kepler of the Department's Water Quality Division introduced this topic. He identified the 1989 Groundwater Protection Act (House Bill (HB) 3515) as the legislative authority for conducting groundwater management area (GWMA) and other state groundwater activities. Most authority for implementing the Act resides with the Strategic Water Management Group (SWMG). Mr. Kepler outlined the GWMA process as identifying and confirming an area-wide groundwater contamination problem; the Department declaring a groundwater management area; SWMG appointing a local committee representing diverse local interests; state agencies conducting a technical groundwater investigation; the local citizen committee and state agencies developing an action plan to improve the groundwater quality for SWMG approval; and periodically reviewing and adjusting the action plan.

Ivan Camacho, Water Quality Division, discussed the northern Malheur County groundwater management area which is currently implementing an action plan. Mr. Camacho noted that implementing best practicable management practices (BMP) in the area has been successful to date. The effort includes a strong research and development program, public education, and an incentive program. Agricultural producers in the area have begun using recommended practices to protect groundwater from further contamination. Existing and future work includes continued BMP research and development, greater adoption of developed BMPs, more area-wide public education, continued groundwater monitoring, and relating BMP implementation to groundwater quality changes.



Dr. Clinton Schrock, superintendent, Oregon State University Malheur Experiment Station, and Ms. Kit Kamo, district manager, Malheur Soil and Water Conservation District, provided additional comments about the northern Malheur County Groundwater Management Area. Dr. Schrock provided some local land use history, and he presented some of the management practices being researched, promoted and adopted. Dr. Schrock noted practices are being adopted by local farmers, and he explained how new practices spread within the farming community in response to a question from Commissioner Lorenzen. Ms. Kamo thanked the Commission for traveling to eastern Oregon, and she invited members to come and see all the good work in progress to improve the groundwater quality in Northern Malheur County.

Jerry Grondin, Water Quality Division, presented the technical groundwater and land use investigation in the Lower Umatilla Basin groundwater management area. Mr. Grondin explained the purpose of the investigation is to provide a sufficient understanding of the land uses and groundwater occurrence, flow, chemistry and quality to enable the local citizen committee and state agencies to develop an effective action plan. The land use, hydrogeologic, and groundwater chemistry/quality complexities in the basin were highlighted and contrasted with northern Malheur County. The primary groundwater quality concern is nitrate and total dissolved solids. Additional concern may include sodium, arsenic and phosphate.

A list of sources contributing to the groundwater quality problem was presented which included irrigated agriculture; large animal feeding operations; established food processing land application sites; specific sites within the U.S. Army Depot; large on-site septic systems; and concentrated rural residential development with individual on-site septic systems. Some of these sources can be addressed through existing programs at the DEQ. However, the action plan could provide guidance or directives about how some of the DEQ programs are implemented in the Lower Umatilla Basin.

Commissioner Lorenzen concluded the topic discussion by noting the many areas that could be declared a groundwater management area, and he cautioned staff about declaring too many areas in eastern Oregon versus western Oregon.

The Commission was requested to accept the presentation as an informational item. No Commission action was required.

**D. Rule adoption: addition to chemical mining rules to require persons or entities who control a chemical mine permittee to assume liability for environmental injury, remediation expenses and penalties.**

This agenda item proposed adoption of a new rule which provides that the Department shall require, prior to issuing a chemical mining facility permit and as a condition of the permit, that those persons or entities who have the power to direct or exercise significant control over the management or policies of a chemical mine permittee also assume liability for any environmental injury, remediation expenses, and penalties which result as a consequence of activities that are associated with the permit. An exception to this requirement may be granted by the Commission pursuant to specific criteria in the rule. Such persons or entities may assume liability by joining with the permittee as a co-permittee or by such other means as the Commission, with advice of the Attorney General, may approve as being legally sufficient to protect the interests of the state and its citizens.

Fifteen persons provided testimony on the proposed rule during the hearing and comment process. Nine supported the rule; several opposed the rule and two proposed amendments.

In response to testimony, the Department proposed amendments to the original proposal to clarify its intent and application. In particular, the indicators of situations where a person or entity may be deemed to be in control of the permittee are more clearly defined. Situations where a person or entity is not deemed to fall under the definition of control are also defined. Attachment A of the staff report presented the rule with changes made in response to testimony reflected as additions and deletions.

The Department recommended that the Commission adopt the rule with amendments made in response to public testimony as presented in the left hand column of Attachment A of the staff report.

Commissioner Lorenzen asked for one additional amendment to section (2) of the proposed rule. He requested that the words "or renewing" be added after the word "issuing" in the third line of the section. The amended section would read:

- (2) Unless an exception is granted by the EQC pursuant to section (3) of this rule, and consistent with the provisions of section (4) of this rule, the Department shall require, prior to issuing or renewing a permit for a Chemical Mining facility, and as a condition of the permit, that those persons or entities who control the permittee assume liability for environmental injuries, remediation expenses, and penalties.

Two people presented testimony on the proposed rule. Roberta Bates, representing Grande Ronde Resources Council, supported adoption of the rule as proposed. Terry Drever-Gee, President of the Eastern Oregon Mining Association, commented on the extensive reclamation efforts being undertaken at the Bonanza Mine.

Commissioner Lorenzen moved that the proposed rule as presented in Attachment A and as amended by adding the words "or renewing" be adopted. The motion was seconded by Commissioner Castle and unanimously approved.

**B. Approval of the minutes.**

Commissioner Lorenzen moved approval of the March 10 work session and March 11 regular meeting minutes; Commissioner Whipple seconded the motion. The motion was approved with three yes votes and Commissioners Castle and McMahan abstaining.

**J. Information report on rule development by the Oregon Department of Agriculture (ODOA) for agricultural water quality management under SB 1010.**

Staff of the Oregon Department of Agriculture (ODOA) and DEQ presented information on SB 1010, the Agricultural Water Quality Management Program, adopted by the 1993 legislature. This bill gives the ODOA the authority to develop plans for preventing and controlling pollution from agricultural activity and soil erosion in certain areas, including TMDL basins, groundwater management areas and any other place where an agricultural water quality management plan is required by state or federal law. SB 1010 applies to Oregon's coastal areas which is required to have an enforceable nonpoint pollution control program, including agricultural activity by the federal Coastal Zone Management Act of 1990. SB 1010 gives the ODOA the authority to require actions by landowners to enforce the requirements and to collect fees for program funding. The ODOA has proposed administrative rules for the implementation of the program except for fee collection. The rules cover program definition and procedure but do not yet include basin plan rules for a specific basin.

SB 1010 was developed because the ODOA and DEQ were concerned about the lack of mechanisms to ensure that nonpoint source pollution would be controlled in TMDL basins and other areas experiencing water quality problems. Additionally, there is a lack of stable funding for ODOA's agricultural water quality management program. SB 1010 addresses both of these issues.

Since this was an information item only, no action was requested.

Phil Ward, Assistant Director of the ODOA, told the Commission that the ODOA had used a goal-oriented approach to the water quality management program. He said the department tried to accommodate those goals using a basin-by-basin strategy. He said voluntary initiatives were established up front and that ODOA would enforce the program rules swiftly and efficiently.

The Commission discussed several issues with Mr. Ward. Those issues included BMPs, monitoring and boundaries. Commissioner Castle indicated that the ODOA should examine rural lands that are not agricultural, and Commissioner McMahan stated that the agricultural and environmental groups do not often talk well with each other. She suggested improved communication and that communities be more involved in the program process.

Director Hansen indicated that the program was financed by the state's General Fund in ODOA's budget and that it would be appropriate to assess fees since the program involves regulatory activity. Mr. Ward added that the department expected to request fee authority in its 1995-97 budget. Mr. Schaedel said that the rules do not address fees.

**H. Potential rule under which exceptions may be granted to EQC (Environmental Quality Commission) rules.**

In response to a subject raised at an Commission retreat in October 1993, staff reviewed three alternatives for the Commission to add flexibility to program rules and numerical standards which do not already have variance or exception procedures. The alternatives are listed below.

1. Variance or appeal of rule or standard where the burden of proof is on the applicant;
2. Rule exception process initiated by the Department/Commission; and,
3. Narrative limits, presumably in rules, to replace numerical standards.

Staff analysis found the current structure of numerical standards, unequivocal policies, variances and appeals to generally be effective.

The Department recommended that current variance and appeals processes not be changed and asked the Commission to give direction for pursuing one or more of the three suggested alternatives.

Dennis Belsky from the Department's Wester Region Office, Medford, was available to answer Commission questions. Director Hansen provided a brief introduction to this item.

Commissioner Castle indicated that he would like to make a clarification, that when this subject was discussed at the retreat, alternate rule language was not considered. Instead, he believed the discussion would focus within the existing framework and would incorporate language to assist if standards were accomplishing goals. He said his suggestion to review this issue was not intended to weaken procedures. Commissioner Castle commented that the Commission seemed to have the most difficulty with procedures in non-flexible situations and more success when they could be flexible in their decision making. He suggested that this issue be tabled until after the three-basin rule evaluation is completed.

**K. Commission member reports.**

There were no Commission member reports.

The Commission did, however, thank Harold Sawyer for all his help, work and dedication. This meeting was the last Commission meeting for Mr. Sawyer since he will be retiring in May.

There was no further business, and the meeting was adjourned at 1:20 p.m.

**NOTE:** Director Hansen gave the following report to the Commission on the trip back to Portland.

**L. Director's report.**

Salt Caves Decision: The Oregon Supreme Court ruled in favor of the Environmental Quality Commission (EQC) in the Salt Caves dam appeal. The appeal resulted from a 1991 decision in which the DEQ denied water quality certification for the proposed project based on a rule that limits development-caused changes in the temperature of the river. The Department's decision was then appealed to the EQC. The EQC agreed with the Department and that decision was appealed to the Oregon Court of Appeals and then on to the Supreme Court.

Vehicle Inspection Boundary Expansion: The DEQ announced proposed changes in the Portland area vehicle inspection boundary on April 5. The proposed boundary would add several communities including Scappoose, Sandy and Newberg. The Department is holding a series of informal open houses to answer questions about the boundary expansion and will hold public hearings next month.

Lawsuit Filed Against UST Cleanup Contractor: The Attorney General filed a lawsuit on behalf of the DEQ against a contractor involved in underground storage tank (UST) cleanup work. The action alleges that an Albany business enterprise has fraudulently provided environmental cleanup services in Oregon involving that at least 30 cleanup sites.

The complaint alleges racketeering and violations of Oregon's unlawful trade practices act and environmental laws. Named as defendants are Kenneth R. "Bob" Cyphers and Sharel L. Cyphers of Corvallis and four businesses owned and operated by the Cyphers.

Kenneth Cyphers is licensed by the DEQ to supervise UST soil cleanup services. Hogate Drilling and UST Environmental Engineers are licensed as service providers under UST laws.

A temporary restraining order preventing Cyphers from doing business has been signed pending a court hearing.

The lawsuit alleges that the defendants violated racketeering law by committing multiple acts of forgery and falsifying business records, by submitting phoney reports from nonexistent testing laboratories and forging signatures of attesting chemists. Other allegations include false receipts from landfills. Investigators have discovered close to 100 phoney reports from two fictitious scientific laboratories, Field Enviro Lab Services and Sierra Chromalab.

The legal action is part of a continuing investigation involving the Attorney General's office, the DEQ, Oregon State Police, U.S. Attorney's office and EPA.

The Department has begun a review of the UST cleanup files and has identified 74 sites that used a Cyphers owned company. Most of the sites are in Linn and Benton counties. The Department is reviewing the files to determine whether the reports are sufficient to meet the requirements of the regulations, or whether additional work is necessary.

The DEQ is sending a letter to those property owners which says the Department has concerns about the accuracy of the environmental reports and will continue to investigate. The DEQ will notify the property owners as soon as the file review is complete and additional information is obtained.

Out-of-State Waste Decision: On April 4, the U.S. Supreme Court held that the Oregon surcharge on solid waste coming from out of state for disposal is invalid under the Commerce Clause of the U. S. Constitution. Those on the Commission in 1990 may remember the rule making which established the out-of-state waste fee based on the costs to the state for disposing of the waste. Many hours of advisory committee, economic consultants, staff and EQC time went into the rulemaking. The fee was immediately challenged by Oregon Waste Systems and Finley Buttes Landfill Company. Although the state won unanimous decision in the Oregon Court of Appeals and Supreme Court, the U.S. Supreme court basically found that even a compensatory fee was on its face discriminatory and only Congress, not individual states, can allow such fees.

It is possible that Congress will allow out-of-state fees as it considers a "RCRA light" bill this session. In 1993, Oregon imported 800,000 tons of waste, all from Washington.

Environmental Partnerships for Oregon: The DEQ's Livable Communities project has changed its name to Environmental Partnerships for Oregon to avoid confusion with other "livable communities" programs. An advisory committee has been established and community agreements have been signed with the Health Division and the two pilot cities, Nyssa and Powers. Although not a party to the agreements, the Economic Development Department is closely involved with the pilots and is participating with the advisory committee.

Both Nyssa and Powers have completed a self-diagnostic concerning their compliance with state and EPA regulations. In addition to wastewater treatment and safe drinking water, these small communities must be concerned with environmental regulations for sludge disposal, upgrading and cleanup of city-owned USTs, air quality (especially woodstove issues), the handling of hazardous wastes at city shops and solid waste disposal.

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In addition to multi-media coordination, multi-media education has quickly become an issue in the program. It is apparent that city staff, especially in small communities, have very limited time to learn about environmental regulations. DEQ staff will work on developing a comprehensive guidebook to state environmental regulations for local governments. The intent is to pursue this project concurrently with the pilots this year.

New Office Space: The Department has opened a one-person office in Hermiston to coordinate the permits for the Umatilla Army Depot incinerator. Sue Oliver has been hired to work with the citizens advisory committee and coordinate the Department's public information efforts.

The Eugene office is set to open the first week in May. Computers will be installed during the week and staff will be moving in soon after. The Dalles office could be open by mid-May. The Columbia Gorge Community College Board has approved an agreement to allow the DEQ to use temporary space while permanent office space at the college is remodeled.

Final negotiations are taking place for office space in Baker City. If all goes well, the Department will be co-locating with the Parks and Recreation Department in June.

Intended Use Plan: The proposed 1994 Intended Use Plan has been prepared for the EPA as part of the application to receive federal grant funds for the State Revolving Fund (SRF). The plan be finalized after May 9, 1994.

The SRF program offers low-cost loans to communities for the planning, design and construction of water pollution control facilities and for estuary management plans. Preliminary SRF loan application forms were sent to all cities, service districts and sanitary districts in the state. A total of 30 jurisdictions requested loans to carry out 37 different water pollution control projects in a total dollar amount of \$88,357,220.

If approved in its current form, the Intended Use Plan will allocate \$20,725,505 to new loans and increases to existing loans.



# Environmental Quality Commission

- Rule Adoption Item
- Action Item
- Information Item

Agenda Item B  
July 22, 1994 Meeting

**Title:**  
Approval of Tax Credit Applications

**Summary:**

New Applications - 19 tax credit applications with a total facility cost of \$ 504,894.00 are recommended for approval as follows:

- 2 Air Quality facilities with a total facility cost of:	\$ 12,972
- 7 CFC facilities costing:	\$ 18,558
- 4 Field Burning related facilities recommended by the Department of Agriculture with a total facility cost of:	\$ 303,980
- 1 Noise Pollution Control facility costing:	\$ 43,024
- 1 Hazardous Waste recycling facility costing:	\$ 4,158
- 4 UST Water Quality facilities with a total facility cost of:	\$ 122,202


There are no applications with claimed facility cost exceeding \$250,000 included in this report.

Included as Attachment B of this report is a memorandum that requests the Commission's approval of a standard approach to allocate the costs of grants received by applicants for UST tax credits between eligible and ineligible project costs on a proportional basis. The Department also recommends the transfer of tax credit certificate No. 3312 to Mary and Walter Eichler from the Eichler Hay Company. A letter requesting the transfer is included in this report.

**Department Recommendation:**

- 1) Approve issuance of tax credit certificates for 19 applications as presented in Attachment A of the staff report.
- 2) Approve the methodology presented in Attachment B for allocating grant assistance to determine certifiable facility costs.
- 3) Approve the transfer of tax credit certificate No. 3312 issued to the Eichler Hay Company to Mary and Walter Eichler, owners of the facility.

  
Report Author

  
Division Administrator

  
Director

July 5, 1994

\*Accommodations for disabilities are available upon request by contacting the Public Affairs Office at (503)229-5317(voice)/(503)229-6993(TDD).

State of Oregon  
Department of Environmental Quality

Memorandum<sup>†</sup>

Date: July 22, 1994

To: Environmental Quality Commission  
From: Fred Hansen, Director  
Subject: Agenda Item B, July 22, 1994 EQC Meeting  
Approval of Tax Credit Applications

Statement of the Need for Action

This staff report presents the staff analysis of pollution control facilities tax credit applications and the Department's recommendation for Commission action on these applications. The following is a summary of the applications presented in this report:

**Tax Credit Application Review Reports:**

Application	Applicant	Description
TC 2863	Jeld-Wen, Inc.	A noise pollution facility consisting of a barrier for a fan, a silencer and enclosure for a high pressure blower and insulation for a baghouse.
TC 3957	L & L Sawyer Painting And Sandblasting	Hazardous Waste solvent recovery equipment.
TC 4167	Joseph A. Huff dba Joe's Market	A UST facility consisting of two STI-P3 tanks and doublewall fiberglass piping, spill containment basins, a tank gauge system, an overfill alarm, automatic shutoff valves and Stage II vapor recovery piping.
TC 4211	Honke Heating & Air Conditioning	A CFC Air Quality facility consisting of a machine that removes and cleans air conditioner or commercial refrigerant coolant.

<sup>†</sup>A large print copy of this report is available upon request.

Application	Applicant	Description
TC 4212	Proudfoot Ranches, Inc.	A CFC Air Quality facility consisting of a machine that removes and cleans auto air conditioner coolant.
TC 4216	University Motors, Inc. dba University Honda	A CFC Air Quality facility consisting of a machine that removes, cleans and recharges automobile air conditioner coolant.
TC 4218	Peter Kyril	A UST facility consisting of four monitoring wells and one recovery well.
TC 4222	One Cent Profit Sales	A CFC Air Quality facility consisting of a machine that removes, cleans and recharges automobile air conditioner coolant.
TC 4223	The Heating Specialist, Inc.	A CFC Air Quality facility consisting of a machine that removes and cleans air conditioner or commercial refrigerant coolant.
TC 4229	Mike Strassel Mobile Repair	A CFC Air Quality facility consisting of a machine that removes and cleans automobile air conditioner coolant.
TC 4230	Bug Works, Inc.	A CFC Air Quality facility consisting of a machine that removes and cleans automobile air conditioner coolant.
TC 4231	Russell Oil Company	A UST facility consisting of three fiberglass tanks and doublewall fiberglass piping, spill containment basins, a tank gauge system, an overfill alarm, turbine leak detectors, monitoring wells, sumps and automatic shutoff valves.
TC 4234	Neils Jensen Farms	An Air Quality Field Burning facility consisting of a model 2620 Bush Hog Mower, a Model 8850 John Deere Tractor and a 27 ft. # 225 Dow Kello-Bilt Disc.
TC 4236	James VanLeeuwen	An Air Quality Field Burning facility consisting of JD 4960 MFWD tractor.

Application	Applicant	Description
TC 4237	Floyd Smith	An Air Quality Field Burning facility consisting of a G-K 3W 600 Swamp Buggie Herbicide Applicator.
TC 4239	Stein Oil Company, Inc.	An Air Quality facility consisting of an above ground stage II vapor recovery system.
TC 4240	Stein Oil Company, Inc.	A UST facility consisting of the epoxy lining of three steel underground storage tanks.
TC 4241	Stein Oil Company, Inc.	An Air Quality facility consisting of an above ground stage II vapor recovery system.
TC 4247	James VanLeeuwen	An Air Quality field burning facility consisting of a Rear's straw vacuum.

**Tax Credit Application Review Reports With Facility Costs Over \$250,000 (Accountant Review Reports Attached): There are none in this report.**

**Background**

Included in this report is TC 4167, Joseph A. Huff, a request for pollution control tax credit relief for a water pollution control facility involving underground storage tanks. The applicant received an essential services grant from the Department to complete the facility. A memorandum, Attachment B to this report, requests that the Commission approve a methodology recommended by the Department whereby the amount of the grant is prorated in direct proportion to the share of eligible and ineligible costs of the project to reduce the amount of the certifiable cost of tax relief. The Department recommends the Commission approve this approach for TC 4167 and for future tax credit requests of this nature.

**Authority to Address the Issue**

ORS 468.150 through 468.190 and OAR 340-16-005 through 340-16-050 (Pollution Control Facilities Tax Credit).

ORS 468.925 through 468.965 and OAR 340-17-010 through 340-17-055 (Reclaimed Plastic Product Tax Credit).

**Alternatives and Evaluation**

None.

**Summary of Any Prior Public Input Opportunity**

The Department does not solicit public comment on individual tax credit applications during the staff application review process. Opportunity for public comment exists during the Commission meeting when the applications are considered for action.

**Conclusions**

- o The recommendations for action on the attached applications are consistent with statutory provisions and administrative rules related to the pollution control facilities and reclaimed plastic product tax credit programs.
- o Proposed July 22, 1994 Pollution Control Tax Credit Totals:

<u>Certificates</u>	<u>Certified Costs*</u>	<u>Certified Allocable Costs**</u>	<u>No.</u>
Air Quality	\$ 12,972	\$ 12,972	2
CFC	18,558	17,149	7
Field Burning	303,980	250,877	4
Hazardous Waste	4,158	4,158	1
Noise	43,024	43,024	1
Plastics	0	0	0
SW - Recycling	0	0	0
SW - Landfill	0	0	0
Water Quality	0	0	0
UST	<u>122,202</u>	<u>105,943</u>	<u>4</u>
<b>TOTALS</b>	<b>\$ 504,894</b>	<b>434,123</b>	<b>19</b>

o Calendar Year Totals Through June 3, 1994:

<u>Certificates</u>	<u>Certified Costs*</u>	<u>Certified Allocable Costs**</u>	<u>No.</u>
Air Quality	\$ 2,620,560	\$ 2,620,560	6
CFC	\$ 17,760	\$ 15,644	7
Field Burning	\$ 1,263,495	\$ 481,036	6
Hazardous Waste	0	0	0
Noise	0	0	0
Plastics	\$ 362,777	\$ 362,777	10
SW - Recycling	\$ 436,972	\$ 436,972	3
SW - Landfill	\$ 0	0	0
Water Quality	\$ 364,576	\$ 364,576	4
UST	<u>\$ 1,211,530</u>	<u>\$1,211,530</u>	<u>14</u>
<b>TOTALS</b>	<b>\$ 6,277,670</b>	<b>\$5,360,230</b>	<b>50</b>

\*These amounts represent the total facility costs. To calculate the actual dollars that can be applied as credit, the total facility cost is multiplied by the determined percent allocable of which the net credit is 50 percent of that amount.

\*\*These amounts represent the total eligible facility costs that are allocable to pollution control. To calculate the actual dollars that can be applied as credit, the certifiable allocable cost is multiplied by 50 percent.

**Recommendation for Commission Action**

It is recommended that the Commission approve certification for the tax credit applications as presented in Attachment A of the Department Staff Report. The Department also recommends approval of the methodology for allocating the costs of grant assistance presented in Attachment B of this report. In addition, the Department recommends approval of a request to transfer certificate No. 3312 (TC 4207) from the Eichler Hay Company to Mary and Walter Eichler, the owners of the tax credit facility.

**Intended Followup Actions**

Notify applicants of Environmental Quality Commission actions.

Memo To: Environmental Quality Commission  
Agenda Item B  
July 22, 1994 Meeting  
Page 6

**Attachments**

- A. Pollution Control Tax Credit Application Review Reports.
- B. Memorandum on a proposed method to allocate UST grants.
- C. Request for transfer of a Pollution Control Facility Certificate.

**Reference Documents (available upon request)**

- 1. ORS 468.150 through 468.190.
- 2. OAR 340-16-005 through 340-16-050.
- 3. ORS 468.925 through 468.965.
- 4. OAR 340-17-010 through 340-17-055.

Approved:

Section:



Division: \_\_\_\_\_

Report Prepared By: Charles Bianchi

Phone: 229-6149

Date Prepared: July 5, 1994

Charles Bianchi  
GW\WC12\WC12698.5  
July 5, 1994

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Jeld-Wen, Inc.  
P.O. Box 1329  
Klamath Falls, OR 97601

The applicant grades, rips, cuts, and finger-joints dimension lumber into stock for milling into windows, doors, and frame components.

Application was made for tax credit for a noise pollution control facility installed at the applicant's Bend, Oregon, Cascade Forest Products plant.

2. Description of Facility

The claimed facility controls the noise generated from the material transport system and the air pollution control baghouse. The facility consists of a barrier for the fan, a silencer and enclosure for the high pressure blower, and insulation for the baghouse cone section, ducting, and small cyclone.

Claimed Facility Cost: \$43,023.90

Accountant's certification was provided.

The applicant indicated that the useful life of the facility is 20 years.

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 on April 21, 1989, more than 30 days before construction commenced on February 22, 1990.
- b. The request for preliminary certification was approved before application for final certification was made.
- c. Construction and installation of the facility was substantially completed on August 10, 1992 and the facility was placed into operation on August 8, 1990. The application for final certification was submitted to the Department on April 26, 1994, within two years of substantial completion of the facility. The application was considered to be complete on June 14, 1994.



#### 4. Evaluation of Application

##### a. Rationale For Eligibility

The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the Department to control noise pollution. This is in accordance with OAR Chapter 340, Division 35, Rule 035.

The noise abatement measures were performed in response to a Notice of Violation and Intent to Assess Civil Penalty issued by the Department on November 9, 1989. Noise measurements conducted at an adjacent noise sensitive property on September 26, 1989, indicated exceedance of Department noise standards. A minimum sound pressure of 69.6 dBA was recorded. Department noise rules require that, in this case, a sound pressure of 50 dBA not be exceeded more than 50%, (L50), of the time. The inspection of the applicant's mill observed that the particle collection system was the source of this sound.

On December 5, 1989, the applicant submitted a compliance schedule to remediate the noise violation. On December 26, 1989, the Department responded that the compliance schedule was satisfactory with one stipulation. The applicant had proposed that a certified acoustical engineer perform a compliance test after the construction of the sound remediation improvements. The Department required the applicant to submit the results of this test. On August 2, 1990, the applicant notified the Department that noise control improvements had been installed. The applicant also noted that the noise levels, as measured by their own employees, had improved significantly but still exceeded noise standards. At this time the applicant requested an exception to OAR 340-35-35. The applicant did not justify this exception request and the compliance tests were not conducted by an independent acoustical consultant as required in the compliance schedule. The exception request was not granted by the Department. On July 22, 1992, the Department set a deadline of September 11, 1992, for completion of the compliance test. The Department instructed the applicant to submit a formal request for an exception if the facility did not meet department sound standards by this date.

On August 10, 1992, the applicant submitted the results of the compliance test and formal request for an exception to OAR 340-35-35. The compliance test was performed by Daly-Standlee & Associates, Inc. The test showed the Cascade Forest Products plant to be in compliance with OAR 340-35-035 with the exception of the back of the Cimarron Motel along the east side of 2nd Street. The consultant demonstrated a technical violation of section 035 in this location. However the consultant presented a viable case that the intent of section 035 was not violated. OAR 340-35-035 was written with a 55 dBA daytime outdoor maximum allowable sound level. The noise measurements conducted by the consultant shows, for both day and night, the highest of the L50 noise level readings are 62.5 dBA. The consultant pointed out that this strip of property consists of a 15 foot landscaped strip which lies between the back of the motel and 2nd Street. There are no daytime activities conducted in this area. The

noise measurements conducted by the consultant inside the motel room demonstrated noise levels at the head of the bed with windows open to be 38 to 40 dBA. OAR 340-35-035 was written with a 50 dBA nighttime outdoor maximum allowable level. The assumption of this rule is there would be a 10 dBA drop from outdoors to indoors. The intent of this level was to protect sleeping by insuring an indoor level of 40 dBA, which is met in this case.

The City of Bend Planning Department provided the applicant with a Land Use Compatibility Statement on November 16, 1992. The statement referred to Cascade Forest Products as being allowed subject to siting, design, construction, or operational standards. The statement went on to say that, "The City has not received any complaints regarding noise from property owners in the IL or other zones that are adjacent to Cascade Forest Products, therefore, this facility complies with the City's IL ordinance."

The Department reviewed the request for exception to OAR 340-35-035 and on January 11, 1993, the Director authorized an exception with the following restrictions:

1. All currently existing noise controls shall remain in place and be kept in a good state of repair.
2. Future plant modifications shall not be allowed to increase presently existing noise impacts at any noise sensitive property including the motel.

The claimed facility consists of a sound barrier, a silencer, insulation and sheet metal. The pneumatic transport system generates noise through the movement of wood chips through the ducting and the cyclone leading to the baghouse. The ducting, the cyclone, and the baghouse were wrapped in two inches of rock wool acoustical insulation with an aluminum backing to muffle the noise of the moving wood. The fan and motor which provide the air pressure to the pneumatic transport system is also a problem source of noise. A silencer encases the high pressure blower. A barrier enclosure was installed around the exhaust fan for the baghouse. The enclosure has four sides to trap and absorb the sound generated by the baghouse fan.

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 applicant indicates on the application that there is no income or savings from the facility, so there is no return on investment.

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

The claimed facility muffles and redirects sound pressure. These methods are technically recognized as acceptable to remediate noise impacts.

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

The applicant indicated that there were no savings or increases in cost 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 pollution.

There are no other factors to consider in establishing the actual cost of the facility properly allocable to reduction of pollution. The principal purpose of the facility is to prevent a substantial quantity of noise 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 Department to control noise pollution.
- c. The facility complies with DEQ statutes, rules, and permit conditions.
- d. The portion of the facility cost that is 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 \$43,024 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-2863.

Tonia C. Garbowsky  
PRC Environmental Management, Inc.  
June 14, 1994

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

L&L Sawyer Painting and Sandblasting  
174 Sawyer's Lane  
Roseburg, OR 97470

The applicant owns and operates a painting and sandblasting company.

Application was made for a tax credit (TC-3957) for a hazardous waste recycling facility.

2. Description of Facility

The facility consists of a hazardous waste solvent recovery system (solvent distillation unit) surrounded by a metal cage to control access. The solvent recovery system recycles contaminated paint and lacquer thinner, recovering clean re-usable solvent and sludge waste. Previously, contaminated paint and lacquer thinner was shipped to a hazardous waste disposal site.

The claimed facility cost has been adjusted by the Department as described below.

Claimed Facility Cost: \$4,322.00

Adjusted Claimed Facility Cost: \$4,322.00-\$164.00 (transportation) = \$4,158.00

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:

Construction of the facility was substantially completed in June 1992 and the application for final certification was found to be complete on May 18, 1994, within two years of

substantial completion of the facility.

4. Evaluation of Application

a. The facility is eligible for final tax credit certification because the sole purpose of the facility is to prevent, control, and substantially reduce the quantity of hazardous waste produced. This prevention and/or control and reduction is accomplished by the use of a spent solvent reclamation system that substantially reduces or eliminates hazardous waste as defined in ORS 466.005.

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 recovers a usable commodity.

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

There is no return on investment. The cost for operating the equipment exceeds the value of the usable, reclaimed solvent.

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

None.

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

The facility recovers re-usable thinner and lacquer wash from hazardous wastes,

L&L Sawyer Painting and Sandblasting  
TC 3957  
May 18, 1994

D001 and F005. If recovery of the re-usable solvent did not occur, the volume of hazardous wastes, D001 and F005 generated would be greater.

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for final tax credit certification because the sole purpose of the facility is to prevent and/or control and substantially reduce the quantity of hazardous waste. This prevention, control, and reduction is accomplished by a waste solvent recovery system that substantially reduces or eliminates hazardous waste as defined in ORS 466.005.
- c. The facility complies with applicable DEQ statutes, 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 \$4,158.00, 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-3957.

Gary Calaba:gjc  
TC3957  
(503) 229-6534  
May 18, 1994

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Joseph A. Huff  
Joe's Market  
15525 Ferns Corner Rd.  
Dallas, OR 97338

The applicant owns and operates a retail gas station at 373 N. Main, Falls City, OR, Facility No. 2611.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks. The application included related air quality Stage II vapor recovery piping.

This applicant also received an 85% not to exceed \$85,000 essential services grant through DEQ's Underground Storage Tank Financial Assistance Program.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are two STI-P3 tanks and doublewall fiberglass piping, spill containment basins, tank gauge system, overfill alarm, automatic shutoff valves and Stage II vapor recovery piping.

Claimed facility cost	\$55,574
(Accountant's certification was provided)	

The Department has determined that 15 percent of the claimed facility cost of \$55,574 is the actual cost to the applicant when adjustment is made for an essential services grant awarded the project under DEQ's UST financial assistance program (see Attachment A for details of percent calculation). Thus, the Department concludes that an adjusted claimed facility cost of \$8,590 is eligible to be claimed as a tax credit with a breakdown as follows:

	Claimed Facility Cost	Percent Adjustment (see attach. A, item F.)	Adjusted Claimed Facility Cost
STI-P3 tanks & fiberglass pipe	\$12,261	15%	\$1,895
Spill containment basins	444	"	69
Tank gauge system	5,201	"	804
Stage II vapor recovery	289	"	45
Labor & materials (incl. overfill alarm & automatic shutoff valves)	37,379	"	5,777
Total	\$ 55,574	15%	\$ 8,590

### 3. Procedural Requirements

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

The facility was substantially completed on September 1, 1992 and placed into operation on September 1, 1992. The application for certification was submitted to the Department on November 2, 1993 and was considered to be complete and filed on June 10, 1994, within two years of the completion date of the project.

### 4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air. This is accomplished by preventing releases into soil, water or air. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of two steel tanks and piping with no corrosion protection and no spill and overfill prevention or leak detection equipment.

To respond to Air Quality regulations under OAR 340-22-400 - 403 and Underground Storage Tank requirements under OAR 340-Division 150, the applicant installed:



- 1) For corrosion protection - STI-P3 tanks and doublewall fiberglass piping.
- 2) For spill and overflow prevention - Spill containment basins, overflow alarm and automatic shutoff valves.
- 3) For leak detection - Tank gauge system.
- 4) For VOC reduction - Stage II vapor recovery piping.

Contamination found at the site was reported to DEQ. Cleanup is completed.

Based on information currently available, the applicant is in compliance with all applicable DEQ regulations in that these tanks are permitted and fee payments are current.

The Department concludes that the costs claimed by the applicant (adjusted to \$8,590) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

In determining the percent of the eligible 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 equipment 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 annual percent return on investment as the applicant claims no gross annual income from the facility.

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

The applicant determined there were no feasible alternatives to tank replacement. The methods chosen are acceptable for meeting the requirements of federal regulations.

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

The applicant claims no savings or increase in costs as a result of the installation.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to pollution control.

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

The actual cost of the facility properly allocable to pollution control is determined by using these factors as displayed in the following table:

	Adjusted Eligible Facility Cost	Percent Allocable	Amount Allocable
	_____	_____	_____
<u>Corrosion Protection:</u>			
STI-P3 tanks and fiberglass piping	\$1,895	42% (1)	\$ 796
<u>Spill &amp; Overfill Prevention:</u>			
Spill containment basins	69	100	69
<u>Leak Detection:</u>			
Tank gauge system	804	90 (2)	724
Stage II vapor recovery piping	45	100	45
Labor & materials (incl. overfill alarm & automatic shutoff valves	5,777	100	5,777
	_____	_____	_____
Total	\$ 8,590	86%	\$ 7,411

- (1) The Department has determined the percent allocable on the cost of a corrosion protected tank and piping system by using a formula based on the difference in cost between the protected tank and piping system and an equivalent bare steel system as a percent of the protected system.

Applying this formula to the costs presented by the applicant, where the protected system cost is \$12,261 and the bare steel system is \$7,107, the resulting portion of the eligible tank and piping cost allocable to pollution control is 42%.

- (2) The applicant's cost for a tank gauge system is reduced to 90% of cost based on a determination by the Department that this is the portion properly allocable to pollution control since the device can serve other purposes, for example, inventory control.

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air. This is accomplished by preventing releases in soil, water or air. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 86%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$8,590 with 86% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4167.

Barbara J. Anderson  
(503) 229-5870  
June 10, 1994

ATTACHMENT A.

TAX CREDIT/GRANT ADJUSTED FACILITY COST WORKSHEET  
APPLICATION NO. TC-4167

JOE'S MARKET  
373 N. Main  
Falls City, OR  
Facility No. 2611

A. TOTAL STATE GRANT AWARDED TO APPLICANT: \$62,645

B. PROJECT EQUIPMENT AND COSTS:	UST PROJECT WORK ELIGIBLE FOR GRANT	POLLUTION CONTROL EQUIPMENT ELIGIBLE FOR TAX CREDIT	ADJUSTED EQUIPMENT COSTS (Using % in F. below)
STI-P3 tanks and fiberglass piping	\$12,261	\$12,261	\$1,895
Spill containment basins	444	444	69
Tank gauge system	5,201	5,201	804
Stage II vapor recovery piping	289	289	45
Labor & materials (incl. overfill alarm and automatic shutoff valves)	37,379	37,379	5,777
Fuel pumps	2,000	0	0
Contaminated soil/groundwater cleanup costs	16,126	0	0
C. TOTAL PROJECT COST	\$73,700	\$55,574	\$8,590

D. CALCULATION OF APPLICANT'S ACTUAL EQUIPMENT COST AND ADJUSTMENT PERCENT:

1. Equipment costs eligible for tax credit  
as a percent of total project cost:  $\$55,574 / 73,700 = 75\%$

2. Portion of State grant applicable to equip-  
ment costs eligible for tax credit:  $\$62,645 \times .75 = \$46,984$

E. APPLICANT'S ACTUAL EQUIPMENT COST:  $\$55,574 - 46,984 = \$8,590$

F. Applicant actual equipment cost as a percent:  $\$8,590 / 55,574 = 15\%$

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

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1. Applicant

Honke Heating & Air Conditioning  
840 NE Cleveland  
Gresham, OR 97030

The applicant owns and operates a heating and air conditioning service and installation company in Gresham, Oregon.

Application was made for tax credit for an air pollution control facility which is owned by the applicant.

2. Description of Facility

Facility is a machine which removes and cleans air conditioner or commercial refrigerant coolant. The machine is self contained and includes pumps, tubing, valves and filters which rid the spent coolant of oil, excess air, water, acids and contaminant particles.

The applicant has identified the useful life of the equipment to be ten years.

Claimed Facility Cost: \$2750.00  
(Costs have been documented)

3. Procedural Requirements

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

Installation of the facility was substantially completed on March 9, 1992. The facility was placed into operation on March 9, 1992. The application for final certification was submitted to the Department on February 7, 1994. The application was found to be complete on February 7, 1994 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 comply with a requirement imposed by the Environmental Protection Agency to reduce air pollution. This reduction is

accomplished by capturing and/or recycling air contaminants, as defined in ORS 468.275. The requirement is to comply with Section 608 of the 1990 Clean Air Act Amendments. Section 608 prohibits the venting of a Class I or Class II ozone depleting substance in the course of maintaining, servicing, repairing, or disposing of an appliance or industrial process refrigeration.

The EPA has specified standards equipment manufactured before January 1, 1993 would have to meet to be grandfathered under the EPA's planned regulations. The standards require the equipment be capable of achieving a vacuum able to sustain either four or twenty-five inches of Mercury. High pressure equipment will need to sustain a four inch vacuum. Low pressure equipment will need to sustain a twenty-five inch vacuum. The claimed facility meets these standards.

b. Eligible Cost Findings

In determining the percent of the 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 recovery and recycling machine serves two purposes. It prevents the release of spent refrigerant to the environment, thereby meeting EPA regulations requiring capture of this air contaminant. Second, it provides a means to recover and clean waste coolant for reuse.

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

The percent return on investment from facility use was calculated using coolant cost and retrieval rate data from the applicant and generic cost of facility operations estimated by the Department.

Specifically, the applicant estimated the income to applicant from the sale of recycled

coolant at \$1.65/pound. The applicant estimated an annual coolant recovery rate of 400 pounds.

In estimating the operating costs for use of the recovery and recycling machine, the Department developed a standardized methodology which considers the following factors:

- o Electricity consumption of machine
- o Additional labor to operate machine
- o Machine maintenance costs

Based on these considerations, the applicant estimated the return on investment to be less than zero, in that machine operating costs exceeded income from the use of the machine.

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

The applicant has identified no alternatives.

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

There are savings from the facility to recover and/or reuse coolant. The applicant may use the recycled coolant in customer equipment. In this case the savings are tied to the displaced cost of virgin coolant. Alternately, the applicant could sell the coolant to an industrial coolant purification center. In this case the savings to the applicant are tied to the sales price of recovered coolant.

However, for this applicant increases in business operations and maintenance costs exceeded facility savings. These cost estimates are discussed in 2) above.

- 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 tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the EPA to reduce air pollution.
- c. The facility complies with Department standards 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 \$2750 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. 4211.

Dennis Cartier  
SJO Consulting Engineers  
June 13, 1994  
LEGAL\AH73576A



State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Proudfoot Ranches, Inc.  
Proudfoot Road  
Ione, OR 97843

The applicant owns and operates a grain and beef producing business in Ione, Oregon. Applicant does its own vehicle maintenance.

Application was made for tax credit for an air pollution control facility which is owned by the applicant.

2. Description of Facility

Facility is a machine which removes and cleans auto air conditioner coolant. The machine is self contained and includes pumps, tubing, valves and filters which rid the spent coolant of oil, excess air, water, acids and contaminant particles.

The applicant has identified the useful life of the equipment to be four years.

Claimed Facility Cost: \$2012.78  
(Costs have been documented)

3. Procedural Requirements

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

Installation of the facility was substantially completed on October 1, 1993. The facility was placed into operation on October 20, 1993. The application for final certification was submitted to the Department on February 11, 1994. The application was found to be complete on June 10, 1994, 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 comply with a requirement imposed by the Department, to reduce air pollution. This reduction is accomplished by

capturing and/or recycling air contaminants, as defined in ORS 468.275. The requirement is to comply with ORS 468.612-621 and OAR 340-22-410 to 415.

Eligible equipment must be certified by Underwriters Laboratory (UL) as meeting the requirements and specifications of UL1963 and the Society of Automotive Engineers (SAE) standards, J1990 and J1991, or other requirements and specifications determined by the Department as being equivalent. The facility meets these requirements.

b. Eligible Cost Findings

In determining the percent of the 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 recovery and recycling machine serves two purposes. It prevents the release of spent auto A/C coolant to the environment, thereby meeting Department regulations requiring capture of this air contaminant. Second, it provides a means to recover and clean waste coolant for reuse as an auto A/C coolant.

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

The percent return on investment from facility use was calculated using coolant cost and retrieval rate data from the applicant and generic cost of facility operations estimated by the Department.

Specifically, the applicant estimated the cost to applicant of virgin coolant at \$12.00/pound. The applicant estimated an annual coolant recovery rate of 40 pounds.

In estimating the operating costs for use of the recovery and recycling machine, the Department developed a standardized methodology

which considers the following factors:

- o Electricity consumption of machine
- o Additional labor to operate machine
- o Machine maintenance costs

Based on these considerations, the applicant estimated the return on investment to be less than zero, in that machine operating costs exceeded income from the use of the machine.

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

The applicant has identified no alternatives.

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

There are savings from the facility to recover and reuse coolant. The applicant may use the recycled coolant in its own vehicles. In this case the savings are tied to the displaced cost of virgin coolant. Alternately, the applicant could sell the coolant to a second shop where the coolant is used. In this case the savings to the applicant are tied to the sales price of recycled coolant.

However, for this applicant increases in business operations and maintenance costs exceeded facility savings. These cost estimates are discussed in 2) above.

- 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 tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department to reduce air 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 \$2013 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. 4212.

Dennis Cartier  
SJO Consulting Engineers  
LEGAL/AH73576G  
June 13, 1994

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

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1. Applicant

University Motors Inc  
dba University Honda  
2150 NW 9th Street  
Corvallis, OR 97330

The applicant owns and operates an automotive dealership with service and parts departments in Corvallis, Oregon.

Application was made for tax credit for an air pollution control facility which is owned by the applicant.

2. Description of Facility

Facility is a machine which removes and cleans auto air conditioner coolant. The machine is self contained and includes pumps, tubing, valves and filters which rid the spent coolant of oil, excess air, water, acids and contaminant particles.

The applicant has identified the useful life of the equipment to be five years.

Claimed Facility Cost: \$3400.00  
(Costs have been documented)

3. Procedural Requirements

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

Installation of the facility was substantially completed on December 4, 1992. The facility was placed into operation on December 4, 1992. The application for final certification was submitted to the Department on February 25, 1994. The application was found to be complete on June 9, 1994, within two 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 air pollution. This reduction is accomplished by capturing and/or recycling air contaminants, as defined in ORS 468.275.

Eligible equipment must be certified by Underwriters Laboratory (UL) as meeting the requirements and specifications of UL1963 and the Society of Automotive Engineers (SAE) standards, J2210, or other requirements and specifications determined by the Department as being equivalent. The facility meets these requirements.

- b. Eligible Cost Findings

In determining the percent of the 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 recovery and recycling machine serves two purposes. It prevents the release of spent auto A/C coolant to the environment, thereby meeting Department regulations requiring capture of this air contaminant. Second, it provides a means to recover and clean waste coolant for reuse as an auto A/C coolant.

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

The percent return on investment from facility use was calculated using coolant cost and retrieval rate data from the applicant and generic cost of facility operations estimated by the Department.

Specifically, the applicant estimated the income to applicant from the sale of recycled coolant at \$16.00/pound. The applicant estimated an annual coolant recovery rate of 10

pounds.

In estimating the operating costs for use of the recovery and recycling machine, the Department developed a standardized methodology which considers the following factors:

- o Electricity consumption of machine
- o Additional labor to operate machine
- o Machine maintenance costs

Based on these considerations, the applicant estimated the return on investment to be less than zero, in that machine operating costs exceeded income from the use of the machine.

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

The applicant has identified no alternatives.

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

There are savings from the facility to recover and reuse coolant. The applicant may use the recycled coolant in customer vehicles. In this case the savings are tied to the displaced cost of virgin coolant. Alternately, the applicant could sell the coolant to a second shop where the coolant is used. In this case the savings to the applicant are tied to the sales price of recycled coolant.

However, for this applicant increases in business operations and maintenance costs exceeded facility savings. These cost estimates are discussed in 2) above.

- 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 distinct portion of this automobile air conditioning coolant recovery and recycling equipment makes an insignificant contribution to the principal purpose of the claimed facility. This coolant recovery equipment has the capability to return (recharge) coolant to automobile air conditioning systems. Recharge capabilities in coolant recovery and recycling equipment is not required by state or federal law. The additional expense incurred in the purchase of equipment with recharge capabilities is not allocable to pollution control. The Department estimates the additional expense incurred is \$700.00.

The actual cost of the facility properly allocable to pollution control as determined by using these factors is 79%.

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for tax credit certification in that the sole purpose of the facility is to reduce air 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 79%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$3400 with 79% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. 4216.

Dennis Cartier  
SJO Consulting Engineers  
June 13, 1994  
LEGAL\AH73576B



State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Peter Kryl  
2185 West 29th Ave.  
Eugene, OR 97405

The applicant owns and operates a retail gas station at 1888 Franklin Blvd., Eugene, OR, Facility No. 582.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are four monitoring wells and one recovery well.

Claimed facility cost \$5,568  
(Documentation of cost 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 was substantially completed on March 19, 1993 and placed into operation on March 19, 1993. The application for certification was submitted to the Department on March 2, 1994 and was considered to be complete and filed on June 3, 1994, within two years of the completion date of the project.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is

accomplished by preventing releases into soil and water. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of three steel tanks, one of which was epoxy lined, steel piping with no corrosion protection, one spill containment basin and no leak detection equipment.

To respond to Underground Storage Tank requirements under OAR 340-Division 150, the applicant installed:

- 1) For leak detection - Monitoring wells and a recovery well.

Based on information currently available, the applicant is in compliance with all applicable DEQ regulations in that these tanks are permitted and fee payments are current.

The Department concludes that the costs claimed by the applicant (\$5,568) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

In determining the percent of the eligible 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 equipment 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 annual percent return on investment as the applicant claims no gross annual income from the facility.

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

The applicant stated that no alternatives were available. The methods chosen are acceptable for meeting the requirements of federal regulations.

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

The applicant claims no savings or increase in costs as a result of the installation.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to pollution control.

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

The actual cost of the facility properly allocable to pollution control is determined by using these factors as displayed in the following table:

	Eligible Facility Cost	Percent Allocable	Amount Allocable
<u>Leak Detection:</u>			
Monitoring/recovery wells	\$5,568	100%	\$5,568
Total	\$5,568	100%	\$5,568

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases in soil and water. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- 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 \$5,568 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4218.

Barbara J. Anderson

(503) 229-5870

June 3, 1994

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

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1. Applicant

One Cent Profit Sales  
34283 SE Colorado Rd  
Sandy, OR 97055

The applicant owns and operates an auto repair shop in Corvallis, Oregon.

Application was made for tax credit for an air pollution control facility which is owned by the applicant.

2. Description of Facility

Facility is a machine which removes and cleans auto air conditioner coolant. The machine is self contained and includes pumps, tubing, valves and filters which rid the spent coolant of oil, excess air, water, acids and contaminant particles.

The applicant has identified the useful life of the equipment to be three years.

Claimed Facility Cost: \$3160.00  
(Costs have been documented)

3. Procedural Requirements

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

Installation of the facility was substantially completed on September 2, 1993. The facility was placed into operation on September 2, 1993. The application for final certification was submitted to the Department on March 16, 1994. The application was found to be complete on June 9, 1994, 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 comply with a requirement imposed by the Department, to reduce air pollution. This reduction is accomplished by capturing and/or recycling air contaminants, as defined in ORS 468.275. The requirement is to comply with ORS 468.612-621 and OAR 340-22-410 to 415.

Eligible equipment must be certified by Underwriters Laboratory (UL) as meeting the requirements and specifications of UL1963 and the Society of Automotive Engineers (SAE) standards, J1990 and J1991, or other requirements and specifications determined by the Department as being equivalent. The facility meets these requirements.

- b. Eligible Cost Findings

In determining the percent of the 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 recovery and recycling machine serves two purposes. It prevents the release of spent auto A/C coolant to the environment, thereby meeting Department regulations requiring capture of this air contaminant. Second, it provides a means to recover and clean waste coolant for reuse as an auto A/C coolant.

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

The percent return on investment from facility use was calculated using coolant cost and retrieval rate data from the applicant and generic cost of facility operations estimated by the Department.

Specifically, the applicant estimated the income to applicant from the sale of recycled coolant at \$12.00/pound. The applicant estimated an annual coolant recovery rate of 60 pounds.

In estimating the operating costs for use of the recovery and recycling machine, the Department developed a standardized methodology which considers the following factors:

- o Electricity consumption of machine
- o Additional labor to operate machine
- o Machine maintenance costs

Based on these considerations, the applicant estimated the return on investment to be less than zero, in that machine operating costs exceeded income from the use of the machine.

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

The applicant has identified no alternatives.

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

There are savings from the facility to recover and reuse coolant. The applicant may use the recycled coolant in customer vehicles. In this case the savings are tied to the displaced cost of virgin coolant. Alternately, the applicant could sell the coolant to a second shop where the coolant is used. In this case the savings to the applicant are tied to the sales price of recycled coolant.

However, for this applicant increases in business operations and maintenance costs exceeded facility savings. These cost estimates are discussed in 2) above.

- 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 distinct portion of this automobile air conditioning coolant recovery and recycling equipment makes an insignificant contribution to the principal purpose of the claimed facility. This coolant recovery equipment has the capability to return (recharge) coolant to automobile air conditioning systems. Recharge capabilities in coolant recovery and recycling equipment is not required by state or federal law. The additional expense incurred in the purchase of equipment with recharge capabilities is not allocable to pollution control. The Department estimates the additional expense incurred is \$700.00.

The actual cost of the facility properly allocable to pollution control as determined by using these factors is 78%.

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department, to reduce air 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 78%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$3160 with 78% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. 4222.

Dennis Cartier  
SJO Consulting Engineers  
June 13, 1994  
LEGAL\AH73576C



State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

The Heating Specialist, Inc  
9300 NE Halsey St.  
Portland, OR 97220

The applicant owns and operates a service and installation of heating, air conditioning and ventilation equipment business in Portland, Oregon.

Application was made for tax credit for an air pollution control facility which is owned by the applicant.

2. Description of Facility

Facility is a machine which removes and cleans air conditioner or commercial refrigerant coolant. The machine is self contained and includes pumps, tubing, valves and filters which rid the spent coolant of oil, excess air, water, acids and contaminant particles.

The applicant has identified the useful life of the equipment to be five years.

Claimed Facility Cost: \$1398.00  
(Costs have been documented)

3. Procedural Requirements

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

Installation of the facility was substantially completed on March 10, 1994. The facility was placed into operation on March 14, 1994. The application for final certification was submitted to the Department on March 16, 1994. The application was found to be complete on June 16, 1994, 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 comply with a requirement imposed by the Environmental Protection Agency to reduce air pollution. This reduction is accomplished by capturing and/or recycling air contaminants, as defined in ORS 468.275. The requirement is to comply with Section 608 of the 1990 Clean Air Act Amendments. Section 608 prohibits the venting of a Class I or Class II ozone depleting substance in the course of maintaining, servicing, repairing, or disposing of an appliance or industrial process refrigeration.

The EPA has specified standards equipment manufactured before January 1, 1993 would have to meet to be grandfathered under the EPA's planned regulations. The standards require the equipment be capable of achieving a vacuum able to sustain either four or twenty-five inches of Mercury. High pressure equipment will need to sustain a four inch vacuum. Low pressure equipment will need to sustain a twenty-five inch vacuum. The claimed facility meets these standards.

b. Eligible Cost Findings

In determining the percent of the 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 recovery and recycling machine serves two purposes. It prevents the release of spent refrigerant to the environment, thereby meeting EPA regulations requiring capture of this air contaminant. Second, it provides a means to recover waste coolant for reuse.

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

The percent return on investment from facility use was calculated using coolant cost and

retrieval rate data from the applicant and generic cost of facility operations estimated by the Department.

Specifically, the applicant estimated the income to applicant from the sale of recycled coolant at \$1.76/pound. The applicant estimated an annual coolant recovery rate of 500 pounds.

In estimating the operating costs for use of the recovery and recycling machine, the Department developed a standardized methodology which considers the following factors:

- o Electricity consumption of machine
- o Additional labor to operate machine
- o Machine maintenance costs

Based on these considerations, the applicant estimated the return on investment to be less than zero, in that machine operating costs exceeded income from the use of the machine.

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

The applicant has identified no alternatives.

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

There are savings from the facility to recover and/or reuse coolant. The applicant may use the recycled coolant in customer equipment. In this case the savings are tied to the displaced cost of virgin coolant. Alternately, the applicant could sell the coolant to an industrial coolant purification center. In this case the savings to the applicant are tied to the sales price of recovered coolant.

However, for this applicant increases in business operations and maintenance costs exceed facility savings. These cost estimates are discussed in 2) above.

- 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 tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the EPA to reduce air pollution.
- c. The facility complies with Department standards 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 \$1398 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. 4223.

Dennis Cartier  
SJO Consulting Engineers  
June 13, 1994  
LEGAL\AH73576D

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Mike Strassel Mobile Repair  
276 Sunset Street  
Banks, OR 97106

The applicant owns and operates a complete auto repair facility in Banks, Oregon.

Application was made for tax credit for an air pollution control facility which is owned by the applicant.

2. Description of Facility

Facility is a machine which removes and cleans auto air conditioner coolant. The machine is self contained and includes pumps, tubing, valves and filters which rid the spent coolant of oil, excess air, water, acids and contaminant particles.

The applicant has identified the useful life of the equipment to be seven years.

Claimed Facility Cost: \$2680.00  
(Costs have been documented)

3. Procedural Requirements

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

Installation of the facility was substantially completed on August 13, 1992. The facility was placed into operation on August 14, 1992. The application for final certification was submitted to the Department on March 30, 1994. The application was found to be complete on June 9, 1994, 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 comply with a requirement imposed by the Department, to reduce air pollution. This reduction is accomplished by capturing and/or recycling air contaminants, as defined in ORS 468.275. The requirement is to comply with ORS 468.612-621 and OAR 340-22-410 to 415.

Eligible equipment must be certified by Underwriters Laboratory (UL) as meeting the requirements and specifications of UL1963 and the Society of Automotive Engineers (SAE) standards, J1990 and J1991, or other requirements and specifications determined by the Department as being equivalent. The facility meets these requirements.

- b. Eligible Cost Findings

In determining the percent of the 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 recovery and recycling machine serves two purposes. It prevents the release of spent auto A/C coolant to the environment, thereby meeting Department regulations requiring capture of this air contaminant. Second, it provides a means to recover and clean waste coolant for reuse as an auto A/C coolant.

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

The percent return on investment from facility use was calculated using coolant cost and retrieval rate data from the applicant and generic cost of facility operations estimated by the Department.

Specifically, the applicant estimated the income to applicant from the sale of recycled coolant at \$9.33/pound. The applicant estimated an annual coolant recovery rate of 30 pounds.

In estimating the operating costs for use of the recovery and recycling machine, the Department developed a standardized methodology which considers the following factors:

- o Electricity consumption of machine
- o Additional labor to operate machine
- o Machine maintenance costs

Based on these considerations, the applicant estimated the return on investment to be less than zero, in that machine operating costs exceeded income from the use of the machine.

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

The applicant has identified no alternatives.

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

There are savings from the facility to recover and reuse coolant. The applicant may use the recycled coolant in customer vehicles. In this case the savings are tied to the displaced cost of virgin coolant. Alternately, the applicant could sell the coolant to a second shop where the coolant is used. In this case the savings to the applicant are tied to the sales price of recycled coolant.

However, for this applicant increases in business operations and maintenance costs exceeded facility savings. These cost estimates are discussed in 2) above.

- 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 tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department to reduce air 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 \$2680.00 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. 4229.

Dennis Cartier  
SJO Consulting Engineers  
June 13, 1994  
LEGAL\AH73576E



The total annual operating hours of 191 divided by the average annual operating hours of 450 produces a percent allocable of 42%.

<u>Equipment</u>	<u>Claimed Cost</u>	<u>Percent Allocable</u>	<u>Cost Allocable</u>
Bush Hog Mower	\$11,000	100%	\$11,000
John Deer Tractor	64,000	42%	26,880
Kello-Bilt Disc	<u>36,000</u>	<u>100%</u>	<u>36,000</u>
	\$111,000	67%	\$73,880

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

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

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

There is an increase in operating costs of \$19,500 to annually maintain and operate the equipment. These costs were considered in the return on investment calculation.

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 pollution.

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 67%.

6. Summation

- a. The equipment was purchased in accordance with all regulatory deadlines.
- b. The equipment is eligible under ORS 468.150 as an approved alternative method for field sanitation and straw utilization and disposal that reduces a substantial quantity of air pollution as defined in ORS 468A.005.
- c. The equipment complies with DEQ statutes and rules.
- d. The portion of the equipment that is properly allocable to pollution control is 67%.

7. The Department of Agriculture's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$111,000, with 67% allocated to pollution control, be issued for the equipment claimed in Tax Credit Application Number TC-4234.

Jim Britton, Manager  
Smoke Management Program  
Natural Resources Division  
Oregon Department of Agriculture  
(503) 378-6792

jb:bm4234  
May 10, 1994

State of Oregon  
Department of Agriculture

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

James VanLeeuwen  
27666 Peoria Road  
Halsey OR 97348

The applicant owns and operates a grass seed farm operation in Linn County, Oregon.

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

2. Description of Claimed Facility

The equipment described in this application is a JD 4960 MFWD (200hp) tractor, located at 27070 Irish Bend Loop, Halsey, Oregon. The equipment is owned by the applicant.

Claimed equipment cost: \$96,900  
(Accountant's Certification was provided.)

3. Description of farm operation plan to reduce open field burning

The applicant has 500 acres of perennial grass seed and 260 acres of annual grass seed under cultivation. He has significantly reduced open field burning of his harvested grass seed fields in the last few years. The chosen alternatives to open field burning include baling and vacuuming perennial fields and plowing, harrowing, and rolling annual fields and perennial fields between stands.

The applicant states that he "did not own a suitable tractor for plowing down straw or pulling a Rears vacuum and did not or would not need one if it were not for reductions in thermal sanitation." This tractor provides sufficient horsepower to vacuum perennial fields and plow, harrow and roll annual fields.

4. 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:

Purchase of the equipment was substantially completed on August 28, 1992. The application was submitted on May 16, 1994 and the application for final certification was found to be complete on May 20, 1994. The application was filed within two years of substantial purchase of the equipment.

5. Evaluation of Application

- a. The equipment is eligible under ORS 468.150 because the equipment is an approved alternative method for field sanitation and straw utilization and disposal that reduces a substantial quantity of air pollution. This reduction is accomplished by reduction of air contaminants, defined in ORS 468A.005; by reducing the maximum acreage to be open burned in the Willamette Valley as required in OAR 340-26-013; and, the facility's qualification as a "pollution control facility", defined in OAR 340-16-025(2)(f)(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 equipment is used to recover and convert waste products into a salable or usable commodity.

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

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

There is no annual percent return on the investment as applicant claims no gross annual income.

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

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

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

There is an increase in operating costs of \$5,000 to annually maintain and operate the equipment. These costs were considered in the return on investment calculation.

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 pollution.

The established average annual operating hours for tractors is set at 450 hours. To obtain a total percent allocable,

the annual operating hours per implement used in reducing acreage open field burned is as follows:

<u>Implement</u>	<u>Acres Worked</u>	<u>Acres/Hour</u>	<u>Annual Operating Hours</u>
Vacuum Pak	500	3	167
Plow	360	7	51
Harrow/Roller	1,080 (3x360)	7	154
Total Annual Operating Hours			372

The total annual operating hours of 372 divided by the average annual operating hours of 450 produces a percent allocable of 83%.

The actual cost of the equipment properly allocable to pollution control as determined by using these factors is 83%.

6. Summation

- a. The equipment was purchased in accordance with all regulatory deadlines.
- b. The equipment is eligible under ORS 468.150 as an approved alternative method for field sanitation and straw utilization and disposal that reduces a substantial quantity of air pollution as defined in ORS 468A.005.
- c. The equipment complies with DEQ statutes and rules.
- d. The portion of the equipment that is properly allocable to pollution control is 83%.

7. The Department of Agriculture's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$96,900, with 83% allocated to pollution control, be issued for the equipment claimed in Tax Credit Application Number TC-4236.

Jim Britton, Manager  
Smoke Management Program  
Natural Resources Division  
Oregon Department of Agriculture  
(503) 378-6792

jb:bm4236  
May 19, 1994

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

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1. Applicant

Bug Works, Inc  
605 SW 13th Street  
Corvallis, OR 97333

The applicant owns and operates an automobile repair and maintenance shop in Corvallis, Oregon. The applicant does its own vehicle maintenance.

Application was made for tax credit for an air pollution control facility which is owned by the applicant.

2. Description of Facility

Facility is a machine which removes and cleans auto air conditioner coolant. The machine is self contained and includes pumps, tubing, valves and filters which rid the spent coolant of oil, excess air, water, acids and contaminant particles.

The applicant has identified the useful life of the equipment to be ten years.

Claimed Facility Cost: \$3156.95  
(Costs have been documented)

3. Procedural Requirements

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

Installation of the facility was substantially completed on October 20, 1992. The facility was placed into operation on November 10, 1992. The application for final certification was submitted to the Department on March 29, 1994. The application was found to be complete on June 9, 1994, 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 comply with a requirement imposed by the Department, to reduce air pollution. This reduction is accomplished by capturing and/or recycling air contaminants, as defined in ORS 468.275. The requirement is to comply with ORS 468.612-621 and OAR 340-22-410 to 415.

Eligible equipment must be certified by Underwriters Laboratory (UL) as meeting the requirements and specifications of UL1963 and the Society of Automotive Engineers (SAE) standards, J1990 and J1991, or other requirements and specifications determined by the Department as being equivalent. The facility meets these requirements.

b. Eligible Cost Findings

In determining the percent of the 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 recovery and recycling machine serves two purposes. It prevents the release of spent auto A/C coolant to the environment, thereby meeting Department regulations requiring capture of this air contaminant. Second, it provides a means to recover and clean waste coolant for reuse as an auto A/C coolant.

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

The percent return on investment from facility use was calculated using coolant cost and retrieval rate data from the applicant and generic cost of facility operations estimated by the Department.

Specifically, the applicant estimated the income to applicant from the sale of recycled coolant at \$9.50/pound. The applicant estimated an annual coolant recovery rate of 20 pounds.

In estimating the operating costs for use of the recovery and recycling machine, the Department developed a standardized methodology which considers the following factors:

- o Electricity consumption of machine
- o Additional labor to operate machine
- o Machine maintenance costs

Based on these considerations, the applicant estimated the return on investment to be less than zero, in that machine operating costs exceeded income from the use of the machine.

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

The applicant has identified no alternatives.

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

There are savings from the facility to recover and reuse coolant. The applicant may use the recycled coolant in customer vehicles. In this case the savings are tied to the displaced cost of virgin coolant. Alternately, the applicant could sell the coolant to a second shop where the coolant is used. In this case the savings to the applicant are tied to the sales price of recycled coolant.

However, for this applicant increases in business operations and maintenance costs exceeded facility savings. These cost estimates are discussed in 2) above.



- 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 tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department to reduce air 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 \$3156.95 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. 4230.

Dennis Cartier  
SJO Consulting Engineers  
June 13, 1994  
LEGAL\AH73576F

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Russell Oil Company  
P. O. Box 7  
Boardman, OR 97818

The applicant owns and operates a retail gas station at 309 SE Nye, Pendleton, OR, Facility No. 7076.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are three fiberglass tanks and doublewall fiberglass piping, spill containment basins, tank gauge system, overfill alarm, turbine leak detectors, monitoring wells, sumps and automatic shutoff valves.

Claimed facility cost \$88,565  
(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 was substantially completed on February 15, 1994 and placed into operation on February 15, 1994. The application for certification was submitted to the Department on April 13, 1994 and was considered to be complete and filed on June 3, 1994, within two years of the completion date of the project.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases into soil and water. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of four steel tanks and piping with no corrosion protection and no spill and overfill prevention or leak detection equipment.

To respond to Underground Storage Tank requirements under OAR 340-Division 150, the applicant installed:

- 1) For corrosion protection - Fiberglass tanks and doublewall fiberglass piping.
- 2) For spill and overfill prevention - Spill containment basins, overfill alarm, sumps and automatic shutoff valves.
- 3) For leak detection - Tank gauge system, turbine leak detectors and monitoring wells.

Contamination found at the site was reported to DEQ. The applicant reports that cleanup is completed.

Based on information currently available, the applicant is in compliance with all applicable DEQ regulations in that these tanks are permitted and fee payments are current.

The Department concludes that the costs claimed by the applicant (\$88,565) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

In determining the percent of the eligible 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 equipment 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 annual percent return on investment as the applicant claims no gross annual income from the facility.

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

The applicant did not indicate that alternatives were considered. The methods chosen are acceptable for meeting the requirements of federal regulations.

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

The applicant claims no savings or increase in costs as a result of the installation.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to pollution control.

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

The actual cost of the facility properly allocable to pollution control is determined by using these factors as displayed in the following table:

	Eligible Facility Cost	Percent Allocable	Amount Allocable
<b><u>Corrosion Protection:</u></b>			
Fiberglass tanks & doublewall fiberglass piping	\$28,425	49% (1)	\$13,928
<b><u>Spill &amp; Overfill Prevention:</u></b>			
Spill containment basins	970	100	970
Overfill alarm	214	100	214
Sumps	1,126	100	1,126
Automatic Shutoff Valves	1,906	100	1,906
<b><u>Leak Detection:</u></b>			
Tank gauge system	9,455	90 (2)	8,510
Turbine leak detectors	1,316	100	1,316
Monitoring wells	150	100	150
Labor & materials	45,003	100	45,003
Total	\$ 88,565	83%	\$ 73,123

- (1) The Department has determined the percent allocable on the cost of a corrosion protected tank and piping system by using a formula based on the difference in cost between the protected tank and piping system and an equivalent bare steel system as a percent of the protected system. Applying this formula to the costs presented by the applicant, where the protected system cost is \$28,425 and the bare steel system is \$14,569, the resulting portion of the eligible tank and piping cost allocable to pollution control is 49%.
- (2) The applicant's cost for a tank gauge system is reduced to 90% of cost based on a determination by the Department that this is the portion properly allocable to pollution control since the device can serve other purposes, for example, inventory control.

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases in soil and water. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 83%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$88,565 with 83% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4231.

Barbara J. Anderson  
(503) 229-5870  
June 3, 1994

State of Oregon  
Department of Agriculture

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Neils Jensen Farms  
1786 Talbot Road South  
Jefferson, OR 97352

The applicant owns and operates a grass seed farm operation in Marion County, Oregon.

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

2. Description of Claimed Facility

The equipment described in this application is located at 1786 Talbot Road South, Jefferson, Oregon. The equipment is owned by the applicant.

Model 2620 Bush Hog (Mower)	\$ 11,000
Model 8850 John Deere Tractor	64,000
27 ft. #225 Dow Kello-Bilt Disc	36,000

Claimed equipment cost: \$111,000  
(Accountant's Certification was provided.)

3. Description of farm operation plan to reduce open field burning

The applicant has 662 acres of perennial grass seed under cultivation. In the recent past, approximately 250 acres were open field burned annually.

As an alternative to open field burning the applicant is now trying to manage a full straw load on his fields. To accomplish the full straw load management the applicant has invested in new equipment and heavier equipment. The applicant states that the heavier disk and higher horsepower tractor are required to penetrate the straw mass when working out a field for stand rotation. The mower is needed to finely chop the full straw load on fields not being rotated to enhance decomposition.

4. 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:

Purchase of the equipment was substantially completed on December 15, 1993. The application was submitted on May 3, 1994, and the appli-

ation for final certification was found to be complete on May 10, 1994. The application was filed within two years of substantial purchase of the equipment.

5. Evaluation of Application

a. The equipment is eligible under ORS 468.150 because the equipment is an approved alternative method for field sanitation and straw utilization and disposal that reduces a substantial quantity of air pollution. This reduction is accomplished by reduction of air contaminants, defined in ORS 468A.005; by reducing the maximum acreage to be open burned in the Willamette Valley as required in OAR 340-26-013; and, the facility's qualification as a "pollution control facility", defined in OAR 340-16-025(2)(f)(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 equipment is used to recover and convert waste products into a salable or usable commodity.

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

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

There is no annual percent return on the investment as applicant claims no gross annual income.

The established average annual operating hours for tractors is set at 450 hours. To obtain a total percent allocable, the annual operating hours per implement used in reducing acreage open field burned is as follows:

<u>Implement</u>	<u>Acres Worked</u>	<u>Machinery Capacity</u>	<u>Annual Operating Hours</u>
Disk	500	8	63
Mower	600	6	100
Plow	225	8	<u>28</u>
Total annual operating hours			191



The total annual operating hours of 191 divided by the average annual operating hours of 450 produces a percent allocable of 42%.

<u>Equipment</u>	<u>Claimed Cost</u>	<u>Percent Allocable</u>	<u>Cost Allocable</u>
Bush Hog Mower	\$11,000	100%	\$11,000
John Deer Tractor	64,000	42%	26,880
Kello-Bilt Disc	<u>36,000</u>	<u>100%</u>	<u>36,000</u>
	\$111,000	67%	\$73,880

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

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

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

There is an increase in operating costs of \$19,500 to annually maintain and operate the equipment. These costs were considered in the return on investment calculation.

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 pollution.

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 67%.

6. Summation

- a. The equipment was purchased in accordance with all regulatory deadlines.
- b. The equipment is eligible under ORS 468.150 as an approved alternative method for field sanitation and straw utilization and disposal that reduces a substantial quantity of air pollution as defined in ORS 468A.005.
- c. The equipment complies with DEQ statutes and rules.
- d. The portion of the equipment that is properly allocable to pollution control is 67%.

State of Oregon  
Department of Agriculture

TAX RELIEF APPLICATION REVIEW REPORT

---

1. Applicant

Floyd Smith  
30383 Peoria Road  
Shedd, OR 97377

The applicant owns and operates a grass seed farm operation in Linn County, Oregon.

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

2. Description of Claimed Facility

The equipment described in this application is a G-K 3W 600 Swamp Buggy Herbicide Applicator, located at 30736 Peoria Road, Shedd, Oregon. The equipment is owned by the applicant.

Claimed equipment cost: \$61,080  
(Accountant's Certification was provided.)

3. Description of farm operation plan to reduce open field burning

The applicant has 912 acres of perennial grass seed and 62 acres of annual grass seed under cultivation. Since 1992, the applicant has farmed without open field burning or propane flaming.

His alternatives to thermal sanitization consist of chopping and plowing down all annual acreage and contract baling, straw storage, and stubble chopdown on all perennial acreage. The applicant states that these treatments require herbicide applications on more acreage during the same envelope of time. To do this additional work in a timely manner, the application equipment is required to maintain the elimination of open burning and propane flaming.

4. 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:

Purchase of the equipment was substantially completed on May 10, 1994. The application was submitted on May 23, 1994 and the application for final certification was found to be complete on June 1, 1994. The application was filed within two years of substantial purchase of the equipment.

5. Evaluation of Application

a. The equipment is eligible under ORS 468.150 because the equipment is an approved alternative method for field sanitation and straw utilization and disposal that reduces a substantial quantity of air pollution. This reduction is accomplished by reduction of air contaminants, defined in ORS 468A.005; by reducing the maximum acreage to be open burned in the Willamette Valley as required in OAR 340-26-013; and, the facility's qualification as a "pollution control facility", defined in OAR 340-16-025(2)(f)(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 equipment is used to recover and convert waste products into a salable or usable commodity.

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

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

There is no annual percent return on the investment as applicant claims no gross annual income.

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

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

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

There is an increase in operating costs of \$4,160 to annually maintain and operate the equipment. These costs were considered in the return on investment calculation.

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 pollution.

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 100%.

6. Summation

- a. The equipment was purchased in accordance with all regulatory deadlines.
- b. The equipment is eligible under ORS 468.150 as an approved alternative method for field sanitation and straw utilization and disposal that reduces a substantial quantity of air pollution as defined in ORS 468A.005.
- c. The equipment complies with DEQ statutes and rules.
- d. The portion of the equipment that is properly allocable to pollution control is 100%.

7. The Department of Agriculture's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$61,080 with 100% allocated to pollution control, be issued for the equipment claimed in Tax Credit Application Number TC-4237.

Jim Britton, Manager  
Smoke Management Program  
Natural Resources Division  
Oregon Department of Agriculture  
(503) 378-6792

jb:bm4237  
June 2, 1994

State of Oregon  
Department of Agriculture

TAX RELIEF APPLICATION REVIEW REPORT

---

1. Applicant

James VanLeeuwen  
27666 Peoria Road  
Halsey OR 97348

The applicant owns and operates a grass seed farm operation in Linn County, Oregon.

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

2. Description of Claimed Facility

The equipment described in this application is a JD 4960 MFWD (200hp) tractor, located at 27070 Irish Bend Loop, Halsey, Oregon. The equipment is owned by the applicant.

Claimed equipment cost: \$96,900  
(Accountant's Certification was provided.)

3. Description of farm operation plan to reduce open field burning

The applicant has 500 acres of perennial grass seed and 260 acres of annual grass seed under cultivation. He has significantly reduced open field burning of his harvested grass seed fields in the last few years. The chosen alternatives to open field burning include baling and vacuuming perennial fields and plowing, harrowing, and rolling annual fields and perennial fields between stands.

The applicant states that he "did not own a suitable tractor for plowing down straw or pulling a Rears vacuum and did not or would not need one if it were not for reductions in thermal sanitation." This tractor provides sufficient horsepower to vacuum perennial fields and plow, harrow and roll annual fields.

4. 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:

Purchase of the equipment was substantially completed on August 28, 1992. The application was submitted on May 16, 1994 and the application for final certification was found to be complete on May 20, 1994. The application was filed within two years of substantial purchase of the equipment.

5. Evaluation of Application

a. The equipment is eligible under ORS 468.150 because the equipment is an approved alternative method for field sanitation and straw utilization and disposal that reduces a substantial quantity of air pollution. This reduction is accomplished by reduction of air contaminants, defined in ORS 468A.005; by reducing the maximum acreage to be open burned in the Willamette Valley as required in OAR 340-26-013; and, the facility's qualification as a "pollution control facility", defined in OAR 340-16-025(2)(f)(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 equipment is used to recover and convert waste products into a salable or usable commodity.

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

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

There is no annual percent return on the investment as applicant claims no gross annual income.

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

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

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

There is an increase in operating costs of \$5,000 to annually maintain and operate the equipment. These costs were considered in the return on investment calculation.

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 pollution.

The established average annual operating hours for tractors is set at 450 hours. To obtain a total percent allocable,

the annual operating hours per implement used in reducing acreage open field burned is as follows:

<u>Implement</u>	<u>Acres Worked</u>	<u>Acres/Hour</u>	<u>Annual Operating Hours</u>
Vacuum Pak	500	3	167
Plow	360	7	51
Harrow/Roller 1,080 (3x360)		7	<u>154</u>
Total Annual Operating Hours			372

The total annual operating hours of 372 divided by the average annual operating hours of 450 produces a percent allocable of 83%.

The actual cost of the equipment properly allocable to pollution control as determined by using these factors is 83%.

6. Summation

- a. The equipment was purchased in accordance with all regulatory deadlines.
- b. The equipment is eligible under ORS 468.150 as an approved alternative method for field sanitation and straw utilization and disposal that reduces a substantial quantity of air pollution as defined in ORS 468A.005.
- c. The equipment complies with DEQ statutes and rules.
- d. The portion of the equipment that is properly allocable to pollution control is 83%.

7. The Department of Agriculture's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$96,900, with 83% allocated to pollution control, be issued for the equipment claimed in Tax Credit Application Number TC-4236.

Jim Britton, Manager  
Smoke Management Program  
Natural Resources Division  
Oregon Department of Agriculture  
(503) 378-6792

jb:bm4236  
May 19, 1994

State of Oregon  
Department of Agriculture

TAX RELIEF APPLICATION REVIEW REPORT

---

1. Applicant

Floyd Smith  
30383 Peoria Road  
Shedd, OR 97377

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

2. Description of Claimed Facility

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Claimed equipment cost: \$61,080  
(Accountant's Certification was provided.)

3. Description of farm operation plan to reduce open field burning

The applicant has 912 acres of perennial grass seed and 62 acres of annual grass seed under cultivation. Since 1992, the applicant has farmed without open field burning or propane flaming.

His alternatives to thermal sanitization consist of chopping and plowing down all annual acreage and contract baling, straw storage, and stubble chopdown on all perennial acreage. The applicant states that these treatments require herbicide applications on more acreage during the same envelope of time. To do this additional work in a timely manner, the application equipment is required to maintain the elimination of open burning and propane flaming.

4. 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:

Purchase of the equipment was substantially completed on May 10, 1994. The application was submitted on May 23, 1994 and the application for final certification was found to be complete on June 1, 1994. The application was filed within two years of substantial purchase of the equipment.



5. Evaluation of Application

a. The equipment is eligible under ORS 468.150 because the equipment is an approved alternative method for field sanitation and straw utilization and disposal that reduces a substantial quantity of air pollution. This reduction is accomplished by reduction of air contaminants, defined in ORS 468A.005; by reducing the maximum acreage to be open burned in the Willamette Valley as required in OAR 340-26-013; and, the facility's qualification as a "pollution control facility", defined in OAR 340-16-025(2)(f)(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 equipment is used to recover and convert waste products into a salable or usable commodity.

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

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

There is no annual percent return on the investment as applicant claims no gross annual income.

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

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

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

There is an increase in operating costs of \$4,160 to annually maintain and operate the equipment. These costs were considered in the return on investment calculation.

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 pollution.

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 100%.

6. Summation

- a. The equipment was purchased in accordance with all regulatory deadlines.
- b. The equipment is eligible under ORS 468.150 as an approved alternative method for field sanitation and straw utilization and disposal that reduces a substantial quantity of air pollution as defined in ORS 468A.005.
- c. The equipment complies with DEQ statutes and rules.
- d. The portion of the equipment that is properly allocable to pollution control is 100%.

7. The Department of Agriculture's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$61,080 with 100% allocated to pollution control, be issued for the equipment claimed in Tax Credit Application Number TC-4237.

Jim Britton, Manager  
Smoke Management Program  
Natural Resources Division  
Oregon Department of Agriculture  
(503) 378-6792

jb:bm4237  
June 2, 1994

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Stein Oil Company, Inc.  
19805 McLoughlin Blvd.  
Gladstone, Oregon 97027

The applicant owns and operates Clackamas Pacific Pride, a gasoline sales and service station in Clackamas, Oregon.

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

2. Description of Facility

The claimed facility is an above ground stage II vapor recovery balance type system. The system is composed of Emco Wheaton nozzles, Goodyear hoses, BXM adapters, OPW breakaway safety valves, OPW hoods, piping and additional miscellaneous equipment. Installation of the facility prevents the escape of gasoline vapors into the atmosphere.

Claimed Facility Cost: \$11,536.73

A distinct portion of the facility makes an insignificant contribution to the principal purpose of pollution control. The applicant claimed \$4,390.97 for changing their diesel dispenser to unleaded, and for extending their vapor line to this new dispenser.

Ineligible Costs: \$ 4,390.97

Adjusted Facility Cost: \$ 7,145.76

The applicant documented the facility costs.

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:

Construction and installation of the facility was substantially completed on March 16, 1994. The facility was placed into operation on March 16, 1994. The application for final certification was submitted to the Department on May 23, 1994 within two years of substantial completion of the facility. The application was found to be complete on June 9, 1994.

4. Evaluation of Application

a. Rationale For Eligibility

The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the Department to prevent the escape of gasoline vapors into the atmosphere. This is in accordance with OAR Chapter 340-22-400 to 403. The emission reduction is accomplished by the elimination of air contaminants as defined in ORS 468A.005.

The facility prevents gasoline vapors from escaping into the atmosphere. The face plate on the nozzle delivering the gasoline forms a tight seal on the fill pipe of the automobile gas tank. As the spout dispenses gasoline there is a small pressure increase created in the automobile gasoline tank due to the additional volume of the added fuel. This pressure increase drives the gasoline vapor from the automobile fuel tank through a secondary line in the nozzle back into the underground storage tank. The gasoline vapor travels through a secondary containment pipe surrounding the pipe the gasoline is dispensed through. The underground tank receives the additional volume in the form of gasoline vapors. There is no net pressure increase in the underground tank because the tank has already dispensed an equivalent volume of liquid gasoline. The vapor recovered is vapor that would otherwise escape from the automobile tank and the gasoline dispensing nozzle into the atmosphere.

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.

A portion of the waste product is converted into a salable or usable commodity consisting of recovered gasoline. It is the position of the Department that the volume of gasoline recovered is of an insignificant economic benefit.

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

The applicant indicates in the application there is no income or savings from the facility, so there is no return on the investment.

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

Stage II vapor recovery balance type systems are technically recognized as an acceptable method for controlling the emissions of vapors from gasoline service stations.

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

The applicant indicated there were 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 pollution.

There are no other factors to consider in establishing the actual cost of the facility properly allocable to reduction of pollution. The principal purpose of the facility is to prevent a substantial quantity 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 principal purpose of the facility is to comply with a requirement imposed by the Department to reduce air pollution.
- c. The facility complies with Department 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 \$7,146 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4239.

Tonia C. Garbowsky: PRC Environmental Management, June 14, 1994

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Stein Oil Co., Inc.  
19805 McLoughlin Blvd.  
Gladstone, OR 97027

The applicant owns and operates a cardlock station at 1780 1/2 Washington St. Oregon City, OR, Facility No. 7956.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are epoxy lining in three steel underground storage tanks.

Claimed facility cost \$19,479  
(Documentation of cost 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 was substantially completed on February 11, 1994 and placed into operation on February 11, 1994. The application for certification was submitted to the Department on May 23, 1994 and was considered to be complete and filed on June 3, 1994, within two years of the completion date of the project.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is

accomplished by preventing releases into soil and water. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of nine steel tanks without corrosion protection, steel piping with no corrosion protection on six tanks, fiberglass piping on three tanks, no spill and overflow prevention and no leak detection equipment except three line leak detectors.

To respond to Underground Storage Tank requirements under OAR 340-Division 150, the applicant installed:

- 1) For Corrosion protection - Epoxy lining in three steel tanks.

Contamination found at the site was reported to DEQ. The applicant reported that cleanup is completed.

Based on information currently available, the applicant is in compliance with all applicable DEQ regulations in that these tanks are permitted and fee payments are current.

The Department concludes that the costs claimed by the applicant (\$19,479) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

**b. Eligible Cost Findings**

In determining the percent of the eligible 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 equipment 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 annual percent return on investment as the applicant claims no gross annual income from the facility.

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

The applicant did not indicate that alternatives were considered. The methods chosen are acceptable for meeting the requirements of federal regulations.

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

The applicant claims no savings or increase in costs as a result of the installation.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to pollution control.

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

The actual cost of the facility properly allocable to pollution control is determined by using these factors as displayed in the following table:

	Eligible Facility Cost	Percent Allocable	Amount Allocable
	_____	_____	_____
<u>Corrosion Prevention:</u>			
Epoxy tank lining	\$19,479	100%	\$19,479
	_____	_____	_____
Total	\$19,479	100%	\$19,479

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil and water. This is accomplished by preventing releases in soil and water. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."



- 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 \$19,479 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4240.

Barbara J. Anderson  
(503) 229-5870  
June 3, 1994

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Stein Oil Company, Inc.  
19805 McLoughlin Blvd.  
Gladstone, Oregon 97027

The applicant owns and operates BP Gladstone, a gasoline sales and service station in Gladstone, Oregon.

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

2. Description of Facility

The claimed facility is an above ground stage II vapor recovery balance type system. The system is composed of Husky nozzles, Thermoid hoses, OPW adapters, OPW breakaway safety valves, Pomeco hoods, piping and additional miscellaneous equipment. Installation of the facility prevents the escape of gasoline vapors into the atmosphere.

Claimed Facility Cost: \$5,826.13

The applicant documented the facility costs.

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:

Construction and installation of the facility was substantially completed on July 27, 1993. The facility was placed into operation on July 27, 1993. The application for final certification was submitted to the Department on May 23, 1994 within two years of substantial completion of the facility. The application was found to be complete on June 9, 1994.

4. Evaluation of Application

a. Rationale For Eligibility

The facility is eligible because the principal purpose of the facility is to comply with a requirement imposed by the Department to prevent the escape of gasoline vapors into the atmosphere. This is in accordance with OAR Chapter 340-22-400 to 403. The emission reduction is accomplished by the elimination of air contaminants as defined in ORS 468A.005.

The facility prevents gasoline vapors from escaping into the atmosphere. The face plate on the nozzle delivering the gasoline forms a tight seal on the fill pipe of the automobile gas tank. As the spout dispenses gasoline there is a small pressure increase created in the automobile gasoline tank due to the additional volume of the added fuel. This pressure increase drives the gasoline vapor from the automobile fuel tank through a secondary line in the nozzle back into the underground storage tank. The gasoline vapor travels through a secondary containment pipe surrounding the pipe the gasoline is dispensed through. The underground tank receives the additional volume in the form of gasoline vapors. There is no net pressure increase in the underground tank because the tank has already dispensed an equivalent volume of liquid gasoline. The vapor recovered is vapor that would otherwise escape from the automobile tank and the gasoline dispensing nozzle into the atmosphere.

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.

A portion of the waste product is converted into a salable or usable commodity consisting of recovered gasoline. It is the position of the Department that the volume of gasoline recovered is of an insignificant economic benefit.

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

The applicant indicates in the application there is no income or savings from the facility, so there is no return on the investment.

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

Stage II vapor recovery balance type systems are technically recognized as an acceptable method for controlling the emissions of vapors from gasoline service stations.

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

The applicant indicated there were 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 pollution.

There are no other factors to consider in establishing the actual cost of the facility properly allocable to reduction of pollution. The principal purpose of the facility is to prevent a substantial quantity 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 principal purpose of the facility is to comply with a requirement imposed by the Department to reduce air pollution.
- c. The facility complies with Department 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 \$5,826 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4241.

Tonia C. Garbowsky: PRC Environmental Management, June 14, 1994

State of Oregon  
Department of Agriculture

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

James VanLeeuwen  
27666 Peoria Road  
Halsey OR 97348

The applicant owns and operates a grass seed farm operation in Linn County, Oregon.

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

2. Description of Claimed Facility

The equipment described in this application is a Rear's straw vacuum, located at 27070 Irish Bend Loop, Halsey, Oregon. The equipment is owned by the applicant.

Claimed equipment cost: \$35,000  
(Accountant's Certification was provided.)

3. Description of farm operation plan to reduce open field burning

The applicant has 500 acres of perennial grass seed and 260 acres of annual grass seed under cultivation. He has significantly reduced open field burning of his harvested grass seed fields in the last few years. One of the chosen alternatives to open field burning is baling and vacuuming perennial fields.

The Rear's vacuum is used to pick up from the 500 acres of perennial grass seed fields the finer straw that remains after the bulk straw is removed by baling. By removing the bulk and finer straw, open field burning is eliminated and propane flaming is reduced.

4. 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:

Purchase of the equipment was substantially completed on May 5, 1994. The application was submitted on June 9, 1994 and the application for final certification was found to be complete on June 15, 1994. The application was filed within two years of substantial purchase of the equipment.

5. Evaluation of Application

a. The equipment is eligible under ORS 468.150 because the equipment is an approved alternative method for field sanitation and straw utilization and disposal that reduces a substantial quantity of air pollution. This reduction is accomplished by reduction of air contaminants, defined in ORS 468A.005; by reducing the maximum acreage to be open burned in the Willamette Valley as required in OAR 340-26-013; and, the facility's qualification as a "pollution control facility", defined in OAR 340-16-025(2)(f)(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 equipment is used to recover and convert waste products into a salable or usable commodity.

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

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

There is no annual percent return on the investment as applicant claims no gross annual income.

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

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

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

There is an increase in operating costs of \$2,500 to annually maintain and operate the equipment. These costs were considered in the return on investment calculation.

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 pollution.

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 100%.

6. Summation

- a. The equipment was purchased in accordance with all regulatory deadlines.
- b. The equipment is eligible under ORS 468.150 as an approved alternative method for field sanitation and straw utilization and disposal that reduces a substantial quantity of air pollution as defined in ORS 468A.005.
- c. The equipment complies with DEQ statutes and rules.
- d. The portion of the equipment that is properly allocable to pollution control is 100%.

7. The Department of Agriculture's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$35,000, with 100% allocated to pollution control, be issued for the equipment claimed in Tax Credit Application Number TC-4247.

Jim Britton, Manager  
Smoke Management Program  
Natural Resources Division  
Oregon Department of Agriculture  
(503) 378-6792

jb:bk4247  
June 15, 1994

State of Oregon  
Department of Environmental Quality

## Memorandum

Date: June 10, 1994

**To:** Environmental Quality Commission  
**From:** Fred Hansen, Director  
**Subject:** Interpretative Issue - Underground Storage Tank (UST)  
Pollution Control Facility Tax Credits

BACKGROUND

Certain owners and operators of underground storage tanks are eligible to receive financial assistance for upgrade or replacement of tanks and installation of pollution control equipment from two sources: the Pollution Control Facilities Tax Credit (468.150 through 190) and the Underground Storage Tank (UST) Essential Services Grant (SB 1215, 1991). A pollution control tax credit offers a 50% Oregon income tax credit for installation of pollution control equipment; an essential services grant pays 75% up to \$75,000 (85% up to \$85,000 in a few cases) for UST project work including tanks, piping, leak detection and spill prevention equipment and cleanup of contamination. The principal difference between the two programs is cleanup, which is not covered by the tax credit program, but can be a significant cost under the grant program.

In order to ensure that public funds are not expended twice for the same pollution control equipment, we are asking your concurrence on the method presented here for adjusting pollution control equipment costs that deducts the grant (or relevant portion thereof) from the amount an applicant may claim for a tax credit. This method was presented to the State Attorney General's office and received their concurrence. There are two parts to the methodology:

ANALYSIS

(1) Definition of "actual cost"

According to tax credit rule (OAR 340-16-020(2)(b)(B)) "the actual cost or portion of the actual cost certified shall not exceed the [applicant] taxpayer's own cash investment in the facility or portion of the facility". The Attorney General has advised that the essential services grant should not be considered the applicant's own cash investment.



(2) Method for determining "actual cost"

As mentioned earlier, the essential services grant covers the total UST project including some costs not eligible for a tax credit, primarily cleanup costs and equipment such as product pumps (see Exhibit 1). Neither the law or rules establishing the essential services grant program direct monies to be spent in any preferential way, that is, equipment versus cleanup. This was done purposefully since each UST project, while conceptually similar, is very unique given physical site conditions and amount of contamination in soil or groundwater.

As the Department has considered this issue, it appears the actual cost can be determined in one of three ways:

- 1) All the equipment paid for by grant funds first, then cleanup. The results are shown in Exhibit 1.
- 2) All the cleanup paid for by grant funds first, then equipment. The results are shown in Exhibit 2.
- 3) Pro rate the grant in equal amounts to equipment and cleanup in proportion to total project costs. The results are shown in Exhibit 3.

A major drawback to the first and second methods is that they both contain a bias based on the kind of expenditures making up the total project cost. The bias can either favor the applicant significantly or the taxpaying public significantly.

The first method is biased against applicants with projects having significant cleanup costs. That is, the total project cost is high, making the grant sizable and when it is deducted from the equipment expenditure, there is nothing left to claim for a tax credit--no benefit to the applicant, but significant benefit to the taxpaying public since there is no expenditure of public funds. (See Exhibit 1.)

In the second method, the bias favors the applicant. That is, the total project cost is high, the grant is sizable and when it is deducted from the proportionately large cleanup bill, there is only a small amount of grant left to deduct from equipment. The majority of equipment costs remaining can then be claimed for a tax credit--a greater benefit to the applicant and a greater burden on public funds. (See Exhibit 2.)

The third method applies the grant uniformly over equipment and cleanup in the proportion they represent of the whole project. (See Exhibit 3.) In the Attorney General's opinion, "it would

Memo To: Environmental Quality Commission  
June 10, 1994  
Page 3

allow underground storage tank owners to receive a tax credit based on their degree of financial participation in costs eligible for tax credit certification. This balance between the tax credit program and the essential services grant program is consistent with the purposes of both [programs] to assist underground storage tank owners in complying with environmental regulations without suffering undue financial burdens."

In weighing the interest of the taxpaying public vis-a-vis the applicant's interest, the third method of prorating the grant uniformly seems the fairest way to resolve the matter. It allows the applicant to meaningfully participate in each financial assistance program as allowed by law and protects the public interest in providing reasonable assistance under each program. The Attorney General has reviewed our analysis and concurs that this is an appropriate resolution of the matter.

#### CONCLUSION

Attached to this memorandum is the tax relief application review report of the first tax credit application received by DEQ where the taxpayer (Joseph A. Huff, TC-4167) has received an essential services grant. The Department's recommended methodology has been incorporated into this report with the "actual cost" determination and breakdown (labeled "Adjusted Claimed Facility Cost") displayed in a table in section 2 (top of page 2). As added information to be included routinely, the review report includes Attachment A, Tax Credit/Grant Adjusted Facility Cost Worksheet presenting the tax credit/grant deduction method in detail.

The Department requests that you concur with our recommendation to prorate the essential services grant between equipment and cleanup costs in proportion to their share of total project costs. We have access to these detail cost figures through the essential services grant program and can use that information to determine the validity of total project costs.

RPR:ba  
TAXCREDIT  
June 10, 1994

#### Attachments:

Exhibit 1, Grant Applied to Equipment First, then Cleanup  
Exhibit 2, Grant Applied to Cleanup First, then Equipment  
Exhibit 3, Prorate Grant Uniformly over Equipment and Cleanup  
TC-4167, Tax Relief Application Review Report, Joseph A. Huff  
Attachment A, Tax Credit/Grant Adjusted Facility Cost Worksheet

EXHIBIT 1. GRANT APPLIED TO EQUIPMENT FIRST, THEN CLEANUP

UST GRANT			TAX CREDIT
-----			
ELIGIBLE ACTIVITIES			
Equipment(including Stage I and II vapor collection)			Equipment(including Stage I and II vapor collection)
Product pumps			Not eligible
Soil and groundwater cleanup			Not eligible
-----			
TOTAL ELIGIBLE PROJECT COST			
Equipment	\$55,574		\$55,574
Cleanup+pumps	18,126		0
	-----		-----
Total eligible project cost	\$73,700		\$55,574
-----			
DISTRIBUTION OF PROJECT EXPENDITURES			
Total grant award =	\$62,645		Applicant equip. expense eligible for tax credit:
Equipment:			
State =	\$55,574		
Applicant \$55,574-55,574 =	\$0		\$55,574-55,574= \$0
			=====
Cleanup:			
State \$62,645-55,574 =	\$7,071		Applicant cleanup expense eligible for tax credit: \$0
Applicant 18,126-7,071 =	\$11,055		
-----			

NOW, CALCULATE TAX CREDIT IN THE NORMAL WAY

TCRED1

EXHIBIT 2. GRANT APPLIED TO CLEANUP FIRST, THEN EQUIPMENT

UST GRANT		TAX CREDIT
-----		
PROJECT ACTIVITIES AND COSTS		
Equipment(including Stage I and II vapor collection)		Equipment(including Stage I and II vapor collection)
Product pumps		Not eligible
Soil and groundwater cleanup		Not eligible
-----		
TOTAL ELIGIBLE PROJECT COST		
Equipment	\$55,574	\$55,574
Cleanup+pumps	18,126	0
-----		
Total eligible project cost	\$73,700	\$55,574
-----		
DISTRIBUTION OF PROJECT EXPENDITURES		
Total grant award =	\$62,645	Applicant equip. expense
Equipment:		eligible for tax credit:
State =	\$44,519	
Applicant 55,574-44,519 =	\$11,055	\$55,574-44,519=
		\$11,055
		=====
Cleanup:		
State =	\$18,126	Applicant cleanup expense
Applicant 18,126-18,126 =	\$0	eligible for tax credit: \$0
-----		

NOW, CALCULATE TAX CREDIT IN THE NORMAL WAY

TCRED2

EXHIBIT 3. PRORATE GRANT UNIFORMLY OVER EQUIPMENT AND CLEANUP

UST GRANT			TAX CREDIT
-----			
ELIGIBLE ACTIVITIES			
Equipment(including Stage I and II vapor collection)			Equipment(including Stage I and II vapor collection)
Product pumps			Not eligible
Soil and groundwater cleanup			Not eligible
-----			
TOTAL ELIGIBLE PROJECT COST			
Equipment	\$55,574		\$55,574
Cleanup+pumps	18,126		0
-----			
Total eligible project cost	\$73,700		\$55,574
-----			
DISTRIBUTION OF PROJECT EXPENDITURES			
Total grant award =	\$62,645		Applicant equip. expense eligible for tax credit:
Equipment: $\$55,574/73,700 =$	75%		$\$8,590/55,574 =$ 15%
State $.75 \times 62,645 =$	\$46,984		
Applicant $55,574-46,984 =$	\$8,590		$\$55,574 \times 15% =$ \$8,590
			=====
Cleanup: $\$18,126/73,700 =$	25%		
State $.25 \times 62,645 =$	\$15,407		Applicant cleanup expense eligible for tax credit: \$0
Applicant $18,126-15,407 =$	\$2,719		
-----			
NOW, CALCULATE TAX CREDIT IN THE NORMAL WAY			

Note: Some discrepancies in calculations may occur due to rounding.

TCRED3

Mary M Eichler  
3085 NE Garden Avenue  
Corvallis, Oregon 97330  
(503) 757-8347  
FAX (503) 752-7667

Department of Environmental Quality  
Attn: Claudia Jones  
811 S.W. Sixth Avenue  
Portland, Or 97204

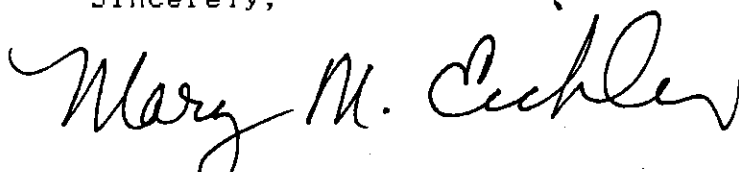
Attention: Claudia Jones

As per our telephone conversation, I am writing to request that the name on our Pollution Control Tax Credit be changed from Eichler Hay Co. to Mary and Walter Eichler only.

Identifying Numbers : Tax Relief Application No. T-4207  
Certificate No. 3312

Thank you for your help.

Sincerely,

A handwritten signature in cursive script that reads "Mary M. Eichler". The signature is written in dark ink and is positioned above the printed name.

Mary M. Eichler

## Environmental Quality Commission

- Rule Adoption Item  
 Action Item  
 Information Item

Agenda Item C  
July 22, 1994 Meeting

**Title:**

Portland Area Vehicle Inspection Program Boundary Change

**Summary:**

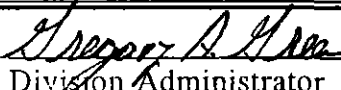
The Portland area is designated as nonattainment for carbon monoxide and ozone pollution. Although air quality has been getting better, anticipated growth in population and traffic volume will jeopardize future maintenance of health standards unless steps are taken to further reduce emissions. With no additional emission reduction strategies the population is at risk of exposure to unhealthy levels of air pollution and current restrictions on economic growth and business expansion will remain in place. These current requirements are an impediment to growth and the development of new jobs in the region.

This proposal will expand the vehicle inspection program to include approximately 11% more vehicles than are currently tested. This along with other initiatives the Department is pursuing at the direction of the State Task Force on Reducing Motor Vehicle Emissions and the Legislature will substantially ensure healthful air quality for the foreseeable future.

**Department Recommendation:**

Adopt the proposed rule as modified. As a result, persons in Aurora, Banks, Canby, Dundee, Estacada, Gaston, Hubbard, Newberg, North Plains, Sandy, Scappoose and other adjacent areas to the current Metro boundary who wish to obtain or renew state vehicle registrations for most gasoline powered or light duty diesel vehicles will be required to pass an emissions compliance inspection. Farm vehicles, 1974 model year automobiles and older, special interest and collectors' item vehicles are not subject to the inspection requirement.

  
Report Author

  
Division Administrator

  
Director

July 1, 1994

†Accommodations for disabilities are available upon request by contacting the Public Affairs Office at (503)229-5317(voice)/(503)229-6993(TDD).

State of Oregon  
Department of Environmental Quality

Memorandum<sup>†</sup>

Date: July 5, 1994

**To:** Environmental Quality Commission  
**From:** Fred Hansen, Director  
**Subject:** Agenda Item C, July 22, 1994, EQC Meeting  
Portland Area Vehicle Inspection Program Boundary Change

**Background**

On March 15, 1994, the Director authorized the Air Quality Division to proceed to a rulemaking hearing on proposed rules which would expand the boundaries in the Portland metropolitan area within which certain motor vehicles are subject to inspection and maintenance requirements for their emissions control systems. The boundary for the Medford inspection program is not affected by this rulemaking.

Pursuant to the authorization, hearing notice was published in the Secretary of State's Bulletin on April 1, 1994. The Hearing Notice and informational materials were mailed to those persons who have asked to be notified of rulemaking actions, and to persons known by the Department to be potentially affected by or interested in the proposed rulemaking action on April 7, 1994.

Public Hearings were held May 2, 1994 at 7:00 PM at the Adult Center, 1250 S Ivy Street in Canby; May 3, 1994 at 7:00 PM at the Pacific University Center in Forest Grove; May 4, 1994 at 7:00 PM at Newberg Community Hospital, 501 Villa Rd. in Newberg; May 9, 1994 at 7:00 PM at the Sandy Community Center, 38348 Pioneer Boulevard in Sandy; and May 11, 1994 at 7:00 PM at Scappoose High School, 33700 SE High School Way in Scappoose with Dave Berg in Newberg and Joe Weller at all the other locations serving as Presiding Officer. The Presiding Officer's Report (Attachment C) summarizes the oral and written testimony presented during the public comment period.

Written comment was received through 5:00 PM May 24, 1994. (A copy of the comments is available upon request.)

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<sup>†</sup>Accommodations for disabilities are available upon request by contacting the Public Affairs Office at (503)229-5317(voice)/(503)229-6993(TDD).



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Department staff have evaluated the comments received (Attachment D). Based upon that evaluation, modifications to the initial rulemaking proposal are being recommended by the Department. These modifications are summarized below and detailed in Attachment E.

The following sections summarize the issue that this proposed rulemaking action is intended to address, the authority to address the issue, the process for development of the rulemaking proposal including alternatives considered, a summary of the rulemaking proposal presented for public hearing, a summary of the significant public comments and the changes proposed in response to those comments, a summary of how the rule will work and how it is proposed to be implemented, and a recommendation for Commission action.

#### **Issue this Proposed Rulemaking Action is Intended to Address**

The Portland area has been designated as being in nonattainment with the national health standards for carbon monoxide (CO) and ozone (O<sub>3</sub>). With currently adopted emission reductions strategies the Portland area has been able to reach attainment with the ozone standard by the Clean Air Act deadline of 1993 and is anticipated to meet the carbon monoxide standard by the 1995 deadline. After attaining the carbon monoxide standard, the region should be able to stay in attainment for the foreseeable future. Anticipated growth in population and traffic is expected to cause the region to exceed the ozone standard again in the mid 1990s unless further measures are taken to reduce emissions. With no additional emission reduction strategies the population is at risk of exposure to unhealthy levels of air pollution and current restrictions on economic growth and business expansion will remain in place. These current requirements are an impediment to growth and the development of new jobs in the region.

To ensure maintenance of the ozone air quality standard in light of an expected 31 percent increase in population and 47 percent increase in vehicle miles traveled by the year 2006, a reduction in emissions of volatile organic compounds of 35.6% and nitrogen oxides of 20.2% is required.

The State Task Force on Reducing Motor Vehicle Emissions reviewed over 100 different air pollution control strategies to achieve these reduction targets. A more intensive investigation of twenty strategies was conducted to determine their feasibility, efficacy and cost effectiveness. Seven strategies were ultimately selected as part of the base plan. Among them were recommendations for an expanded vehicle inspection boundary, a more rigorous vehicle inspection test procedure, employee commuter options program and gasoline-powered lawn and garden standards for new equipment.

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Expanding the boundary of the Portland vehicle inspection program to include an additional 11% more vehicles is one of the critical elements in the plan. This package has been reviewed and recommended by a number of organizations, including the State Task Force on Reducing Motor Vehicle Emissions and the Oregon Legislature to meet the pollution reduction need. Biennial inspections of motor vehicles was recognized as a very cost effective emission reduction method compared to other air pollution control strategies. Vehicle inspection/maintenance programs reduce pollution at a cost of about \$3,000 per ton of pollutant versus about \$8,000 per ton for California's new low emission vehicle program or over \$10,000 per ton for state-of-the-art industrial controls.

#### **Relationship to Federal and Adjacent State Rules**

The Clean Air Act provides discretion to states as to what elements are to be included in a maintenance plan. However, if this rule is not adopted, a critical element of the Portland Air Quality Maintenance Plan will be absent and the plan will not be approvable by EPA. Without an approved maintenance plan the population remains at risk of adverse health effects from breathing polluted air. There can be no lifting of restrictions on business and economic growth in major portions of Clackamas, Columbia, Marion, Multnomah, Washington and Yamhill counties and the region may face further burdensome federal emission reduction requirements.

Portions of Clark County in Washington are also part of the ozone nonattainment area. The Southwest Washington Air Pollution Control Authority is responsible for preparing a maintenance plan to provide the equivalent emission reductions that have been projected for the Department's maintenance plan. The specific elements of that maintenance plan have not been determined at this time.

An inspection/maintenance requirement has been recently put in place for vehicles in Clark County as part of that area's attainment strategy. The control area, described by zip codes, intersects at the state line approximately at the point of the Department's proposed expanded boundary.

#### **Authority to Address the Issue**

The Commission is authorized by ORS 468A.390 to designate boundaries for motor vehicle inspection requirements when the need is identified under the State of Oregon Clean Air Act Implementation Plan. The proposed amendment to the rule will be a part of the State Implementation Plan.

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**Process for Development of the Rulemaking Proposal (including Advisory Committee and alternatives considered)**

The State Task Force on Reducing Motor Vehicle Emissions originally proposed expanding the vehicle inspection boundary to include all of Clackamas, Multnomah and Washington counties. Other larger boundaries, e.g., including the entire Willamette Valley, were considered but not recommended because the costs were too great in relation to the benefits. The Special House Committee on Emissions felt that expanding the I/M boundary was an appropriate strategy but that it could be achieved in a more equitable way by including more of the urbanized portions of the region. The Legislature recognized that as a result the boundaries would extend outside the Tri-county area but they left the specific new boundary identification to the Environmental Quality Commission.

A process was established to meet legislative direction and the emission reduction goals of establishing the new boundary. A Technical Advisory Task Force on the Vehicle Inspection Boundary Change was appointed that was comprised of a number of local government officials, industry representatives and representatives of planners, the Oregon Driver and Motor Vehicles Services, environmental organizations, the Population Research and Census Center and private citizens (see Attachment F for a list of members). This group was convened to provide guidance to the Department on what criteria should be used to identify the new boundary.

The emission reduction credit associated with expanding the boundary was assumed to be based on at least 1,174,291 people (the 1990 population of Clackamas, Multnomah and Washington counties) being included within the testing program, approximately an 11% increase in the current program's scope. To equitably reach that target within the legislative direction the Task Force reviewed and approved a proposal to draw the boundary primarily using "Journey to Work" data from the 1990 Census as the basic datum. Census tracts adjacent to the current boundary would be evaluated on the basis of the "number" of workers that travel to work within the Portland Air Quality Maintenance Area (AQMA) and the "percentage" of workers that travel to work within the AQMA. The boundary expansion was to be identified by including the areas exhibiting the greatest amount of travel into the AQMA considering the aforementioned data analyses.

The new boundary was to be drawn by computer also considering the following criteria:

- The boundary should encompass the greatest number of people meeting the criteria and the minimum geography, i.e., the greatest population density.

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- The boundary should be contiguous to the nonattainment area and contain no "islands".
- The boundary should correspond, if possible, with other recognizable boundaries in use, e.g. zip codes, natural geographic boundaries, etc.

The Task Force asked the Department to also consider non-work trips when evaluating the relative contribution of vehicle trips into the AQMA. After researching other available data, the Department could not find any reliable indicator of nonwork trip travel into the AQMA, although the Metro External Corĉon Survey was useful to corroborate and refine the boundary developed from the Census data. The Task Force also urged the Department to not ignore less populated areas outside of cities and towns for contributions to emissions. Several members expressed their belief that recent development trends in these areas may reflect strong attachments to Portland economic and cultural attractions and therefore be the source of many trips into the metropolitan area.

The proposed expanded boundary is shown in Attachment H. The bounded areas represent a population approximately equivalent to the 1990 population of Clackamas, Multnomah and Washington counties.

#### **Summary of Rulemaking Proposal Presented for Public Hearing and Discussion of Significant Issues Involved.**

The Department proposed that the boundary for vehicle emissions testing requirements in the Portland area be expanded to include the cities of Aurora, Banks, Canby, Dundee, Estacada, Gaston, Hubbard, Lafayette, Newberg, North Plains, Sandy, Scappoose and other areas adjacent to the current Metro boundary.

It was anticipated that there would be several issues that would be raised in the public comment period. The first issue was the expansion of the boundary itself. Secondly, it was anticipated that people from differing areas would raise concerns about the appropriateness of including or excluding certain areas from the inspection requirement.

#### **Summary of Significant Public Comment and Changes Proposed in Response**

Many concerns were raised about the effectiveness of a vehicle inspection program, whether the Department should be focussing on large cities rather than small towns and rural areas and whether residents of certain types of land use, e.g. exclusive farm use

zones, should be exempted from inspection requirements. In addition suggestions were made for alternative emission reduction strategies. These are presented in more detail in Attachment D.

By considering both indexes in determining the boundary, the methodology was able to maintain a balance between achieving the most emission reductions while including the minimum area (by considering the number of workers) and the equity of the testing requirement (by considering the percentage of workers). The percentage index also provides a barometer of the cost effectiveness of testing any given population to achieve the needed emission reductions because it will target areas where a relatively high percentage of the population make regular trips into the airshed.

Objections that focussed on included tracts that ranked lower on one scale than the other tended to minimize the contribution of these two variables towards designing an effective and efficient program. Even though tracts did score differently on either scale, when looking at both factors all of the included tracts were consistently higher than tracts that were not included.

Others argued that larger municipal areas should have the requirement imposed on them before including smaller towns. The data indicate, however, the smaller towns and unincorporated areas surrounding Portland are much greater sources of trips into the ozone nonattainment area than cities like Salem or Eugene. Similarly, commentators suggested that the requirement should be extended statewide. The proposed boundary expansion is designed to meet the projected emission reduction need for the Portland air quality maintenance area. Extending it to other areas of the state would not be cost effective.

Alternative strategies were also recommended. Most of them did not provide equivalent emission reductions. Several commentators suggested behavioral or market based controls. The Task Force proposed two strategies of this kind as part of the maintenance plan, emission fees and congestion pricing, however statutory authority to adopt either of these measures was not granted by the 1993 Legislature.

Suggestions were made to exempt exclusive farm use areas on the basis that persons living here were marginal trip generators. This zoning restriction is not restrictive enough to guarantee that only farm use development will occur. The Legislature has, in recent years, loosened requirements for exclusive farm use and forest resource zones that will allow more nonfarm and forest development to occur. Exemptions based on land use could not be expected to accurately identify farmers and forest managers. Currently there is an statutory exemption from testing based on farm use of the vehicle. Some

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commentors suggested that this "F-plate" exemption be extended to all vehicles registered at the same address. The Commission, however, does not have statutory authority to extend this exemption. The statutory exemption may be broad enough as currently written to provide the type of exemption the commentors desired.

Some commentors pointed out that their city planning efforts are directed towards making the community a job center, reducing the need for trips into the Portland area. The expansion, however, is based on addressing a current need. Trends show that more people are travelling in to metropolitan jobs from the outlying areas as shown in census data. The Census Bureau defines a metropolitan statistical area as a geographic area consisting of a large population nucleus together with the adjacent communities having a high degree of economic and social integration with that nucleus. The Bureau uses 15% of the workforce travelling into the metropolitan area as an indicator of that connection. For instance, in 1975 when the current Portland testing program was started, Yamhill County had not met the 15% threshold. By 1980 Yamhill County met that standard and in 1990 the data indicated that 23% of the workforce travelled to a job in the tri-county area. The Department would support a review of the continued inclusion of any of these areas when the maintenance plan is itself reviewed in ten years. Based on the analysis of data collected at that time the Department would consider revising the inspection boundary to exclude areas that significantly reduce the number of trips to the AQMA.

The Department did review the data again to look for special circumstances that would warrant modifying the proposed boundary. An anomaly was uncovered in one case. The original methodology provides a consistent grouping of areas, except in the case of Lafayette. Here the data indicated that, although located in a census tract which showed relatively high numbers and percentage of the workforce, the town of Lafayette itself was a distinctly smaller source of trips to the AQMA, less than 10% of the total population. Based on the fact that this area is on the periphery of the boundary, that there is a relatively large discrepancy (about a factor of two) between Lafayette and the next incorporated area and that all other towns show at least 10% of its population travelling to jobs in the metropolitan area, the Department recommends that the original boundary be modified to exclude the town of Lafayette.

### **Summary of How the Proposed Rule Will Work and How it Will be Implemented**

Beginning in May 1995 owners of certain types of gasoline and diesel powered vehicles in the affected area will be required to obtain a certificate of compliance with the Department's emission test in order to re-register their vehicle. These additional vehicles will be phased into the testing requirement over the next 24 months as their registrations

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come due. Vehicle owners will be notified of the requirement in the renewal notice provided by Driver and Motor Vehicle Services up to three months prior to registration expiration.

The Department will begin in August 1994 to identify sites for facilities to respond to the increased testing workload. Additional test equipment will be purchased, debugged and installed and staff will be hired and trained to operate the testing facilities within the budget provided by the new revenues.

**Recommendation for Commission Action**

It is recommended that the Commission adopt the rules/rule amendments regarding expanding the control area for vehicle emission inspections in the Portland area as presented in Attachment A of the Department Staff Report.

**Attachments**

- A. Rule (Amendments) Proposed for Adoption
- B. Supporting Procedural Documentation:
  - 1. Legal Notice of Hearing
  - 2. Public Notice of Hearing (Chance to Comment)
  - 3. Rulemaking Statements (Statement of Need)
  - 4. Fiscal and Economic Impact Statement
  - 5. Land Use Evaluation Statement
- C. Presiding Officer's Report on Public Hearing
- D. Department's Evaluation of Public Comment
- E. Detailed Changes to Original Rulemaking Proposal made in Response to Public Comment
- F. Advisory Committee Membership
- G. Rule Implementation Plan
- H. Proposed Vehicle Inspection Boundary

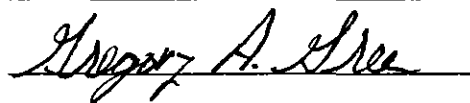
**Reference Documents (available upon request)**

Written Comments Received (listed in Attachment C)

Approved:

Section: \_\_\_\_\_

Division: \_\_\_\_\_



Report Prepared By: Kevin Downing

Phone: 503 229-6549

Date Prepared: July 1, 1994



## Boundary Designations

340-24-301

(1) In addition to the area specified in ORS 815.300, pursuant to ORS 468A.390, the following geographical areas, referred to as the Portland Vehicle Inspection Area and the Medford-Ashland AQMA, ~~are~~<sup>is</sup> designated as ~~an~~<sup>is</sup> areas within which motor vehicles are subject to the requirement under ORS 815.300 to have a Certificate of Compliance issued pursuant to ORS 468A.380 to be registered or have the registration of the vehicle renewed.

(2) As used in this section, "Portland Vehicle Inspection Area" means the area of the state included within the following census tracts, block groups and blocks as used in the 1990 Federal Census. In Multnomah County the following tracts, block groups and blocks are included: Tracts 1, 2, 3.01, 3.02, 4.01, 4.02, 5.01, 5.02, 6.01, 6.02, 7.01, 7.02, 8.01, 8.02, 9.01, 9.02, 10, 11.01, 11.02, 12.01, 12.02, 13.01, 13.02, 14, 15, 16.01, 16.02, 17.01, 17.02, 18.01, 18.02, 19, 20, 21, 22.01, 22.02, 23.01, 23.02, 24.01, 24.02, 25.01, 25.02, 26, 27.01, 27.02, 28.01, 28.02, 29.01, 29.02, 29.03, 30, 31, 32, 33.01, 33.02, 34.01, 34.02, 35.01, 35.02, 36.01, 36.02, 36.03, 37.01, 37.02, 38.01, 38.02, 38.03, 39.01, 39.02, 40.01, 40.02, 41.01, 41.02, 42, 43, 44, 45, 46.01, 46.02, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60.01, 60.02, 61, 62, 63, 64.01, 64.02, 65.01, 65.02, 66.01, 66.02, 67.01, 67.02, 68.01, 68.02, 69, 70, 71, 72.01, 72.02, 73, 74, 75, 76, 77, 78, 79, 80.01, 80.02, 81, 82.01, 82.02, 83.01, 83.02, 84, 85, 86, 87, 88, 89, 90, 91, 92.01, 92.02, 93, 94, 95, 96.01, 96.02, 97.01, 97.02, 98.01, 98.02, 99.01, 99.02, 99.03, 100, 101, 102, 103.01, 103.02, 104.02, 104.04, 104.05, 104.06, 104.07; Block Groups 1, 2 of Tract 105; Blocks 360, 361, 362 of Tract 105; that portion of Blocks 357, 399 of Tract 105 beginning at the intersection of the Oregon-Washington State Line ("State Line") and the northeast corner of Block Group 1 of Tract 105, thence east along the State Line to the intersection of the State Line and the eastern edge of Section 26, T1N, R4E, thence south along the section line to the centerline of State Highway 100, thence west along the centerline of State Highway 100 to the intersection of State Highway 100 and the western edge of Block Group 2 of Tract 105. In Clackamas County the following tracts, block groups and blocks are included: Tracts 201, 202, 203.01, 203.02, 204.01, 204.02, 205.01, 205.02, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216.01, 216.02, 217, 218, 219, 220, 221.01, 221.02, 222.02, 223, 224, 225, 226, 227.01, 227.02, 228, 229, 230, 231, 232, 233, 234.01, 234.02, 235, 236, 237, 238; Block Groups 1, 2 of Tract 241; Block Groups 1, 2, 3, 4 of Tract 242; Block Groups 1, 2 of Tract 243.02. In Marion County the following tracts, block groups and blocks are included: Tract 102. In Yamhill County the following tracts, block groups and blocks are included: Tracts 301, 302; Block Groups 1, 2, 3, 4 of Tract 303; Blocks 1, 2B, 3B, 27B of Tract 303. In Washington County the following tracts,

block groups and blocks are included: Tracts 301, 302, 303, 304.01, 304.02, 305.01, 305.02, 306, 307, 308.01, 308.02, 309, 310.03, 310.04, 310.05, 310.06, 311, 312, 313, 314.01, 314.02, 315.01, 315.04, 315.05, 315.06, 315.07, 315.08, 316.03, 316.04, 316.05, 316.06, 316.07, 317.02, 317.03, 317.04, 318.01, 318.02, 318.03, 319.01, 319.03, 319.04, 320, 321.01, 321.02, 322, 323, 324.02, 324.03, 324.04, 325, 326.01, 326.02, 328, 329, 330, 331, 332, 333; Block Groups 1, 2 of Tract 327; Block Group 1 of Tract 334; Block Group 2 of Tract 335; Block Group 1 of Tract 336. In Columbia County the following tracts, block groups and blocks are included: Tract 9710.98; Block Groups 2, 3 of Tract 9709.98; Blocks 146B, 148, 152 of Tract 9709.98.

(3){(2)} As used in this section, "Medford-Ashland Air Quality Maintenance Area" means the area of the state beginning at a point approximately one mile northeast of the town of Eagle Point, Jackson County, Oregon, at the northeast corner of section 36, T35S, R1W; thence south along the Willamette Meridian to the southeast corner of section 25, T37S, R1W; thence southeast along a line to the southeast corner of section 9, T39S, R2E; thence south-southeast to the southeast corner of section 22, T39S, R2E; thence south to the southeast corner of section 27, T39S, R2E; thence southwest to the southeast corner of section 33, T39S, R2E; thence west to the southwest corner of section 31, T39S, R2E; thence northwest to the northwest corner of section 36, T39S, R1E; thence west to the southwest corner of section 26, T39S, R1E; thence northwest along a line to the southeast corner of section 7, T39S, R1E; thence west to the southwest corner of section 12, T39S, R1W; thence northwest along a line to the southwest corner of section 20, T38S, R1W; thence west to the southwest corner of section 24, T38S, R2W; thence northwest along a line to the southwest corner of section 4, T38S, R2W; thence west to the southwest corner of section 5, T38S, R2W; thence northwest along a line to the southwest corner of section 31, T37S, R2W; thence north along a line to the Rogue River, thence north and east along the Rogue River to the north boundary of section 32, T35S, R1W; thence east along a line to the point of beginning.

[NOTE: This rule is included in the State of Oregon Clean Air Act Implementation Plan as adopted by the Environmental Quality Commission under OAR 340-20-047.]

Stat. Auth.: ORS Ch. 468 & 468A

Hist.: DEQ 11-1985, f. 9-30-85, ef. 1-1-86; DEQ 21-1988, f. & cert. ef. 9-12-88; DEQ 4-1993, f. & cert. ef. 3-10-93

**NOTICE OF PROPOSED RULEMAKING HEARING**

(Rulemaking Statements and Statement of Fiscal Impact must accompany this form.)

Department of Environmental Quality      Air Quality Division  
OAR Chapter 340

DATE:	TIME:	LOCATION:
May 2, 1994	7:00 PM	Adult Center 1250 S. Ivy St. Canby, Oregon
May 3, 1994	7:00 PM	Pacific University University Center Multipurpose Room (lower level) Forest Grove, Oregon
May 4, 1994	7:00 PM	Newberg Community Hospital Health Education Rooms 3, 4, 5 501 Villa Ave. Newberg, Oregon
May 9, 1994	7:00 PM	Sandy Community Center 38348 Pioneer Boulevard Sandy, Oregon
May 11, 1994	7:00 PM	Scappoose High School Cafeteria 33700 SE High School Way Scappoose, Oregon

HEARINGS OFFICER(s): Kevin DowningSTATUTORY AUTHORITY: ORS 468A.390

ADOPT: None

AMEND: OAR 340-24-301

REPEAL: None

- This hearing notice is the initial notice given for this rulemaking action.
- This hearing was requested by interested persons after a previous rulemaking notice.
- Auxiliary aids for persons with disabilities are available upon advance request.

**SUMMARY:**

The rule amendment proposes expansion of the vehicle inspection boundary in the Portland metropolitan area within which certain motor vehicles are subject to inspection and maintenance (I/M) requirements for their emissions control system. Cities proposed to be within the program include Aurora, Canby, Newberg, Sandy, Scappoose and adjacent areas

to the current Metro boundary. The boundary for the Medford I/M program is not affected by this rulemaking. Expansion of the boundary is one of the key strategies needed for a 10 year plan being developed to maintain attainment with the federal ozone standard. The boundary expansion was selected by the State Task Force on Reducing Motor Vehicle Emissions and endorsed by the Oregon Legislature as one of the essential elements of the maintenance plan.

**LAST DATE FOR COMMENT:** 5:00 PM PDST, May 24, 1994

**DATE PROPOSED TO BE EFFECTIVE:** May 1, 1995

**AGENCY RULES COORDINATOR:** Harold Sawyer, (503) 229-5776

**AGENCY CONTACT FOR THIS PROPOSAL:** Kevin Downing  
**ADDRESS:** Air Quality Division  
811 S. W. 6th Avenue  
Portland, Oregon 97204  
**TELEPHONE:** (503) 229-6549  
or Toll Free 1-800-452-4011

Interested persons may comment on the proposed rules orally or in writing at the hearing. Written comments will also be considered if received by the date indicated above.

  
\_\_\_\_\_  
Signature

3-15-94  
\_\_\_\_\_  
Date

*Oregon Department of Environmental Quality*

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

**Portland Area Vehicle Inspection Program Boundary Change**

Date Issued:	April 4, 1994
Public Hearings:	May 2, 3, 4, 9, 11, 1994
Comments Due:	May 24, 1994

**WHO IS  
AFFECTED:**

Motor vehicle owners in the Portland metropolitan area

**WHAT IS  
PROPOSED:**

This proposal will expand the boundary in the Portland metropolitan area within which certain motor vehicles are subject to inspection and maintenance (I/M) requirements for their emissions control system. The boundary for the Medford I/M program is not affected by this rulemaking.

**WHAT ARE THE  
HIGHLIGHTS:**

Persons in Aurora, Banks, Canby, Dundee, Estacada, Gaston, Hubbard, Lafayette, Newberg, North Plains, Sandy, Scappoose and other adjacent areas to the current Metro boundary who wish to obtain or renew state vehicle registrations for most gasoline powered or light duty diesel vehicles will be required to pass an emissions compliance inspection. Farm vehicles, 1974 model year automobiles and older, special interest and collectors' item vehicles are not subject to the inspection requirement. Depending on public comments and further evaluation, other communities may be included within the boundary when the final rules are issued.

**HOW TO  
COMMENT:**

Public Hearings to provide information and receive public comment are scheduled as follows:

<b>DATE:</b>	<b>TIME:</b>	<b>LOCATION:</b>
May 2, 1994	7:00 PM	Adult Center 1250 S. Ivy St. Canby, Oregon



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

11/1/88

**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.

May 3, 1994	7:00 PM	Pacific University University Center Multipurpose Room (lower level) Forest Grove, Oregon
May 4, 1994	7:00 PM	Newberg Community Hospital Health Education Room 3 501 Villa Rd. Newberg, Oregon
May 9, 1994	7:00 PM	Sandy Community Center 38348 Pioneer Boulevard Sandy, Oregon
May 11, 1994	7:00 PM	Scappoose High School Cafetorium 33700 SE High School Way Scappoose, Oregon

The hearings will be preceded at 6:30 PM with a question and answer period regarding the proposal.

All comments regarding the proposal are welcome, however the Department is particularly soliciting comments concerning the criteria and methodology used in drawing the boundary. Written comments must be received by 5:00 p.m. on May 24, 1994 at the following address:

Department of Environmental Quality  
Air Quality Division  
811 S. W. 6th Avenue  
Portland, Oregon, 97204

A copy of the Proposed Rule may be reviewed at the above address. A copy may be obtained from the Department by calling the Air Quality Division at 229-5359 or calling Oregon toll free 1-800-452-4011.

**WHAT IS THE  
NEXT STEP:**

The Department will evaluate comments received and will make a recommendation to the Environmental Quality Commission. Interested parties can request to be notified of the date the Commission will consider the matter by writing to the Department at the above address.

State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY

Rulemaking Proposal  
for  
Portland Area Vehicle Inspection Program Boundary Change

## Rulemaking Statements

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

1. Legal Authority

ORS 468A.390

2. Need for the Rule

The proposal to expand the boundary, and increase the number of vehicles subject to emission system inspection requirements, is a critical element of the Portland area ozone maintenance plan. This strategy, along with others recommended by the State Task Force on Reducing Motor Vehicle Emissions and the House Special Task Force on Emissions and confirmed by the Legislature in HB 2214, will ensure that Portland area residents will have clean air at least until 2006 and that Clean Air Act restrictions on new business expansion can be lifted.

3. Principal Documents Relied Upon in this Rulemaking

Volume 1, Final Report of the State Task Force on Motor Vehicle Emission Reductions in the Portland Area; 1990 Census Data Population and Housing Characteristics.

4. Advisory Committee Involvement

A Technical Advisory Committee on the Vehicle Inspection/Maintenance Boundary Expansion was convened and met to discuss criteria and methodology to be used in drawing the new boundary. Given the direction from the Committee, the Department applied that criteria to census population databases to develop the boundary described in the rulemaking.

State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY

Rulemaking Proposal  
for  
Portland Area Vehicle Inspection Program Boundary Change

Fiscal and Economic Impact Statement

**Introduction**

The proposed rule amendment will require an additional 73,000 vehicles in the Portland metropolitan area to be tested for emissions. These additional vehicles will be tested without increasing the current test fees. The current cost of the certificate of compliance is \$10. There is no charge for vehicles that fail the emissions compliance inspection. However, state license registration of the vehicle is dependent upon acceptable test results.

**General Public**

Owners of any gaseous powered vehicle or any diesel powered vehicle with a gross vehicle weight rating less than 8501 pounds will be required, as a condition of re-registration, to pass an emissions system compliance test. The cost for the certificate of compliance is \$10. There is no charge for a test that shows a failure to comply. Repair costs are the responsibility of the owner and average \$50 per vehicle failing the test. Heavy duty gaseous powered vehicles require inspections annually. All other vehicles are inspected on a biennial schedule. In the future the Portland area vehicle inspection program, including the expanded boundary, will be proposed to be subject to a more thorough test procedure.

**Small Business**

The financial impact for small businesses with vehicles subject to inspection is identical to that facing the general public.

For vehicle repair businesses there is estimated to be a positive annual economic impact of approximately \$600,000. This reflects the costs to bring vehicles that fail the test into compliance with established emission standards.



## Large Business

The financial impact for large businesses with vehicles subject to inspection is identical to that facing the general public. However, businesses that have a fleet of 100 or more vehicles may qualify for self certification of their fleet. The business would assume the cost of the testing program among its normal maintenance costs. There are fees charged for establishing the status of a motor vehicle fleet testing operation, licensing of fleet emission inspectors and for each exhaust gas analyzer used. The initial charge is \$5 for each setup, license and/or analyzer and an annual renewal fee of \$1 for each setup, license and/or analyzer. Each certificate of compliance for fleet vehicles requires a payment of \$5 to DEQ.

## Local Governments

The financial impact on local government with vehicles subject to inspection is identical to that facing the general public, except that government vehicles are required to obtain a certificate of compliance each year. In addition, agencies with a fleet of 50 or more vehicles may qualify for self certification of their fleet with the same fee schedule as outlined above for large businesses.

## State Agencies

- DEQ - One or more testing stations may be necessary to accommodate the increased testing load.

- FTE	7.0 FTE Vehicle Emission Technician
- Revenues	\$733,700
- Expenses	\$703,960 Personal Services, Services and Supplies
	\$ 66,424 Capital Outlay

- Drivers and Motor Vehicles Services: Currently DEQ has an agreement with DMV to, in the appropriate areas, issue notices of requirements for emission testing with the registration notices. Costs associated with the additional area will be covered by the current fee structure and may even be reduced with enhanced capabilities to more accurately identify those vehicles requiring testing.

## Assumptions

Approximately 36,500 additional vehicles will be tested each year. It is anticipated that 30% will require repairs to the emissions systems to pass the compliance inspection. The average cost of repairs is \$50 for those vehicles that fail the test.

State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY

Rulemaking Proposal  
for  
Portland Area Vehicle Inspection Program Boundary Change

## Land Use Evaluation Statement

**1. Explain the purpose of the proposed rules.**

The proposal to expand the boundary, and increase the number of vehicles subject to emission system inspection requirements, is a critical element of the Portland area ozone maintenance plan. This strategy, along with others recommended by the State Task Force on Reducing Motor Vehicle Emissions and the House Special Task Force on Emissions and confirmed by the Legislature in HB 2214, will ensure that Portland area residents will have clean air for at least the next ten years and that Clean Air Act restrictions on new business activity can be lifted.

**2. Do the proposed rules affect existing rules, programs or activities that are considered land use programs in the DEQ State Agency Coordination (SAC) Program?**

Yes \_\_\_ No XX

a. If yes, identify existing program/rule/activity:

b. If yes, do the existing statewide goal compliance and local plan compatibility procedures adequately cover the proposed rules?

Yes \_\_\_ No \_\_\_ (if no, explain):

c. If no, apply the following criteria to the proposed rules.

Staff should refer to Section III, subsection 2 of the SAC document in completing the evaluation form. Statewide Goal 6 - Air, Water and Land Resources is the primary goal that relates to DEQ authorities. However, other goals may apply such as Goal 5 - Open Spaces, Scenic and Historic

Areas, and Natural Resources; Goal 11 - Public Facilities and Services; Goal 16 - Estuarine Resources; and Goal 19 - Ocean Resources. DEQ programs or rules that relate to statewide land use goals are considered land use programs if they are:

1. Specifically referenced in the statewide planning goals; or
2. Reasonably expected to have significant effects on
  - a. resources, objectives or areas identified in the statewide planning goals, or
  - b. present or future land uses identified in acknowledged comprehensive plans.

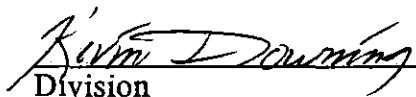
In applying criterion 2. above, two guidelines should be applied to assess land use significance:

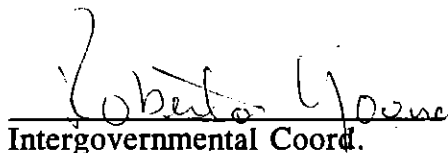
- The land use responsibilities of a program/rule/action that involves more than one agency, are considered the responsibilities of the agency with primary authority.
- A determination of land use significance must consider the Department's mandate to protect public health and safety and the environment.

**In the space below, state if the proposed rules are considered programs affecting land use. State the criteria and reasons for the determination.**

It has been previously determined through the DEQ SAC program that the vehicle inspection program is not a program that significantly affects land use. These proposed rules which change the boundary do not contain program changes that significantly affect land use.

3. **If the proposed rules have been determined a land use program under 2. above, but are not subject to existing land use compliance and compatibility procedures, explain the new procedures the Department will use to ensure compliance and compatibility.**

  
Division

  
Intergovernmental Coord.

7/14/94  
Date

State of Oregon  
Department of Environmental Quality

## Memorandum

Date: June 1, 1994

**To:** Environmental Quality Commission

**From:** David Berg and Joseph Weller, Presiding Officers

**Subject:** Hearings Report for Portland Area Vehicle Inspection Boundary Change

Five hearings were held to accept testimony on proposed rules that will expand the boundary in the Portland metropolitan area within which certain motor vehicles are subject to inspection and maintenance requirements for their emission control system.

On May 2, 1994 a public hearing was held at the Adult Center, 1250 S Ivy St., Canby. Thirty-seven persons attended, 14 persons presented oral testimony. Written testimony was presented by five persons at that meeting.

On May 3, 1994 a hearing was held at Pacific University in the Multipurpose room of the University Center. Three people attended that hearing and one presented oral and written testimony.

On May 4, 1994 a hearing was held at the Newberg Community Hospital, Health Education Room 3, 501 Villa Rd. Forty persons attended this hearing and 19 offered oral testimony and four presented written testimony.

On May 9, 1994 a hearing was held in Sandy at the Sandy Community Center, 38348 Pioneer Boulevard. Seven persons attended the hearing. Two presented oral testimony and one presented written testimony.

On May 9, 1994 a hearing was held at Scappoose High School in the school cafeteria. Forty-five persons attended and 16 presented oral testimony. Written testimony was received from 6 persons.

The following report provides a summary of written and oral comments made, including written comments received outside of the public hearings. Forty-one persons submitted additional written testimony outside of the public hearings. Comments are grouped by similar subject areas. The persons who made the comment are identified by a code which is keyed to the entries in the Testimony Reference table.

**Testimony References  
Public Testimony Given/Received in Canby**

<u>No.</u>	<u>Oral Testimony</u>	<u>Written Testimony</u>	<u>Name and Affiliation</u>
C1	YES		Dan Brown 1181 A Crosby Canby
C2	YES		Jerry Muncie 6806 S Miller Hubbard
C3	YES	YES	Doug Hopper 6713 S Gibson Woodburn
C4	YES	YES	George Forsman 11300 S Bremmer Canby
C5	YES		Don Muncie 6806 S Miller Hubbard
C6	YES		Garry LaPoint 10618 Crosby Rd NE Woodburn
C7	YES		Duane Shaw 9702 S Gribble Canby
C8	YES		George R Abbott 30895 Wall Colton
C9	YES		Steve Iverson 5989 S Newman Woodburn

C10	YES		Mary Pearmine 2251 Matheny Gervais
C11	YES		Albert Vrooman 14785 Ehlen Dundee
C12	YES		Francis Lang 32477 S Palmer Molalla
C13	YES	YES	Ronald Fullerton 26999 S Meridian Aurora
C14	YES	YES	Paula Molinsky 30841 Oswalt Colton
C15	YES	YES	Ken Molonsky 30841 Oswalt Colton

**Public Testimony Given/Received in Forest Grove**

<u>No.</u>	<u>Oral Testimony</u>	<u>Written Testimony</u>	<u>Name and Affiliation</u>
FG1	YES	YES	Dave Vanasche 36130 NW Wren Cornelius

### Public Testimony Given/Received in Newberg

<u>No.</u>	<u>Oral Testimony</u>	<u>Written Testimony</u>	<u>Name and Affiliation</u>
N1	YES		Sen. Stann Bunn 401 E 1st St Newberg
N2	YES		Ron Ross 675 3rd St Newberg
N3	YES		Kent Newell 1213 Newall Newberg
N4	YES		Bob Wendling 720 E 1st St Newberg
N5	YES		Neil Cohen PO box 220 Dundee
N6	YES		Larry Priano PO Box 309 Dayton
N7	YES	YES	Duane Cole City Manager, Newberg 414 E 1st St Newberg
N8	YES	YES	Albert Vrooman 440 SE 5th Dundee

N9	YES		Edmund Casciato 751 SW 11th Dundee
N10	YES		Steven Delashmutt 11170 NE Otter Newberg
N11	YES		Richard Murch 1315 E 10th Newberg
N12	YES		Roger Currier 504 Pinehurst Newberg
N13	YES	YES	Leslie Lewis PO Box 408 Newberg
N14	YES		Burton Thompson 17605 NE Ty Keson Newberg
N15	YES		George Alexander PO Box 350 Newberg
N16	YES		Monte Glud 23120 NE Hagey Dundee
N17	YES		T. Dan Wollam 512 Bukley Ln Newberg
N18	YES		Gary Gitzen 22820 Holly Hill Rd Hillsboro Yamhill County
N19	YES	YES	Dennis Goecks Chair, Yamhill Co Commission



**Public Testimony Given/Received in Sandy**

<u>No.</u>	<u>Oral Testimony</u>	<u>Written Testimony</u>	<u>Name and Affiliation</u>
Sa1	Yes	Yes	Barry Ray Bushue MultCoFarmBureau 9880 SE Levenue Rd Boring
Sa2	Yes		Michelle Boyle 43803 SE Kleinsmith Sandy

**Public Testimony Given/Received in Scappoose**

<u>No.</u>	<u>Oral Testimony</u>	<u>Written Testimony</u>	<u>Name and Affiliation</u>
Sc1	YES		RW Sherris 32968 NW Peak Rd Scappoose
Sc2	YES	YES	Lisa Smith 33567 SE Maple Scappoose
Sc3	YES	YES	Daniel W Caton 33213 Wheeler Scappoose
Sc4	YES		Roy A Fisher 32741 NW EJ Smith Scappoose
Sc5	YES	YES	Tony Federici State Rep Dist. 1 59945 Sunrise St Helens

Sc6	YES		Joan Dukes State Sen. Dist 1 Rt 2 Box 503 Astoria
Sc7	YES		Donald Anderson 22005 NW Gillihan Portland
Sc8	YES	YES	Eddie Huckins 33897 SE Maple St Scappoose
Sc9	YES	YES	Dan Sprague 17295 Clatskanie Dist. Clatskanie
Sc10	YES	YES	Marie Gadotti Columbia Co Farm Bureau 33717 Johnsons Landing Rd Scappoose
Sc11	YES		Scott Russell 31291 Raymond Cr Scappoose
Sc12	YES		Rita Bernhard Mayor City Hall Scappoose
Sc13	YES		Jim Minard PO Box P Scappoose
Sc14	YES		Craig Spansail 52950 NW Cliff Scappoose
Sc15	YES		Phil Holsheimer 50925 SW Old Portland Rd Scappoose

Sc16 YES

Dale R Walker  
31413 Raymond Cr  
Scappoose

**Public Written Testimony Received**

<u>No.</u>	<u>Name and Affiliation</u>
W1	Mary McDermott American Lung Association of Oregon 1776 SW Madison Portland
W2	Mr and Mrs Jesse J West 407 Mountainview Court Newberg
W3	Onslow S Althaus 2901 E 2nd Space 79 Newberg
W4	Dee Carmen 20766 S Shelden Colton
W5	Jose Rodriquez 21105 Hwy 211 Colton
W6	Duane Stanbro 22072 Hunter Rd Colton
W7	Scott Carroll 20070 S Young Rd Molalla
W8	Roger Bishop 20480 Green Mt Rd Colton

W9 Jason Carroll  
20138 Hwy 211  
Colton

W10 Jim Craven  
American Electronics Assn.  
707 13th St SE  
Salem

W11 John Ball  
320 S Locust St  
Canby OR 97013

W12 Francis Nagel  
Aurora

W13 Randall and Jane L Vial  
970 NW 22nd Ave  
Canby

W14 Jim Sahli  
29500 S Needy Rd  
Canby

W15 Philip Agrue  
29943 S Kenagy Lane  
Hubbard

W16 Joel and Teresa Spalding  
26730 S Hwy 170  
Canby

W17 Thomas P Fitzgerald

W18 Robert and Roxanne Besmehn  
50776 Dike  
Scappoose

W19 Bob Palzer  
Sierra Club Oregon Chapter Air Quality coordinator

W20 Eugene A Oster  
20928 NW Gilkison  
Scappoose

W21 Dale and Sandra Walker  
31413 Raymond Cr Rd  
Scappoose

W22 R A Newcomer  
26800 S Harms Rd  
Canby

W23 Marge Flick  
Scappoose

W24 Lawrence Castle  
302 N 1st Ave  
Canby

W25 Edwin and Patricia Pardey  
5604 S Miller  
Hubbard

W26 Gerald Wilce  
14700 NW Tranquility  
Banks

W27 Oregon Farm Bureau

W28 James and Shirley Pardey  
30626 S Meridian  
Hubbard

W29 Whitaker  
Rt 3 box 19  
Canby

W30 Les and Verna Kleve  
22331 Boones Ferry Rd  
Aurora

W31 Randy Crisell  
330 S Settlemier  
Woodburn

W32 Andrew M Hein  
25479 S Hwy 170  
Canby

W33 Allen and Joanne Loibl  
26600 S Hwy 170  
Canby

W34 Jerry Van De Walle  
17671 Woodland Loop  
Yamhill

W35 C.D. North  
27315 S Pelican  
Canby

W36 Melissa K Page  
540 1/2 NW 3rd  
Canby

W37 James Whitty  
Legislative Counsel  
Associated Oregon Industries

W38 Patricia K Fail  
52101 SW Eggleston  
Scappoose

W39 Bobby L Womack  
21015 S Deer Creek Ln  
Colton

W40 David Threefoot  
28491 S Hult Rd  
Beavercreek

W41 Janet L Sirr  
19362 S Frank  
Colton

Comments on Vehicle Inspection Boundary Designation rules

Testimony summary/Issues

Whose Comment

**INFORMATION USED TO DEVELOP THE PROPOSED BOUNDARIES IS NOT ADEQUATE OR IS ARBITRARY.**

1. C15  
The information used to develop the boundaries is too old and should be reviewed again using newer data.
2. C14,C13,C6  
40 person per square mile criteria used equals only one person per 16 acres.
3. C6  
The boundaries should be drawn along county lines.
4. Sa1  
McMinnville was excluded from the I/M area even though the number of McMinnville residents who commute to Portland is higher than the total population in Lafayette, which is in the boundary.
5. Sc2,Sc1  
The average commute time reported from the census for Scappoose area commuters does not support the notion that 3,000 per day are commuting from Scappoose into Portland. If as the paper says 3500 people from Scappoose commute to Portland that would be everyone in town, impossible.
6. Sc5  
Census tract data rank Scappoose below the criteria developed by DEQ for inclusion. DEQ needed only the top 22 census tracts to meet their population needs but Scappoose tracts ranked 29,30 and 35.
7. Sc3,Sc11  
Set up a road block to determine the origin, destination and purpose of trip. This would allow a better boundary to be drawn. Count the cars going down Hwy 30.
8. C4  
Allow those in the larger boundary to voluntarily have cars inspected and include Woodburn and Salem in the area.
9. W27  
The boundary was drawn according to the percentage of those in the area who commute to Portland, not the numbers who did so. This results in a boundary which includes Lafayette, but excludes McMinnville, a source of many more commuters.

10. N1,N7  
Analysis relies too much on current transportation patterns. For example, Newberg is committed to making itself independent of Portland and thus its future contribution to auto trips to Portland will decline. Extended area phone service will reduce commuting to Portland.
11. N1  
The commuter trip numbers don't add up. How much effort did the department put forth to identify the cars that move into the Portland area?
12. N4  
According to his own surveys, only 7% of Newberg residents commute to Portland. Also 1990 census data indicate that only 4% of Yamhill Co residents commute to work in the Tri-County area.
13. N5  
The proposal is based on faulty statistical evidence and poor scientific findings.
14. N7  
Data from Metro survey reported as percentage of trips, however this can be deceptive because there is no indication of the volume of the trips.

**INSPECTION AND MAINTENANCE IN THE PROPOSED EXPANDED BOUNDARY IS NOT NEEDED**

15. N13,Sc2,W8,N7  
The expanded I/M boundary only results in a 1% decrease in hydrocarbons and 1/2% decrease in NOx. This is insufficient air quality gain to justify the larger boundaries.
16. Sc2,W21,N2  
The number of commuters in Scappoose (Lafayette) represents only 1/2 of 1% of all employees over 16 years of age in the tri-county area. This is too small a number to justify I/M for Scappoose.
17. Sc8,W11,N10  
The current vehicle testing program is ineffective.
18. N16,Sc1,Sc16  
This is simply a grab for more money by DEQ
19. Sc11  
When enhanced I/M is required, there won't be enough dynamometers to test all of the cars which will need it.



20. N3, W36, W28, W20, W25, W26, W33, W34  
I rarely drive to Portland so why should I be forced to go through I/M?
21. W22, W29  
Our air(Canby, Newberg) is not polluted but yours is so keep your air away from us.
22. N10  
Driving to the I/M testing stations creates more pollution than it will remove from the air.

**SUGGESTIONS ON HOW TO GET NEEDED EMISSION REDUCTIONS INSTEAD OF OR IN ADDITION TO I/M.**

23. N3, C14, C13, C4, W26  
Not enough being done to get emission reductions from people living nearer the Portland city area ie. limit driving, special license plates to enter area, the mayor wants thousands of new residents.
24. C12  
Correct field burning would solve some of the problem.
25. C11  
Problems are caused by a lousy Portland freeway system.
26. C2, N12  
The real problem with auto emissions is the gasoline, we should have reformulated gas.
27. C15, Sa1  
Some businesses and farmers within the proposed boundaries pay payroll taxes to Tri-Met yet get no or little service. There is a need for mass transit to the outlying areas.
28. N14  
Advocate and obtain more mass transit, rather than expanding the I/M boundary.
29. Sc8, N10  
Require annual certified tune-ups or use the infra-red pollution detecting monitors to find the big polluters.
30. Sc8  
Provide an incentive to pass the I/M test by paying those who pass \$10 and charging those who don't pass \$30.
31. Sc5  
Institute parking rationing or reinstate a parking lid in Portland instead of including Scappoose in the I/M boundary.

32. Consider cash for clunkers option. Sc5
33. Consider regulation of older lawn and garden engine emissions. Sc5
34. Reinstate the Portland parking lid, increase parking fees. Sc5,Sc6,W13
35. Develop a way to solve the massive freeway and commuting problems. N8,Sc3,N5,N12
36. Inspect boat,planes,trucks,race cars,motorcycles for emission compliance within the existing I/M boundary. Sc3
37. Require employers to hire only people who live within existing I/M boundaries and require car pooling. Sc3
38. Limit the number of vehicles which can be registered per household. Sc3
39. Raise the price of gasoline to reduce driving. Sc3
40. Raise the legal driving age minimum to 18. Sc3
41. Should petition the federal government to have Vancouver and Portland declared as one airshed rather than the current two. Sc6
42. Develop incentives to use mass transit in Portland. Sc6
43. Require use of cleaner heating fuels for commercial and industrial facilities. C4
44. Target only those who commute long distances to Portland. C4,W16
45. All vehicles including log trucks, diesels, etc. should have to comply with the emissions inspections. W4,W16

46. N19,W16,W36  
Target those who commute from Washington State.
47. W19  
Diesel trucks should be subject to I/M. Other states require it and diesel exhaust has high Nox emissions
48. W19  
Worst case scenarios should be utilized to project ozone non-attainment in order ensure compliance with health standards for the next decade.
49. W19  
The current boundary for the Maintenance Plan should be expanded so that new point sources are required to have RACT and LAER.
50. W32  
The real problem is one person per vehicle commuters, one-half million of them. You should do something about this problem not saddle rural residents with the burden of solving this problem for you.
51. N8  
Phase in the requirements by requiring I/M on 1995 and newer model years only.
52. N11  
Turnover of the fleet will be adequate to reduce pollution.
53. N19  
Build a bypass to remove stalled and idling traffic from Newberg.

#### **INSPECTION AND MAINTENANCE OF AUTOS CAUSES DRIVABILITY AND MPG PROBLEMS**

54. N14,C5,W11  
Vehicle runs better with emissions systems disconnected or when the emissions do not meet DEQ specifications.

#### **SPECIFIC SUGGESTIONS ON WHAT AREAS TO INCLUDE/EXCLUDE**

55. N19,N17,N15,C6,Sc11,W30,N13  
The boundaries should be drawn along county lines, Tri-Counties.
56. N13,W14,W11,N10  
Thousands of people drive from Salem and/or Woodburn to Portland daily, why not require them to go through I/M.

57. C10  
Include Donald and Hubbard but not Woodburn
58. W16, W27, C3, F1, Sa1, Sc10, Sc7, W18  
Should include populated areas and exclude, or exempt EFU's, or exempt all vehicles registered to a person who has at least one "F" plated vehicle.
59. C13  
Should exclude all areas south of the Wilsonville and Canby urban growth boundaries, perhaps using the Molalla river as a natural boundary.
60. W3, W36  
Since people from the city of Newberg (Canby) contribute very little to the overall problem, they shouldn't have to be tested.
61. W4  
Should include Molalla.
62. W7, C14, C15  
Should include Woodburn but not Molalla.
63. N1  
McMinnville shows a bigger potential growth than Newberg, yet McMinnville is left of the larger I/M boundary. Yamhill Co. is growing slower than Multnomah, Clackamas or Washington Counties during 1990-1993.
64. N13  
Areas in Yamhill Co rank low on the list of areas to include in I/M. Other areas which have higher percentages or more commuters are not in the new boundaries.
65. N13  
Census tract 303 in Yamhill Co is very rural and should be eliminated from the boundary.
66. N19  
The Mayors of Lafayette and Dundee and the City Council of Newberg as well as the Yamhill County Board of Commissioners ask that Yamhill County not be included in the new boundary.

**THIS PROPOSAL IS UNFAIR OR BURDENSOME**

67. F1, C3, C13, Sa1, Sc10, Sc7  
Farming land is included while populated areas are excluded. Farmers already have too many regulations to deal with. Also, farmers maintain open areas which contribute to good air quality. Farm and forest lands cannot be developed so will not contribute to the

expected growth in vehicle pollution.

68. N5,Sa1,Sc10,Sc11,W9,W17  
Some areas cannot participate in the projected growth which this regulation is supposed to address. It is unfair to restrict their growth and also force their citizens to shoulder the burden for growth in other areas. Farmland value is depressed due to EFU zoning, so farmers already have paid a high price for being excluded from the profits associated with development.
69. N8,N4,W41,C11,Sc9,W2,W35,W41,W20,Sc2,Sc12,W17,W15  
It would take too long and be a financial burden on those in the new boundary to have to drive to the Portland inspection sites and get their cars fixed. Yet, another monitoring site closer to our town would be an inefficient use of tax dollars.
70. Sc2  
Scappoose city vehicles, including 5 police vehicles will have to spend time out of commission while getting tested and bringing them into compliance may be expensive.
71. Sc5  
From 1990-1992 Columbia County grew by only 821 people compared with well over 10,000 for each of the three counties to the south. Therefore Columbia county is not a suburb of Portland, but is clearly separate.
72. Sc5  
Scappoose cannot obtain PUC approval for EAS because they maintain that Scappoose is a community distinct from Portland, yet DEQ wants to include Scappoose in the urban area to extend the I/M boundaries.
73. N13,N5,W41,W40,W39,W24,Sc3,Sc9,Sc6,Sc12,N1,N11,N17  
Why should less populated areas have to be included in I/M to solve Portland's problem. People in the smaller cities may live and work in them. Target those vehicles which commute to Portland.
74. Sc4,W38  
The people should get to vote on whether they want to be in the boundary.
75. W21,N13  
This area (Scappoose,Newberg) will receive no benefit from I/M.
76. W23  
Many of the vehicles travelling route 30 are from Washington State and they go straight through Scappoose. Also, some drive daily from Seaside to Portland.
77. W31,W35  
Don't impose testing on my combines, farm vehicles and tractors.

78. N8  
Imposing I/M will lower property values, for which land owners should be compensated.
79. N8  
Auto dealers have been selling noncomplying vehicles from the existing boundary to people in areas outside the current boundary. Those who have bought these vehicles should be given some kind of compensation.
80. N8  
Environmental agencies are presenting contradictory messages about ozone. Why should there be testing of automobiles to reduce ozone when we are told that we have to recycle air conditioning fluid to prevent the destruction of ozone?

#### **MARION COUNTY OVERLAP WILL CREATE MPO CONFLICTS**

81. C10  
This program may conflict with Marion County MPO issues and in order to avoid that, I/M should be kept out of Marion county

#### **CONCERNS ABOUT THE PROCESS AND THE WAY GOVERNMENT AGENCIES WORK TOGETHER**

82. C8,C7,C4,C13  
On one hand, LCDC won't allow small cities to expand to provide local job opportunities, so people are forced to drive to larger cities. But DEQ will force these same people to go through I/M because they drive to work.
83. Sa1  
The hearings officer is not an objective observer, but a DEQ employee.
84. W21  
This will just allow the DEQ to expand and ask the legislature for more money.
85. W28  
This is another example of large suburban areas over powering smaller rural areas.

#### **BELIEVES THE EXPANDED I/M BOUNDARY WILL IMPROVE AIR QUALITY**

86. W1,W10,W19,W37  
An expanded I/M boundary will help to keep the air healthful.
87. W19

Current limits for ozone are set too high and we need further reductions in pollutants to protect public health.

88.

W37

Better auto emissions testing and larger I/M boundaries are the most critical emissions reduction strategies.

**BELIEVES THE EXPANDED I/M BOUNDARY IS NECESSARY TO INDUSTRY**

89.

W10

Industry has done it's share to clean the air, motorists must also share in the burden.

## Responses to Comments on Vehicle Inspection Boundary Designation Rule

Testimony summary/IssuesWhose Comment**INFORMATION USED TO DEVELOP THE PROPOSED BOUNDARIES IS NOT ADEQUATE OR IS ARBITRARY.**

1. C15  
The information used to develop the boundaries is too old and should be reviewed again using newer data.  
  
*The primary data used in making the boundary determinations are from the 1990 Census. No other, more recent data are available.*
2. C14,C13,C6  
40 person per square mile criteria used equals only one person per 16 acres.  
  
*When census tracts were ranked according to relative number of work trips to the air quality maintenance area (AQMA) they covered an area that included urban, suburban and rural areas. In keeping with legislative direction a population density screen was used to exclude the more remote, rural areas. At values greater than forty people per square mile, whole census tracts that had scored high on the scale were excluded. This would have produced a bounded area that was not precisely descriptive of relative contributions to air quality impacts as lower ranked tracts would have then been included.*
3. C6  
The boundaries should be drawn along county lines.  
  
*Originally the State Task Force had proposed expanding the vehicle inspection boundary to the county lines of Clackamas, Multnomah and Washington counties. A special Legislative committee recommended that the boundary be drawn instead to reflect more urbanized areas than some of the very remote areas included within the Tri-County area. The Department supports redrawing the boundaries along the current proposal because it more closely reflects where people are coming from when travelling into the AQMA.*
4. Sa1  
McMinnville was excluded from the I/M area even though the number of McMinnville residents who commute to Portland is higher than the total population in Lafayette, which is in the boundary.  
  
*The selection process was developed to determine the relative contribution to trips into*



*the AQMA from census tracts surrounding the current inspection boundary. Relative one to the other, the tract in which Lafayette is located has a greater number of workers and a higher percentage of the workforce travelling to jobs in the AQMA than all four of the census tracts in which McMinnville is located. See the discussion regarding No. 9 in this section.*

*It is always possible to select out a portion of any census tract to compare it, favorably or unfavorably to any other area. However, in doing so you eliminate any possibility of being able to make meaningful judgements.*

5.

Sc2,Sc1

The average commute time reported from the census for Scappoose area commuters does not support the notion that 3,000 per day are commuting from Scappoose into Portland. If as the paper says 3500 people from Scappoose commute to Portland that would be everyone in town, impossible.

*The testimony that there is a commute population of 3,500 from the Scappoose area is incorrect. Census data indicate that 1,262 workers commute to jobs in the AQMA from the census tracts in which Scappoose is located, about 45.9% of the total workforce in this area. This figure does not represent an unreasonable estimate of the workforce.*

6.

Sc5

Census tract data rank Scappoose below the criteria developed by DEQ for inclusion. DEQ needed only the top 22 census tracts to meet their population needs but Scappoose tracts ranked 29,30 and 35.

*Areas to be included were considered on two measures, the number of workers travelling into the AQMA and the percentage of the workforce travelling into the AQMA. This argument would imply that only one measure should have been used, the number of workers. Both measures were selected to provide the most comprehensive way to characterize out of area trip origins. In particular, the percentage index provides a check for equity of the testing requirement and maximizes cost effectiveness of the program. Relying solely on number of workers would also ignore the confounding factor introduced by the variability of tracts in total population. In the sample considered, tracts range from 1,672 to 11,067 total population, the mean being 5,223. Since Scappoose is described by two census tracts which bisect the town and are each smaller than the mean, it could be expected that these areas may score lower on a relative measure based on total population, which was the case. However, if both tracts are considered as a single unit, the population count is closer to the mean. The AQMA workforce count becomes 1,262, which would rank 15th on this measure and well within the target.*

7.

Sc3,Sc11

Set up a road block to determine the origin, destination and purpose of trip. This would allow a better boundary to be drawn. Count the cars going down Hwy 30.

*Metro, in 1988, using precisely the suggested methodology performed this traffic study. They discovered that of all the trips from southern Columbia County to the Portland area Scappoose accounted for about 4,915 trips, about 50% of the total from this area. St. Helens, although a larger town, accounted for 34% or 3,344 trips.*

*Similar checkpoints were established throughout the metropolitan area. The results from this survey were considered when defining the boundary. However, these data were not used as a primary determinant because the finite number of checkpoint locations did not allow for complete reporting throughout the region, e.g., residents from the Estacada were not polled. The Census data allowed for more refined judgements because it was more comprehensive. However, because it did include work and nonwork trips, the Metro Cordon Survey was used to corroborate the Census data.*

8.

C4

Allow those in the larger boundary to voluntarily have cars inspected and include Woodburn and Salem in the area.

*Although the inspection program is intended to test cars within the designated area, there is no restriction on whose vehicle can be inspected. Drivers wishing to determine the condition of their emissions control system can take their car to a test station and ask for a voluntary test. There is no charge for this service. However, very few people take advantage of this opportunity. The pollution reductions from a voluntary program would be very small, requiring the Department to take much stronger steps in other areas to achieve the same air quality benefits. In addition, the Environmental Protection Agency will not acknowledge voluntary programs as being eligible for credit as part of a maintenance plan.*

*Woodburn and Salem were not included because they did not score high enough on the selected scales. Although air quality benefits could be expected from including any area within a vehicle inspection program, neither of these areas are a nonattainment area or score higher than other areas as a source of trips into the Portland AQMA. Extending the inspection program to these areas would significantly raise the costs of the program relative to the identified need.*

9.

W27

The boundary was drawn according to the percentage of those in the area who commute to Portland, not the numbers who did so. This results in a boundary which includes Lafayette, but excludes McMinnville, a source of many more commuters.

*The criteria to be considered also included the number of workers. However, even though McMinnville is a large town (pop. 20,070), it is not necessarily the larger source of trips into the Portland AQMA. For instance, Census tract 303 (pop. 7,141),*

*in which Lafayette is located, shows 1,078 people working in the AQMA versus 899 from McMinnville.*

*Lafayette, of course, does not account for all of the trips. However Lafayette, and the census tract in which it is located, was included in the proposed boundary because it met the criteria. Looking at the breakdown of the data within the census tract among incorporated areas, it appears that Lafayette itself has a very small percentage of its total population commuting into the AQMA, about 6.3%. Compared to other incorporated areas Lafayette is more similar on this measure to areas that are proposed to be outside the boundary. Based on this information the Department recommends that the proposal be modified to exclude Lafayette.*

10.

N1,N7

Analysis relies too much on current transportation patterns. For example, Newberg is committed to making itself independent of Portland and thus its future contribution to auto trips to Portland will decline. Extended area phone service will reduce commuting to Portland.

*Expanding the vehicle inspection boundary is a response to a current problem. The areas that are included have been selected on the basis of their current contribution to vehicle trips into the Portland area. Increases in vehicle miles travelled caused by current residents as well as the anticipated growth in population are creating pressures on our ability to maintain current good air quality status for the foreseeable future. The data indicate a significant number of current trips into the AQMA from vehicles based outside the inspection boundary limits. For northern Yamhill county this also reflects an historic trend of increasing work trips to the AQMA.*

*The Department would support a review of the continued inclusion of any of these areas when the maintenance plan is itself reviewed in ten years. Based on the analysis of data collected at that time the Department would consider revising the inspection boundary to exclude areas that significantly reduce the number of trips to the AQMA.*

*The commentor argues that their surveys indicate that people will make trips into the Portland area in order to avoid long distance toll charges. Toll avoidance behavior may account for some trips to within the current limits of Portland extended area phone service (EAS). These trips may likely have been made for other reasons as well and thus would continue with EAS coverage for Newberg. Without any data it is not possible to make any judgement about what impact the EAS designation may really have.*

11.

N1

The commuter trip numbers don't add up. How much effort did the department put forth to identify the cars that move into the Portland area?

*The Department investigated several databases to identify a data source that would best describe automobile travel throughout the northern Willamette Valley, e.g., enrollment*

*patterns at community colleges, highway transportation surveys, attendance figures from entertainment attractions within the AQMA and shopping surveys. The Census data generally described as "Journey to Work" was used primarily because it was the most uniform, reliable and comprehensive survey available.*

12.

N4

According to his own surveys, only 7% of Newberg residents commute to Portland. Also 1990 census data indicate that only 4% of Yamhill Co residents commute to work in the Tri-County area.

*Using the customer base of a single business on a single day does not provide a statistically valid sample upon which one can make very broad conclusions.*

*Census data from 1990 indicate that 23% of the workforce in all of Yamhill County commute to jobs in Multnomah, Clackamas and Washington counties. The Census Bureau considers a county as being part of a metropolitan statistical area when at least 15% of its workforce travels to jobs within metropolitan areas. In fact, Yamhill County met that threshold and has been considered part of the Portland Primary Metropolitan Statistical Area since 1980. For city of Newberg residents, the census data indicate 32.1% of the workforce travels into the Portland AQMA.*

13.

N5

The proposal is based on faulty statistical evidence and poor scientific findings.

*The data was based on a large sample size, with responses from over 230,000 individuals. Of all the databases considered this sample allows for the greatest confidence in making relatively fine determinations. In fact, the Journey to Work data represents a maximum  $\pm 2.8\%$  variation at the 95% confidence interval. The Department has not made inferences that are not supported by the data.*

14.

N7

Data from the Metro Survey is reported only as the percentage of trips, however this can be deceptive because there is no indication of the volume of trips.

*This survey was not used as a primary determination of areas to be included or excluded from the inspection boundary. It was instead used to corroborate the census data in order to provide an indication of the extent and distribution of nonwork trips. The following table presents the volume data as reported by the Metro Cordon Survey. These values are daily trips through selected gates from specified areas.*

*Number of Trips Through Gates*

<i>Gates</i>	<u><i>US 26 E</i></u>		<u><i>99-W</i></u>		<u><i>US 30 W</i></u>	
<i>Sandy</i>		<i>10,661</i>	<i>Newberg</i>	<i>5,674</i>	<i>Scappoose</i>	<i>4,915</i>
<i>Eagle Creek</i>		<i>1,060</i>	<i>Dundee</i>	<i>3,230</i>	<i>St. Helens</i>	<i>3,344</i>
<i>Welches</i>		<i>597</i>	<i>McMinnville</i>	<i>1,640</i>	<i>Warren</i>	<i>1,070</i>
<i>Rhododendron</i>		<i>450</i>	<i>Dayton</i>	<i>169</i>	<i>Columbia City</i>	<i>263</i>

**INSPECTION AND MAINTENANCE IN THE PROPOSED EXPANDED BOUNDARY IS NOT NEEDED**

15.

N13,Sc2,W8,N7

The expanded I/M boundary only results in a 1% decrease in hydrocarbons and 1/2% decrease in NOx. This is insufficient air quality gain to justify the larger boundaries.

*That it is a small amount does not necessarily make it trivial. To achieve a similar reduction from mass transit usage, for instance, would require a 50% increase over current ridership levels. This proposal is a key component of the maintenance plan, without which the entire plan will not be approved. The Department is required to project air quality levels out to the next ten years as part of the maintenance planning effort, taking into account expected performance and activity from new and existing sources. If the current mix of control efforts is insufficient to ensure healthful air quality then the Department is required to prepare enforceable proposals that will ensure that air quality can be maintained. Expanding the boundary was one of the strategies recommended by the State Task Force and approved by the Legislature after months of careful review.*

16.

Sc2,W21,N2

The number of commuters in Scappoose (Lafayette) represents only 1/2 of 1% of all employees over 16 years of age in the tri-county area. This is too small a number to justify I/M for Scappoose.

*The issue is the air pollution impact from untested vehicles that are likely to travel into the AQMA on a frequent basis. Most of the residents within the tri-county area already have their cars inspected for excessive emissions and so are already playing a key role in keeping the air clean. Air pollution impacts from untested vehicles that frequent the area have been compensated for by overcontrolling other sources of pollution. Now, twenty years after the vehicle inspection program started in Oregon, the easily gotten emission reductions have been obtained. Addressing the impacts from these untested vehicles has become more important in continuing to assure good air quality for residents in this part of the state. A process has been developed to equitably determine where these vehicles are coming from. The proposed boundary is the result. Even*

*though many of these communities are small in relation to the entire metropolitan area, the pollution reductions gained will be equivalent to a 50% increase in ridership on Tri-Met.*

17.

Sc8,W11,N10

The current vehicle testing program is ineffective.

*The Oregon vehicle inspection program has been cited by EPA as one of the most effective in the nation for producing air quality benefits. This conclusion was reached as the result of an intensive audit of the program.*

18.

N16,Sc1,Sc16

This is simply a grab for more money by DEQ.

*The vehicle inspection program is self-supporting. Fees collected for the test are restricted by law to paying only for the operation of this program. There are no other sources of revenue for this program. Any fees collected from this program cannot be used to offset other budget reductions the Department has faced in the past few years.*

19.

Sc11

When enhanced I/M is required, there won't be enough dynamometers to test all of the cars which will need it.

*An enhanced test to better identify high emitter cars, particularly late model cars, will be implemented within the next few years. This test uses a dynamometer to help simulate driving conditions. Supply of dynamometers is not expected to be a limiting factor for either the Department or repair facilities.*

20.

N3,W36,W28,W20,W25,W26,W33,W34

I rarely drive to Portland so why should I be forced to go through I/M?

*Trips into Portland itself are not the only source of the problem. Because ozone pollution is a regionally caused problem sources over a large area contribute to this pollution. Trips to other parts of the Portland metropolitan area including Forest Grove, Hillsboro, Tualatin, Tigard, Wilsonville, Oregon City, Troutdale and Gresham will have adverse impacts on regional air quality. The proposed boundary is designed to reflect areas surrounding the current inspection program from which vehicles have a high probability of making trips into these areas.*

21.

W22,W29

Our air (Canby,Newberg) is not polluted but yours is so keep your air away from us.

*Ozone pollution is a regionally created pollutant that is impacted by sources over a wide area. Since ozone is not created at the source but is formed downwind of its origin, the opportunity for a number of sources over a wider area to play a role in formation is*

*greater. It is generally accepted among environmental scientists that sources within 30 kilometers of the nonattainment area will have an impact on ozone pollution within the core area. Department regulations recognize this and impose strict standards for controls on businesses in these areas. Around Portland this area extends from St. Helens in the north to Woodburn to the south and from Banks to Sandy. These restrictions pose an economic cost to businesses in the area that may affect decisions to expand or locate here. Job creation throughout the entire region is affected as a result.*

22.

N10

Driving to the I/M testing stations creates more pollution than it will remove from the air.

*Driving to the stations will generate a minuscule amount of pollution compared to the savings obtained from a complying vehicle over the two year period in which the registration is valid. It is reasonable to assume that an average vehicle will travel approximately 24,000 miles in the two year period for which it is registered. Most cars will pass the first time but even accounting for a second trip total mileage for trips to the test station would account for less than 1/10 of 1 percent of all miles driven during this time.*

#### **SUGGESTIONS ON HOW TO GET NEEDED EMISSION REDUCTIONS INSTEAD OF OR IN ADDITION TO I/M.**

23.

N3,C14,C13,C4,W26

Not enough being done to get emission reductions from people living nearer the Portland city area ie. limit driving, special license plates to enter area, the mayor wants thousands of new residents.

*The emission reductions which allowed us to attain the ozone standard in the Portland area came people within the nonattainment boundary (i.e. the City of Portland and the surrounding metropolitan area). These included vehicle inspection, gasoline volatility controls, gasoline station controls, and industrial controls.*

*Other than the expanded I/M boundary, all of the strategies in the proposed Portland ozone maintenance plan affect only sources within the nonattainment area boundary. These include several measures to reduce reliance on single-occupant automobile travel and several measures to reduce emissions from paints and consumer products.*

*Redirecting growth from outlying areas into the core urban area helps reduce ozone by shortening automobile trip lengths and making alternative transportation (bus, bike, walk, carpool) more feasible.*

24.

C12

Correct field burning would solve some of the problem.

*The pollution problems vehicle inspection is proposing to address are carbon monoxide and ozone. Field burning primarily generates respirable particulate matter and, to a lesser extent, carbon monoxide. Field burning is an insignificant contributor to ozone pollution. Further restrictions on field burning would provide little relief for the identified problems.*

25.

C11

Problems are caused by a lousy Portland freeway system.

*Other cities with beltway freeway systems do not have better air quality than does Portland, which lacks the extensive beltway system the commentor is advocating. Building a more extensive freeway network would have the opposite effect in that it would encourage more cars to be used more often for longer distances. This is the experience of other areas like Los Angeles which have relied on freeway construction as a primary transportation option.*

26.

C2,N12

The real problem with auto emissions is the gasoline, we should have reformulated gas.

*Reformulated gasoline was considered as a strategy by the Task Force. It was rejected as a first line control measure because it was not as cost effective as the other controls that were recommended. The Task Force did recommend reformulated fuels as a backup measure, however.*

27.

C15,Sa1

Some businesses and farmers within the proposed boundaries pay payroll taxes to Tri-Met yet get no or little service. There is a need for mass transit to the outlying areas.

*People within the Tri-Met service area will get benefit from a healthy and effective mass transit system in two ways: 1) high ridership levels will reduce congestion and highway construction and maintenance costs; 2) provide a safe, efficient way to travel around the area. There may be a need for mass transit in the outlying areas but the population density does not justify higher levels of service without also providing a higher level of subsidy.*

28.

N14

Advocate and obtain more mass transit, rather than expanding the I/M boundary.

*To get the same emission reductions that can be obtained from expanding the vehicle inspection boundaries we would need to see a 50% increase in ridership on Tri-Met. An increase of this magnitude is not expected in the timeframe we need to ensure good air quality. The Department has, and will continue to advocate for adequate financial support for mass transit as well as for other actions local governments may take to*



*encourage mass transit usage.*

29.

Sc8,N10

Require annual certified tune-ups or use the infra-red pollution detecting monitors to find the big polluters.

*Annual inspections have not been shown to produce significant pollution reductions over a biennial program to justify the increased costs that doubling the number of tests would impose. Studies have also shown that a decentralized, service station conducted test does not provide the same emission reductions as an equivalent centralized program.*

*Remote sensing technology has been developed in recent years as a way to detect high emitter cars as they drive pass the sensing site. The Department has investigated the use of this technique but has rejected its use for several reasons: 1) the device cannot detect evaporative emissions; 2) the technology does not work in the rain; 3) siting requirements for the instrument are sufficiently restrictive that an unbiased, comprehensive review of the fleet is not readily possible; 4) EPA does not acknowledge the technology as being very effective so getting credit for its use will require substantial negotiation with the agency.*

30.

Sc8

Provide an incentive to pass the I/M test by paying those who pass \$10 and charging those who don't pass \$30.

*The proposed boundary increase does not include a proposal to revise the I/M fee. However, the Department is evaluating alternative ways to restructure the I/M fee for future rulemakings.*

*Presently, the fee is assessed only when a vehicle passes. Because the fee is set to cover the cost of running the test, this means that people who pass the first time are subsidizing those who take the test several times. Since most vehicles pass the first time, the exact proposal made by the commentor is not possible. However, the concept is under active consideration and will be addressed further in future rulemakings regarding the I/M fee.*

31.

Sc5

Institute parking rationing or reinstate a parking lid in Portland instead of including Scappoose in the I/M boundary.

*Parking restrictions will be included in the maintenance plan in addition to expanding the I/M boundary. Both of these measures, as well as several other measures, are needed to ensure that the ozone standard is not violated in the future as the region grows. The parking ratio rule will be proposed for public comment early in 1995.*

32.

Sc5

Consider cash for clunkers option.

*Cash for clunkers, or accelerated vehicle retirement, was considered by the Task Force which developed the maintenance plan and by the 1993 State Legislature when the plan was approved. Cash for clunkers is a good strategy for areas which do not currently meet the ozone standard and need immediate emission reductions to attain by a near-term deadline. It works by accelerating the turnover of older high-emitting vehicles to newer low-emitting vehicles. However, since these vehicles will turnover anyway during the maintenance period, it does not provide any benefit for a maintenance plan.*

33.

Sc5

Consider regulation of older lawn and garden engine emissions.

*As part of the maintenance plan, the Task Force recommended that the Department establish emission standards for new lawn and garden equipment sold within the Portland area. It is anticipated that turnover of the older, more polluting machines will largely occur within 10-12 years, which is consistent with the maintenance plan period. If new equipment is being purchased at a lower rate, economic incentives could be developed to increase turnover.*

34.

Sc5,Sc6,W13

Reinstate the Portland parking lid, increase parking fees.

*The parking lid, in conjunction with a parking ratio, helped reduce automobile trips to downtown Portland. This helped solve carbon monoxide problems which occur at congested intersections. The parking lid does not result in significant reduction of ozone-causing emissions and would not be an effective replacement for the expanded I/M boundary.*

*The parking lid may be repealed as part of the carbon monoxide maintenance plan which will include expansion of parking ratios to the entire central city. Parking ratios will be further expanded to the ozone nonattainment area as part of the ozone maintenance plan.*

*Regional parking fees were considered by the Task Force which developed the Portland ozone maintenance plan. The Task Force was very interested in a market-based strategy, but recommended a registration-based emission fee instead of parking fees. Later, the 1993 Legislature substituted regional parking ratios and other measures for the emission fee.*

35.

N8,Sc3,N5,N12

Develop a way to solve the massive freeway and commuting problems.

*One of the major goals of the ozone maintenance plan is to reduce reliance on single-occupant vehicles for commuting and other trips. Single-occupant vehicle trips are a*

*major source of air pollution as well as congestion.*

*The maintenance plan will include an Employee Commute Options (ECO) program which requires larger employers to provide more commuting options for employees. The exact options selected will vary by work site, but could include transit subsidies, carpool incentives, telecommuting, and other options.*

*The maintenance plan will also include a parking ratio program which will require developers to build facilities which are less reliant on automobile travel. In addition, the maintenance plan will include measures to be adopted by Metro to meet state land-use and transportation demand management requirements.*

*All of these measures will help reduce freeway and commuting problems.*

36.

Sc3

Inspect boats, planes, trucks, race cars, motorcycles for emission compliance within the existing I/M boundary.

*Emissions from any of these sources are significantly less than those produced by motor vehicles. Establishing an inspection program for each of these classes of engines would require a much larger effort by the Department than is represented by the vehicle inspection program. Enforcement procedures and emission standards would also have to be developed. Expanding the vehicle inspection program is a more effective and efficient step to take.*

37.

Sc3

Require employers to hire only people who live within existing I/M boundaries and require car pooling.

*The Environmental Quality Commission does not have the authority to regulate where employees must live. In any event, such a requirement would be extremely disruptive to the economic development of the region.*

*The maintenance plan will include a measure to reduce single-occupant commuting. However, rather than mandating carpooling, the rule will allow employers the flexibility to select the trip reduction strategies which work best at each specific work site. Employers will select from a variety of carpool, transit, bike/walk, and telecommute strategies to achieve required automobile trip reductions.*

38.

Sc3

Limit the number of vehicles which can be registered per household.

*While it is true that the number of vehicles in a household is correlated to the number of automobile trips made, restricting the number of vehicles which can be registered would not be an effective and equitable way to reduce automobile trips. Without providing alternatives, limiting vehicle registrations would reduce mobility in the region.*

*The trip reduction strategies to be included in the ozone maintenance plan will require employers and developers to provide more options for commuting and other trips. This may enable households to get by with fewer vehicles without reducing mobility because alternative modes of travel will be more available.*

39.

Sc3

Raise the price of gasoline to reduce driving.

*This was a strategy considered by the Task Force and recommended by the House Special Task Force. Provided that the price of gasoline is adjusted to serve as a disincentive to driving this could be an effective strategy. However, the 1993 Legislature did not approve of this direction.*

40.

Sc3

Raise the legal driving age minimum to 18.

*This strategy is not likely to be effective. The most likely effect of this strategy would be to increase vehicle travel because parents will have to shuttle teenagers to their destinations, often making two trips for every one the teenagers make. In addition, it is highly inequitable.*

41.

Sc6

Should petition the federal government to have Vancouver and Portland declared as one airshed rather than the current two.

*Portland and Vancouver are considered on interstate ozone nonattainment area by the federal government. Vancouver is preparing an ozone maintenance plan which will achieve the same percent reduction in emissions as the Portland plan. Note that Vancouver recently instituted a vehicle inspection program.*

42.

Sc6

Develop incentives to use mass transit in Portland.

*Tri-Met is taking steps to provide more incentives and support for people to encourage them to become mass transit users. The Department is also working on programs, such as a parking ratio requirement and employee commute options programs, that will also provide incentive and encouragement to us mass transit. Even with these steps being taken, expansion of the boundary is still needed to ensure good air quality.*

43.

C4

Require use of cleaner heating fuels for commercial and industrial facilities.

*Ozone precursor emissions from these sources are a very small part of the problem, accounting for about 0.6% of the total volatile organic compounds (VOC) and 3.9% nitrogen oxides (NO<sub>x</sub>) in the Portland airshed. This compares to automobiles which contribute about 42% of VOC and 49.5% of NO<sub>x</sub>. Further regulation of commercial and industrial heating fuels will also have little benefit for ozone reductions because*

*the use of these fuels is not growing as quickly as automobile use.*

44. C4,W16  
Target only those who commute long distances to Portland.

*In fact, the proposed inspection boundary will effectively do this. People coming from these outlying areas will be driving longer distances within the AQMA than people currently in the AQMA.*

45. W4,W16  
All vehicles including log trucks, diesels, etc. should have to comply with the emissions inspections.

*Heavy duty diesel trucks are not tested for three reasons: 1) they are a relatively small source of ozone pollution; 2) registration denial is not an option for these vehicles which are registered in multiple states; 3) emission standards to judge engine performance have not been established for these vehicles. EPA and California have taken steps to establish emission standards and the Department will follow developments to see if any benefits can be derived for the Oregon program.*

46. N19,W16,W36  
Target those who commute from Washington State.

*Vehicles in Vancouver and surrounding areas are subject to an emissions testing program established by the state of Washington.*

47. W19  
Diesel trucks should be subject to I/M. Other states require it and diesel exhaust has high Nox emissions

*See response to No. 23 in this section.*

48. W19  
Worst case scenarios should be utilized to project ozone non-attainment in order ensure compliance with health standards for the next decade.

*The ozone maintenance plan is being developed using reasonable worst case assumptions to prevent future nonattainment. Weather is one of the most significant variables in ozone formation; ozone forms more rapidly on hot, sunny days. The maintenance plan will be based on a worst case weather assumption (95% confidence level). Emissions forecasts are based on summer weekday emission levels. Traffic projections will consider only those transit and road improvements for which funding is committed. In addition, a contingency plan will be included with backup emission control strategies in case the forecasts are wrong or any of the strategies fail.*

49.

W19

The current boundary for the Maintenance Plan should be expanded so that new point sources are required to have RACT and LAER.

*Reasonably Available Control Technology (RACT) is required for large existing stationary sources within the nonattainment area boundary. Large stationary sources account for a small percentage of total emissions in the area (approximately 6%), so expanding RACT to sources outside of the boundary would not result in significant emission reductions.*

*Lowest Achievable Emission Rate (LAER) technology is required for major new sources within the nonattainment area. Best Available Control Technology (BACT), is required for major new sources outside of the nonattainment area. Once the maintenance plan is approved and the area is redesignated to attainment, BACT will be substituted for LAER within the maintenance boundary. Since the requirement will be the same, there is no reason to change the boundary.*

50.

W32

The real problem is one person per vehicle commuters, one-half million of them. You should do something about this problem not saddle rural residents with the burden of solving this problem for you.

*The data indicates that there are significant numbers of people living in rural areas that are travelling to jobs and shopping within the AQMA. Many of these trips are done by single occupant vehicles. The Department is taking steps, along with other agencies, to encourage carpooling and mass transit usage. However, even with these steps the Department must also look to other programs, such as expanding the vehicle inspection program, in order to ensure continued good air quality.*

51.

N8

Phase in the requirements by requiring I/M on 1995 and newer model years only.

*The need for demonstrated emission reductions is more immediate than could be tolerated with an extended phase in period as proposed by the commentor. A phase in over the time frame the commentor proposes would have no effective benefit for vehicle owners, except to postpone their involvement and delay air quality improvements. Practically speaking, the inspection program is being phased in, as cars come due for inspection as their registration expires, approximately 1/24th of the fleet each month.*

52.

N11

Turnover of the fleet will be adequate to reduce pollution.

*Turnover of the fleet, with the resulting increase in newer cars with more stringent pollution controls, has been factored into the projections for air quality. Unfortunately, this factor alone is insufficient to guarantee continued good air quality.*

53.

N19

Build a bypass to remove stalled and idling traffic from Newberg.

*Traffic management projects such as the above proposal are sometimes helpful in reducing carbon monoxide problems because carbon monoxide violations generally occur at congested intersections. However, a bypass would not help reduce ozone-causing emissions. Generally, when congestion is reduced by expanding the road system, the expanded capacity draws more traffic in the long-run. This in turn leads to increased emissions from motor vehicles. Alternatively, strategies which encourage the use of alternative modes of transportation can reduce ozone-causing emissions. In addition to the expansion of the I/M boundary, the maintenance plan will include several strategies to increase the use of alternative transportation modes.*

### **INSPECTION AND MAINTENANCE OF AUTOS CAUSES DRIVABILITY AND MPG PROBLEMS**

54.

N14,C5,W11

Vehicle runs better with emissions systems disconnected or when the emissions do not meet DEQ specifications.

*Initial motor vehicle emission control efforts by the manufacturers relied to a large extent upon "add-on" emission control systems and devices. Many of these early vehicle designs had driveability problems that presented significant repair issues to the automotive repair industry and to affected motorists. However, as the vehicle manufacturers gained experience and incorporated emission limitations into their basic engine design and into the electronic engine control management systems; and as the service industry gained experience with these new systems, driveability issues are no longer a significant technical issue. It should be noted that the manufacturer's emission control warranty assures that a vehicle will pass an emission control test during the warranty period.*

### **SPECIFIC SUGGESTIONS ON WHAT AREAS TO INCLUDE/EXCLUDE**

55.

N19,N17,N15,C6,Sc11,W30,N13

The boundaries should be drawn along county lines, Tri-Counties.

*See response to comment No. 3.*

56.

N13,W14,W11,N10

Thousands of people drive from Salem and/or Woodburn to Portland daily, why not require them to go through I/M.

*Other areas rank higher than Woodburn in reaching the emission reduction target. No census tract in Salem ranked higher on either measure than any census tract within the proposed boundary. Taken as a whole, Salem is a larger source of trips than some*

*other included areas. These cars are, however, a very small percentage of the total vehicle fleet based in Salem. This expansion of the program would be more expensive and inefficient than testing the cars within the proposed boundary.*

57.

C10

Include Donald and Hubbard but not Woodburn

*The proposed boundary does include Donald and Hubbard but does not include Woodburn. This is based on the relative ranking of the areas for trips into the AQMA.*

58.

W16,W27,C3,F1,Sa1,Sc10,Sc7,W18

Should include populated areas and exclude, or exempt EFUs, or exempt all vehicles registered to a person who has at least one "F" plated vehicle.

*The data indicate that rural areas are not always a smaller source of trips into the AQMA than more densely populated areas. Exclusive Farm Use and forest resource zone land use designations do not necessarily guarantee that residents in these areas are committed to a rural lifestyle with few trips into metropolitan areas. Particularly in recent years, zoning restrictions for these areas have been loosened so that residential development is not required to be tied to the resource use or management.*

*Farm vehicles are exempt from inspection requirements. This exemption has been established by statute and the Commission does not have authority to modify or extend that exemption. The statute's criteria for an "F" plate is fairly broad and will cover most vehicles registered to a farm. Because of this and the uncertain nature of the type of development that could occur in farm and forest zones the Department does not recommend adopting these modifications.*

59.

C13

Should exclude all areas south of the Wilsonville and Canby urban growth boundaries, perhaps using the Molalla river as a natural boundary.

*The data indicate that rural areas can sometimes be a significant source of trips into metropolitan areas. Stopping the boundary at urban growth boundaries or the Molalla River ignores this contribution. For instance, the census tract in Clackamas County that is primarily south of the Molalla River shows 1,137 people with jobs in the AQMA. This is a predominately rural area but is approximately equivalent to a more urban area: the city of Salem has 1,326 people who have jobs in the AQMA.*

60.

W3,W36

Since people from the city of Newberg (Canby) contribute very little to the overall problem, they shouldn't have to be tested.

*Any single individual is a relatively small contributor to the overall pollution problem. However, the diffused responsibility does not eliminate or preclude the presence of the problem, which is caused by the collective efforts of individuals making independent*



*decisions. It is appropriate to include both of these areas in a vehicle inspection program because on a number of measures both communities indicate a high degree of economic and social connections to the metropolitan area. A sizeable percentage of the workforce in both of these communities travel to jobs within the AQMA: Newberg 32.1%, Canby 40.8%. Both of these areas show large numbers of workers travelling to jobs in the AQMA, about a third of the workforce in each location. Nonwork trips from each town are also relatively high. These cities have also identified themselves as connected to the Portland metropolitan area in successfully making a case to the PUC for extended area phone service.*

61.

W4

Should include Molalla.

*Molalla did not score high enough on either measure to be included. To include Molalla would provide pollution reductions for residents in Molalla and the area but would provide fewer benefits for the identified problem in the AQMA relative to other areas. The Department does not recommend including Molalla at this time.*

62.

W7,C14,C15

Should include Woodburn but not Molalla.

*Neither Woodburn or Molalla scored sufficiently high in the rankings to be included.*

63.

N1

McMinnville shows a bigger potential growth than Newberg, yet McMinnville is left out of the larger I/M boundary. Yamhill Co. is growing slower than Multnomah, Clackamas or Washington Counties during 1990-1993.

*Expanding the boundary is designed to address emissions from existing users of the airshed that are in nearby areas outside the current inspection program. Despite its greater size McMinnville does not show itself to be a larger source of trips into the AQMA than Newberg. Even though Yamhill county is not growing as fast as Clackamas and Washington counties the number of people choosing to live there and travel to the AQMA for employment has increased, both in absolute numbers and as a percentage of the workforce. Most of the work and non work trips into the AQMA are based in northern Yamhill county.*

64.

N13

Areas in Yamhill Co rank low on the list of areas to include in I/M. Other areas which have higher percentages or more commuters are not in the new boundaries.

*Areas were selected for inclusion on the basis of their scoring relatively high on either measure. Regarding the tracts in Yamhill county: There is no tract excluded from the proposed boundary that is ranked higher than any of the Yamhill county tracts for number of workers in the AQMA. Other tracts excluded from the boundary do score higher on the percentage of workers, however all of these excluded tracts scored much lower than the Yamhill county tracts on the number of workers, the air quality impact*

*measure. To make up that air quality credit it would have required extending the program into areas where as little as 18% of the workforce travels into the AQMA. This would result in a significant distortion of the balance between the two measures the Department was striving for.*

65.

N13

Census tract 303 in Yamhill Co is very rural and should be eliminated from the boundary.

*Census tract 303 shows 1,078 persons (32.7% of the workforce) who travel to jobs in the AQMA. This compares favorably to the workforce contribution from the city of Salem of 1,326 (1.3% of the workforce). A rural area does not necessarily indicate that there are few work trips into the metropolitan area.*

66.

N19

The Mayors of Lafayette and Dundee and the City Council of Newberg as well as the Yamhill County Board of Commissioners ask that Yamhill County not be included in the new boundary.

*The objections are noted. Failure to implement all the elements of the maintenance plan will mandate that the Department will continue to enforce air quality restrictions on businesses in these areas that meet specified thresholds. Current regulations impact small and medium size businesses such as secondary wood manufacturing/coating operations that would provide employment for as little as 25 people.*

#### **THIS PROPOSAL IS UNFAIR OR BURDENSOME**

67.

F1,C3,C13,Sa1,Sc10,Sc7

Farming land is included while populated areas are excluded. Farmers already have too many regulations to deal with. Also, farmers maintain open areas which contribute to good air quality. Farm and forest lands cannot be developed so will not contribute to the expected growth in vehicle pollution.

*See response to comment No. 57.*

68.

N5,Sa1,Sc10,Sc11,W9,W17

Some areas cannot participate in the projected growth which this regulation is supposed to address. It is unfair to restrict their growth and also force their citizens to shoulder the burden for growth in other areas. Farmland value is depressed due to EFU zoning, so farmers already have paid a high price for being excluded from the profits associated with development.

*Projected declines in air quality are expected primarily because of two forces: anticipated increase in the population of the Portland metropolitan area and increasing reliance and utilization of the automobile by current residents. Expanding the boundary will cover areas of anticipated growth but the boundary was principally drawn based*

*on usage patterns that have developed over the past twenty years. Although some of these areas may not see much population growth themselves, these areas have shown themselves to be connected to the metropolitan areas for jobs, shopping and entertainment. It is the impact from these untested but frequent users of the air shed that will be addressed by emissions system testing. As noted earlier, farmers are virtually unaffected by the emissions testing program.*

69. N8,N4,W41,C11,Sc9,W2,W35,W41,W20,Sc2,Sc12,W17,W15

It would take too long and be a financial burden on those in the new boundary to have to drive to the Portland inspection sites and get their cars fixed. Yet, another monitoring site closer to our town would be an inefficient use of tax dollars.

*The Department is taking steps to locate stations in places that will provide for maximal service levels. Since the decision to take the test is opportunity-driven the Department works to continually manage its resources to meet the variable demand in order to minimize delays and waiting times at the stations. It is the Department's goal to provide excellent service for motorists using the facilities.*

70. Sc2

Scappoose city vehicles, including 5 police vehicles will have to spend time out of commission while getting tested and bringing them into compliance may be expensive.

*The Oregon Legislature concluded that government vehicles should set an example for vehicle emission control concerns, and thus required that these vehicles be emission control certified each year. The City of Scappoose, under this proposed boundary change, would be joining with other local, state, and federal government vehicle operations which have been participating in this effort for years. Unless the city's vehicles have been poorly maintained or tampered with, cost of compliance with emission control requirements should be comparable to standard maintenance costs.*

71. Sc5

From 1990-1992 Columbia County grew by only 821 people compared with well over 10,000 for each of the three counties to the south. Therefore Columbia county is not a suburb of Portland, but is clearly separate.

*Based on the data collected by the 1990 Census, Columbia County will become part of the Portland Primary Metropolitan Statistical Area (PMSA). This is based on a finding that at least 15% of the county's workforce travels to a job in the PMSA of Clackamas, Multnomah, Washington and Yamhill counties. Columbia county displays this connection to Portland in other ways. Communities in Columbia county advertise themselves as an "easy commute" from Portland. Traffic surveys indicate that approximately 5,000 trips are made on a daily basis between Scappoose and Portland. The Scappoose City Club has made public representations that Scappoose is connected to Portland in sworn documents before the Public Utility Commission and District Court.*

72.

Sc5

Scappoose cannot obtain PUC approval for EAS because they maintain that Scappoose is a community distinct from Portland, yet DEQ wants to include Scappoose in the urban area to extend the I/M boundaries.

*The decision to award extended area phone service is based on criteria established by the Public Utility Commission. These criteria are designed to meet the needs of providing efficient phone service and are not necessarily relevant to the issue addressed by the rule change proposed by DEQ. The PUC initially ruled that Scappoose did not meet the objective criterion of an adequate distribution of phone calls to the Portland EAS. The Department has provided data to the plaintiffs arguing for an appeal of the PUC's decision.*

73.

N13,N5,W41,W40,W39,W24,Sc3,Sc9,Sc6,Sc12,N1,N11,N17

Why should less populated areas have to be included in I/M to solve Portland's problem. People in the smaller cities may live and work in them. Target those vehicles which commute to Portland.

*Many areas with less population than nearby cities show a high number of workers travelling to the AQMA for employment. These people enjoy the benefits of being nearby a metropolitan area while not shouldering the responsibility for maintaining air quality that their coworkers who live inside the current inspection boundary undertake.*

*The Department supported two proposals that could more closely target vehicles which proportionately contribute more to the pollution problem, emission fees and congestion pricing. Both measures were defeated in the Legislature.*

74.

Sc4,W38

The people should get to vote on whether they want to be in the boundary.

*The proposed rule change is an administrative procedure and is not subject to electoral review. This process is a reflection of the Commission's authority and responsibility as directed by the Legislature.*

75.

W21,N13

This area (Scappoose,Newberg) will receive no benefit from I/M.

*Even though the air quality in these areas is generally below the threshold standards for adverse health impacts, it is expected that impacts from auto exhaust in these areas will be reduced even more as a result of emission testing. Upon approval of the maintenance plan, the Department is proposing to revise air quality regulations that limit economic growth in these areas. As a result more business capitol and energy can be devoted to economic activity and job creation.*

76.

W23

Many of the vehicles travelling route 30 are from Washington State and they go straight through Scappoose. Also, some drive daily from Seaside to Portland.

*A significant number of trips into the AQMA originate from these nearby outlying areas. Although there will be cars from other areas which are not subject to emission testing coming into the AQMA these are fewer in number and it would be relatively inefficient and wasteful to try to test these vehicles as well.*

77.

W31,W35

Don't impose testing on my combines, farm vehicles and tractors.

*The requirement does not apply to farm equipment and implements. The emissions inspection requirement only applies to certain motor vehicles that require registration to operate on Oregon highways.*

78.

N8

Imposing I/M will lower property values, for which land owners should be compensated.

*It is unlikely that a lowered property valuation will result from inclusion within an inspection/maintenance boundary. In fact it is more likely that the opposite effect will occur. Inspection programs are one of the most effective ways to ensure clean air and a clean environment is cited as an attraction for businesses and individuals that choose to live here.*

79.

N8

Auto dealers have been selling noncomplying vehicles from the existing boundary to people in areas outside the current boundary. Those who have bought these vehicles should be given some kind of compensation.

*The responsibility for making the decision to buy these cars rests with the purchaser, who probably paid less than premium prices considering the vehicle was not well maintained. It is unfair to others that owners of these cars, which create an unreasonable amount of pollution, then place a burden on others, in terms of health impacts and poor air quality.*

80.

N8

Environmental agencies are presenting contradictory messages about ozone. Why should there be testing of automobiles to reduce ozone when we are told that we have to recycle air conditioning fluid to prevent the destruction of ozone?

*These are two distinct issues involving the same chemical material, O<sub>3</sub>. The vehicle testing program is intended to minimize ozone levels here in the breathing zone in that part of the atmosphere known as the troposphere. Ozone causes significant health and environmental problems at the earth's surface. This same material in the upper*

*stratosphere serves as the Earth's main shield against harmful ultraviolet radiation. In each area the problems are distinctly opposite, too much at the surface causes health problems, too little in the stratosphere increases cancer risk. There is minimal interaction between the two areas and the two environmental protection strategies are not contradictory.*

#### **MARION COUNTY OVERLAP WILL CREATE MUNICIPAL PLANNING ORGANIZATION (MPO) CONFLICTS**

81.

C10

This program may conflict with Marion County MPO issues and in order to avoid that, I/M should be kept out of Marion county.

*The only requirement associated with this proposal is that selected motor vehicles will be required to pass an emissions compliance test. No other planning or regulatory requirements accompany this proposal.*

#### **CONCERNS ABOUT THE PROCESS AND THE WAY GOVERNMENT AGENCIES WORK TOGETHER**

82.

C8,C7,C4,C13

On one hand, LCDC won't allow small cities to expand to provide local job opportunities, so people are forced to drive to larger cities. But DEQ will force these same people to go through I/M because they drive to work.

*DLCD rules require cities and towns to make projections of their population and business growth needs and then to establish urban growth boundaries that will accommodate that need. In some cases DLCD has determined that the municipality has underestimated its needs and required it to revise the boundary accordingly. Other economic forces play a much larger role in an area's failure to become a job center. In addition, people also make decisions independent of government policy to live in more rural settings and travelling on a frequent basis into metropolitan areas to take care of employment, shopping and entertainment needs.*

83.

Sa1

The hearings officer is not an objective observer, but a DEQ employee.

*The hearings officer is a DEQ employee, which does not necessarily affect objectivity. Staff consider themselves professional and take pride in their work, which in this case requires a distillation of testimony presented during the public comment period. The complete public record, available as tape recordings of the hearings and copies of all written testimony, is maintained for review by the Commission.*

84. W21  
This will just allow the DEQ to expand and ask the legislature for more money.

*There is no advantage to the Department in expanding this program for its own sake. The goal of the proposal is to provide one of the key strategies to ensuring that air quality will be maintained within acceptable levels.*

85. W28  
This is another example of large suburban areas overpowering smaller rural areas.

*The proposal reflects the changing nature of land use in the more outlying areas. People are choosing to live further away from cities but are still maintaining an economic and social connection to the metropolitan centers. If people living in rural areas had not chosen to live there and work in the metropolitan areas then the data would not support inclusion within the vehicle inspection boundary.*

#### **BELIEVES THE EXPANDED I/M BOUNDARY WILL IMPROVE AIR QUALITY**

86. W1, W10, W19, W37  
An expanded I/M boundary will help to keep the air healthful.

*Expanding the scope of the vehicle inspection program is one of the most cost effective methods the Department can implement in order to improve air quality. This approach has been reviewed and recommended by the State Task Force on Motor Vehicle Emission Reductions and the Oregon Legislature.*

87. W19  
Current limits for ozone are set too high and we need further reductions in pollutants to protect public health.

*There is some evidence and discussion among the scientific community that the national air quality standard for ozone levels is set too high. These reports indicate that there may be adverse health impacts at lower levels. However, these findings are not yet widely accepted. That this discussion is occurring and is considered plausible by reputable scientists makes it even more imperative that the Department successfully implement all elements of the maintenance plan in order to ensure that further deterioration of ambient air quality does not occur.*

88. W37  
Better auto emissions testing and larger I/M boundaries are the most critical emissions reduction strategies.

*Automobiles are the most significant source of ozone precursors in the Portland airshed. Auto emissions testing plays a central role in keeping pollution levels to acceptable limits. Improvements to the testing procedure and expansion of the testing area are key elements of a ten year plan to ensure good air quality.*

**BELIEVES THE EXPANDED I/M BOUNDARY IS NECESSARY TO INDUSTRY**

89.

W10

Industry has done it's share to clean the air, motorists must also share in the burden.

*Industrial sources in the Portland air shed are required to install the most effective pollution control equipment available, and cost is not a limiting factor. Businesses wishing to expand or locate here must also offset their pollution load by reducing pollution from other sources by 110%. This requirement can be costly and time consuming and places these businesses at a competitive disadvantage relative to businesses located in clean air areas. Implementing the maintenance plan, including expanding the auto emissions testing area, will appropriately control more effectively the largest sources of emissions.*



CHANGES TO ORIGINAL RULEMAKING PROPOSAL  
MADE IN RESPONSE TO PUBLIC COMMENT

Division 24.

Typographical errors were corrected.

Based on a further evaluation of the data the city of Lafayette was excluded, as shown below.

340-24-301 (2) ...In Yamhill County the following tracts, block groups and blocks are included:  
Tracts 301, 302, ~~303~~; **Block Groups 1, 2, 3, 4 of Tract 303; Blocks 1, 2B, 3B, 27B of Tract 303...**

Indicated changes are from the rule put out for public comment.

Vehicle Inspection/Maintenance Boundary Change

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State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY

Rulemaking Proposal  
for  
Portland Area Vehicle Inspection Program Boundary Change

## Rule Implementation Plan

### Summary of the Proposed Rule

The proposed rule would expand the boundaries in the Portland metropolitan area within which certain motor vehicles are subject to inspection and maintenance requirements for their emissions control systems. The boundary for the Medford inspection program is not affected by this rulemaking.

### Proposed Effective Date of the Rule

May 1, 1995

### Proposal for Notification of Affected Persons

Owners of certain gasoline or diesel powered vehicles within the limits established in the rule will be notified by Driver and Motor Vehicle Services up to three months prior to when their registration is due for renewal. This notice will inform them of the need to obtain a certificate of compliance from the Department of Environmental Quality in order to re-register their vehicles. The automotive service industry, including repair shops, dealerships and industry associations, currently receive and "Information Bulletin" on a periodic basis. This bulletin provides information on program operations, testing results, program requirement, etc. The bulletin mailing list will be updated to include repair facilities and dealerships within the proposed new areas of the program.

### Proposed Implementing Actions

The Department will locate sites for additional testing stations, purchase testing equipment and hire and train staff to conduct the tests. This steps will be taken beginning in August, 1994 through to the opening of new facilities in May, 1995. Vehicle owners within the program area with vehicle registration due after May, 1995 will be required to obtain a

certificate of compliance with the Department's emission test in order to re-register the vehicle. Vehicles that do not pass the test will be expected to be repaired in order to obtain registration.

**Proposed Training/Assistance Actions**

Existing training and technical assistance efforts will be extended to accommodate the expanded program. The Department will continue its current training program for new staff. Outreach programs to the automobile repair industry and automobile fleet operators will be provided to affected parties in the expanded coverage area.

# Vehicle Inspection Boundary

Portland Metropolitan Area

- Vehicle Inspection Station
- ▭ Current I/M Boundary
- - - Proposed I/M Boundary
- ~ Vancouver I/M Boundary

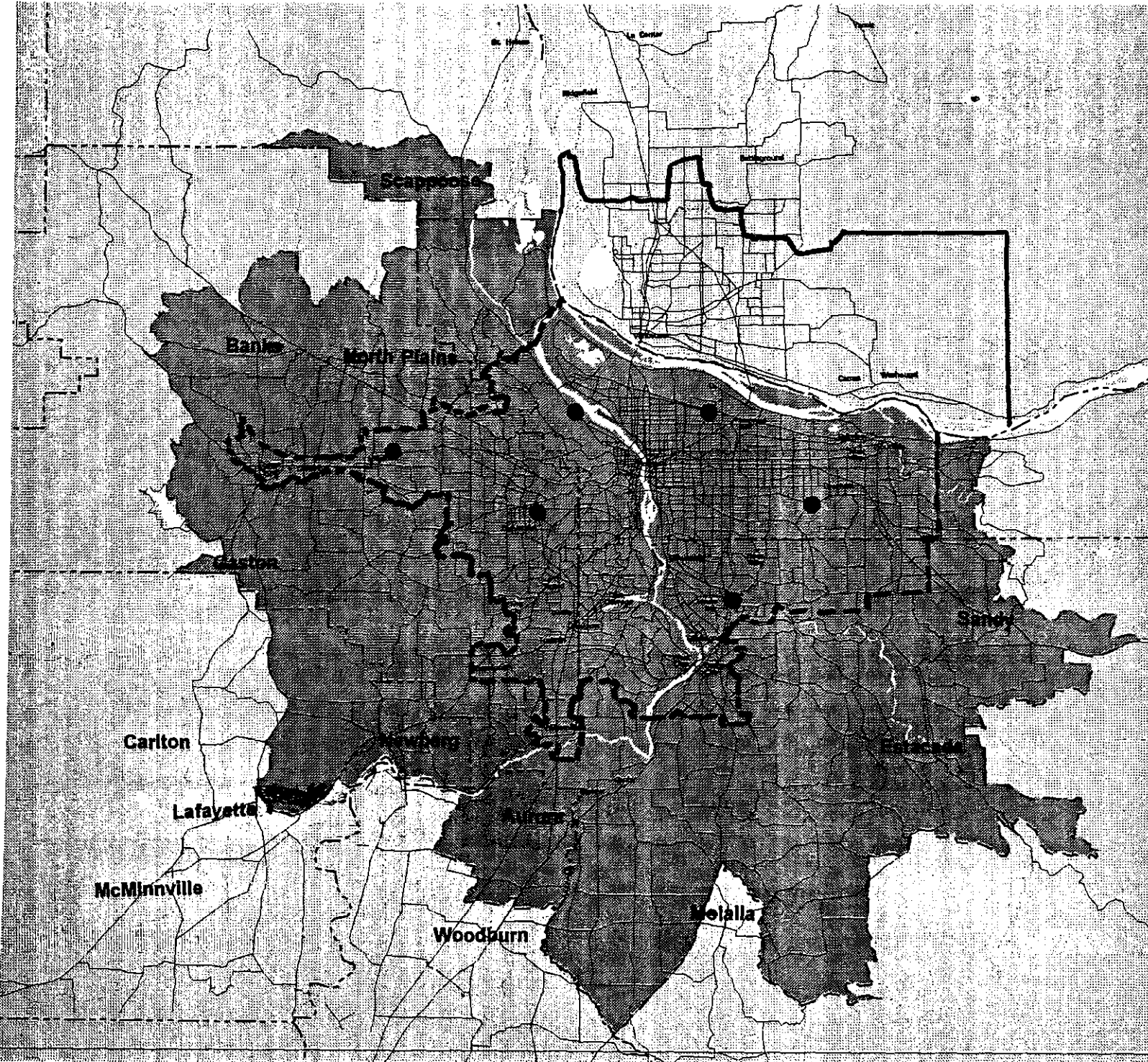
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METRO



# Environmental Quality Commission

- Rule Adoption Item
- Action Item
- Information Item

Agenda Item D  
July 22, 1994 Meeting

**Title:**

Proposed Adoption of Rule Amendments to On-Site Sewage Disposal Fees

**Summary:**

The Department proposes to establish a schedule of fees that will generate sufficient revenue to support the program and enhance service delivery. The field services portion would be supported by application fees, while the administrative/support portion would be funded from license fees and surcharge fees collected on all program applications within the state. The fees were developed after evaluating the time to complete the work each type of application represents, workload, staffing requirements, and a budget analysis. Public hearing comments generally did not support higher fees. The information used to develop the fees was re-examined, and as a result some of the fees were reduced.

The counties of Benton and Washington requested one or more of the application fees they charge be increased above the schedule of fees adopted by the Commission in 1991. The new schedule of fees within Attachment A will set a new ceiling for the county fees. The Benton County fee would be lower than that ceiling and would not need to be established by rule. Many of the Washington County fees would also be lower. However, Washington County would like approval to establish two application fees at higher levels than being considered for the Department. Staff have reviewed the information supplied by the County and have not been able to justify the higher fees. The Department does not support adoption of the higher Washington County fees, as contained in Attachment J.

**Department Recommendation:**

It is recommended the Commission adopt the rule amendments regarding the on-site sewage program fees, as presented in Attachment A.

  
Report Author

  
Division Administrator

  
Director

July 8, 1994

†Accommodations for disabilities are available upon request by contacting the Public Affairs Office at (503)229-5317(voice)/(503)229-6993(TDD).

State of Oregon  
Department of Environmental Quality

Memorandum<sup>†</sup>

Date: July 5, 1994

**To:** Environmental Quality Commission  
**From:** Fred Hansen, Director  
**Subject:** Agenda Item D, July 22, 1994, EQC Meeting

Proposed Adoption of Rule Amendments to On-Site Sewage Disposal Fees

**Background**

The Department of Environmental Quality (Department) regulates on-site sewage treatment and disposal activities throughout Oregon, and performs program-related field services in 14 counties (4 in western Oregon, 10 in eastern Oregon). In the other 22 counties, a portion of the program responsibilities have been delegated (through inter-governmental agreements) to local units of government. About 35 percent of Oregon's citizens depend on septic systems for their home's primary sewage disposal method.

Within the Department, the program consists of two identifiable segments, program and support services, and field services. Field services are responsible for performing work that is in response to applications (and fees) received within six field offices, and must also perform other program duties that are not application (or fee) driven. Examples of non-application driven work includes complaint investigation, sanitary surveys, enforcement activities, staff technical training, response to inquiries from the public, etc. The program and support services portion of the program has responsibility for the development of administrative rules, licensing of sewage disposal service businesses, maintenance of the service agreements with the local units of government, program planning and guidance, response to variance requests, development of training strategies for staff, and other similar duties.

Funding to cover the Department's cost to implement all aspects of the program comes from application fees, surcharge fees, and sewage disposal service license fees. The current schedule of fees was adopted effective July 1, 1991, to fund a portion of the program along with general fund monies.

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<sup>†</sup>Accommodations for disabilities are available upon request by contacting the Public Affairs Office at (503)229-5317(voice)/(503)229-6993(TDD).

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On May 12, 1994, the Director authorized the Water Quality Division to proceed to a rulemaking hearing on proposed rules which would increase the application fees, additional necessary changes and surcharges to make the program self-supporting. Also included in this rulemaking are requests from the counties of Washington and Benton for authorization to increase one or more of their application fees beyond the maximum fee levels previously established by the Commission in 1991.

Pursuant to the authorization, hearing notice was published in the Secretary of State's Bulletin on June 1, 1994. The Hearing Notice and informational materials were mailed to the mailing list of those persons who asked to be notified of rulemaking actions, and to a mailing list of persons known by the Department to be potentially affected by or interested in the proposed rulemaking action on May 23, 1994.

Three (3) Public Hearings were held in different areas of the state on June 23, 1994, beginning at 10 am. In Roseburg, the hearing was held in the Roseburg City Council Chambers, with Mr. Delbert Cline serving as the Presiding Officer. Mr. Charles Ashbaker served as the Presiding Officer at the hearing held in the Washington County Public Service Building in Hillsboro. The third Public Hearing was at the Pendleton Convention Center in Pendleton, with Mr. Ed Liggett serving as the Presiding Officer. The Presiding Officers' Reports (Attachment C) summarize the oral testimony presented at the hearings.

Written comment was received through June 24th, 1994, with the public comment period closed at 5 pm that day. A list of written comments received is included as Attachment D. (A copy of the comments is available upon request.)

Department staff have evaluated the comments received (Attachment E). Based upon that evaluation, the fee schedule has been modified. The proposed rules in Attachment A reflect the changes based on comments received. Attachment F provides the rationale for the changes.

The following sections summarize the issues this proposed rulemaking action is intended to address, the authority to address the issues, the process for development of the rulemaking proposal including alternatives considered, a summary of the rulemaking proposal presented for public hearing, a summary of the significant public comments and the changes proposed in response to those comments, a summary of how the rule will work and how it is proposed to be implemented, and a recommendation for Commission action.



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**Issues this Proposed Rulemaking Action is Intended to Address**

The on-site sewage disposal program, which is staffed to provide a minimally effective program, cannot be fully funded by current fees due to inflation and loss of general fund dollars. These proposed rules would shift the program's funding base to 100% fees to support program activities. This proposed action is also intended to provide the revenue needed to fund additional staff to process all applications within 2 weeks or less of receipt. Current program staffing levels are inadequate to provide timely response to the regulated community. Commonly, delays in responding to applications during the building season due to insufficient staffing may reach six weeks or more. Such lengthy delays cause considerable anxiety among those individuals that are pressed for time.

The proposed action will allow counties to increase the application fees they collect to support their activities in the program. Two counties have requested the ability to set fees that are higher than the current schedule of maximum fees (OAR 340-71-140) the Commission previously adopted in 1991. However, the counties are prohibited by ORS 454.745(4) from establishing fees that exceed the current schedule of maximum fees unless the Commission adopts the higher County fees by rule.

Benton County would like to adopt the application fee for a residential repair permit at \$306, the level they determined it costs to process and complete work on the application. The County may not adopt a higher fee until the Commission either adopts a new schedule of maximum fees (as the Department is requesting) or adopts a rule establishing the higher residential repair permit fee for Benton County. Adoption of either request will allow the County to establish the application fee up to the maximum limit allowed by the rule.

Washington County would like to raise most of their application fees higher than the current schedule of maximum fees. Washington County must shift more of the program's funding base to fees than the current fee schedule will allow. The County estimates it costs them approximately \$60,000 more than their fee revenue provides to implement the program for the Department. Washington County's proposed fee schedule (Attachment H) is projected to reduce this shortfall to about \$13,000. With two exceptions (residential site evaluation report and gray water waste disposal sump permit), the higher fees proposed by the County do not exceed the Department's proposed fee schedule (Attachment A). The County requested the residential site evaluation report fee be established at \$395. This would be higher than the Department proposes in Attachment A. The County also proposes that the permit fee for a gray water waste disposal sump be established at \$360, which would exceed the Department's proposed

fee. The Department is not recommending Commission adoption of Washington County's request for higher fees for these two activities because the County has not demonstrated to the Department's satisfaction why higher fees are needed to conduct these activities at the county level. If the Commission agrees with the Department's recommendation to not allow higher fees for Washington County in these two categories, then simply adopting the Department fee schedule in Attachment A will be sufficient to take care of Washington County's needs. However, should the Commission determine the higher fees are justified for Washington County, the Commission could adopt the fee rule in Attachment J in addition to the Department's proposed fee schedule.

### **Relationship to Federal and Adjacent State Rules**

The proposed amendments establish a modified schedule of fees to fund on-site program services. There are no equivalent Federal regulations. Other states, or the health districts or counties within these states, commonly establish fees to support their efforts in regulating on-site systems. In the state of Washington, for example, the counties and health districts contacted have all adopted fee schedules that fund a portion of their programs.

### **Authority to Address the Issue**

ORS 454.745 grants the Commission authority to adopt rules establishing maximum fees for services rendered, and for permits and licenses under ORS 454.655 and 454.695, upon the request of the Director, or upon the request of any county the Department has contracted for services with pursuant to ORS 454.725.

In addition, ORS 454.625 mandates that the Commission adopt such rules as it considers necessary for the purpose of regulating subsurface sewage disposal consistent with the direction given in ORS 454.605 through 454.745.

### **Process for Development of the Rulemaking Proposal (including Advisory Committee and alternatives considered)**

The Department took the opportunity to evaluate the current schedule of fees when the requests from Benton and Washington Counties came in. The fee schedule was found not to be generating the revenue needed to adequately fund the Department's activities in the program. It was apparent that the regulated community was not being served in a responsive manner. During the construction season it has not been uncommon for the

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public to experience delays of up to six weeks or more before building sites can be evaluated for sewage disposal suitability, with other activities delayed as well. One solution to improve responsiveness is to provide for an appropriate staff level in each of the Department's field offices.

The proposed fee schedule for the Department was developed after an analysis was made of the time needed to process applications in each of the 6 field service offices (4 in western Oregon, 2 in eastern Oregon), staffing levels, field services data concerning past numbers of applications received, and completion of a budget analysis. An additional analysis was made to determine the number of technical field staff needed to react to all applications within 2 weeks of receipt. Two weeks was selected as the optimum timing, as field staff have found that if we cannot respond in 2 weeks the number of telephone complaints and concerns dramatically increases.

The Department did not conduct any workshops or public informational meeting in the process of developing this proposal; however a draft of the rule was presented to the policy advisory sub-committee of the on-site administrative rules review committee. The sub-committee expressed agreement and support for the Department to develop a fee schedule that would fund program services, but did not make a specific recommendation.

The proposed fee schedule would provide funding for additional staffing in the 1995 construction season, in order to improve responsiveness to the regulated community. In the 1995-97 biennium, the proposed fees would allow for the addition of 11 permanent FTE to the Department's budget for increased services, and also cover a revenue shortfall projected at the current staffing level.

The Counties of Benton and Washington have requested that they be authorized to increase fees beyond the current maximums established by the Commission in 1991. The increases are needed to generate additional revenue to support their efforts in the on-site program. Benton County requested the authority to establish a fee for major repair permits that would, on the average, equal the cost to the county to process that type of application. Washington County determined that many on-site activities for which they received applications and fees had a greater cost to the county than the fee collected. Therefore, Washington County also submitted a request to the Department for higher application fees.

When the proposed fees exceed the current schedule of maximum fees, as adopted by the Environmental Quality Commission, the requests must be taken through the rulemaking process. If the Commission adopts the revised schedule of maximum fees for the Department at the levels proposed in Attachment A, the counties will be able to establish

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their program fees up to the new limits without further action by the Commission. Washington County has proposed higher application fees for two activities that exceed the Department's proposed fees. The Department does not support adoption of the higher fees because the County has not demonstrated to the Department's satisfaction why higher fees are needed to conduct these activities at the county level.

**Summary of Rulemaking Proposal Presented for Public Hearing and Discussion of Significant Issues Involved.**

The Department proposes that most of the fees it collects to support on-site program activities be increased. Also included in this rulemaking are proposed maximum fees that Benton and Washington Counties would like the authority to establish that exceed the current maximum schedule of fees adopted by the Commission in 1991. Several housekeeping rule amendments are also proposed, including the repeal of several obsolete county fee rules.

**Summary of Significant Public Comment and Changes Proposed in Response**

Attachments E and F identify the Department's evaluation of significant public comment and the changes that were made to the rules in response to that comment. Several comments were received that suggested the proposed residential repair permit would likely cause homeowners to try to effect repairs without contacting the Department for guidance or for a permit. This could cause an increased health risk and possible environmental degradation, and could cause a shift of limited Department resources towards enforcement rather than assistance. The feeling expressed was that the fee should be at a lower level to encourage (or at least not discourage) this contact. As a result of public comment, the proposed fees for residential repair permits have been revised from \$615 to \$310 for major repair permits and from \$280 to \$150 for minor repair permits. Currently, these fees are \$115 and \$75, respectively.

Many commenters stated that the proposed permit fees were too high. The workload analysis used to establish these fees was re-examined, specifically with respect to the number of inspection visits that are needed to insure proper construction. Several of the alternative system permit fees were lowered because the amount of time needed to process applications should be very similar to the time needed with a standard system. With two of the alternative systems (sand filter and capping fill), the time estimates were found to be too high since each contained two construction inspections that could be

eliminated with efficient planning. The permit for the gray water disposal sump, commonly used in RV parks, was found to take significantly less time to process than originally estimated. All of these changes resulted in a reduction of the permit fee for that type of system (see Attachment F).

The Department expects to receive support from many Counties for the fee increase, but strong opposition from other fee payers.

### **Summary of How the Proposed Rule Will Work and How it Will be Implemented**

Upon adoption of this proposal and filing with the Secretary of State, the amended schedule of maximum fees will be in effect. This revised fee schedule will replace the one currently used by all of the Department's offices that accept applications for on-site activities. Local units of government that provide program-related services on behalf of the Department will collect the new \$35 surcharge instead of the \$10 to \$20 surcharge they currently collect. The regulated community will pay the new fees at the time they apply for permits, site evaluations, licenses, and other program actions.

Local units of government that implement the program on the Department's behalf will be able to adjust their individual fee schedules up to the maximum levels established in this rule, consistent with the limits described in ORS 454.745(4).

### **Recommendation for Commission Action**

It is recommended that the Commission adopt the rule amendments regarding the on-site sewage program fees, as presented in Attachment A of the Department Staff Report.

### **Attachments**

- A. Rule (Amendments) Proposed for Adoption
- B. Supporting Procedural Documentation:
  - 1. Legal Notice of Hearing
  - 2. Public Notice of Hearing (Chance to Comment)
  - 3. Rulemaking Statements (Statement of Need)
  - 4. Fiscal and Economic Impact Statement
  - 5. Land Use Evaluation Statement
  - 6. Questions to be Answered to Reveal Potential Justification for Differing from Federal Requirements
- C. Presiding Officers' Reports on Public Hearings

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- D. List of Written Comments Received
- E. Department's Evaluation of Public Comment
- F. Detailed Changes to Original Rulemaking Proposal made in Response to Public Comment
- G. Rule Implementation Plan
- H. Washington County Fee Rule
- I. Benton County Fee Rule
- J. Washington County Fee Rule, Revised

**Reference Documents (available upon request)**

Written Comments Received (listed in Attachment D)  
Monthly and Quarterly Activity Reports from DEQ and Contract Counties  
Work-Time Estimates for Various Activities--Eastern & Western Oregon  
Backlog Analysis--Eastern & Western Oregon  
Enhanced Program Budget Report  
ORS Chapter 454  
OAR Chapter 340, Division 71, Rule 140  
OAR Chapter 340, Division 72  
Benton County Request and Supporting Materials  
Washington County Request and Supporting Materials

Approved:

Section:

*Thomas J. Lucas*

Division:

*Assistant for Am. Re. Down*

Report Prepared By: Sherman O. Olson

Phone: 229-6443

Date Prepared: July 5, 1994

SOO:crw  
MW\WC12\WC12728.5  
July 5, 1994

PROPOSED AMENDMENTS TO  
OAR 340-71-140

NOTE:

The ***bold italicized underlined*** portions of text represent proposed additions made to the rules.

The ~~***bold italicized bracketed***~~ portions of text represent proposed deletions made to the rules.

**340-71-140 FEES — GENERAL.**

- (1) Except as provided in section (5) of this rule, the following nonrefundable fees are required to accompany applications for site evaluations, permits, licenses and services provided by the Department.

ON-SITE SEWAGE DISPOSAL SYSTEMS	MAXIMUM FEE
(a) New Site Evaluation:	
(A) Single Family Dwelling:	
(i) First Lot . . . . .	<u>\$ 380</u> <del>[\$245]</del>
(ii) Each Additional Lot Evaluated During Initial Visit . . . . .	\$ 205
(B) Commercial Facility System:	
(i) For First One Thousand (1,000) Gallons Projected Daily Sewage Flow . . . . .	<u>\$ 380</u> <del>[\$245]</del>
(ii) <b><i><u>For systems with projected sewage flows greater than one thousand (1,000) gallons but not more than 5,000 gallons, the site evaluation application fee shall be \$380 plus an additional \$100 for each 500 gallons or part thereof above 1,000 gallons [Plus For Each Five Hundred (500) Gallons or Part Thereof Above One Thousand (1,000) Gallons, for Projected Daily Sewage Flows up to Five Thousand (5,000) Gallons</u></i></b> . . . . .	<u>\$ 75</u>
(C) Site Evaluation Report Review . . . . .	<u>\$ 335</u> <del>[\$200]</del>

- (D) Fees for site evaluation applications made to an agreement county shall be in accordance with that county's fee schedule.
- (E) Each fee paid for a site evaluation report entitles the applicant to as many site inspections on a single parcel or lot as are necessary to determine site suitability for a single system. The applicant may request additional site inspections within ninety (90) days of the initial site evaluation, at no extra cost.
- (F) Separate fees shall be required if site inspections are to determine site suitability for more than one (1) system on a single parcel of land.

(b) Construction-Installation Permit:

(A) For First One Thousand (1,000) Gallons Projected Daily Sewage Flow:

(i) Standard On-Site System . . . . . \$ 565 ~~[\$245]~~

(ii) Alternative System:

(I) Aerobic System . . . . .	<u>\$ 565</u>	<del>[\$245]</del>
(II) Capping Fill . . . . .	<u>\$ 860</u>	<del>[\$415]</del>
(III) Cesspool . . . . .	<u>\$ 565</u>	<del>[\$245]</del>
(IV) Disposal Trenches in Saprolite . . .	<u>\$ 565</u>	<del>[\$245]</del>
(V) Evapotranspiration-Absorption . . .	<u>\$ 565</u>	<del>[\$245]</del>
(VI) Gray Water Waste Disposal Sump . . . . .	<u>\$ 240</u>	<del>[\$120]</del>
(VII) Holding Tank . . . . .	<u>\$ 565</u>	<del>[\$245]</del>
(VIII) Pressure Distribution . . . . .	<u>\$ 860</u>	<del>[\$350]</del>
(IX) Redundant . . . . .	<u>\$ 565</u>	<del>[\$245]</del>
(X) Sand Filter . . . . .	<u>\$ 1,100</u>	<del>[\$445]</del>
(XI) Seepage Pit . . . . .	<u>\$ 565</u>	<del>[\$245]</del>
(XII) Seepage Trench . . . . .	<u>\$ 565</u>	<del>[\$245]</del>
(XIII) Steep Slope . . . . .	<u>\$ 565</u>	<del>[\$245]</del>
(XIV) Tile Dewatering . . . . .	<u>\$ 860</u>	<del>[\$350]</del>

(iii) At the discretion of the Agent, the permittee may be assessed a reinspection fee, not to exceed \$200 ~~[\$25]~~ when a precover inspection correction notice requires correction of improper construction and, at a subsequent inspection, the Agent finds system construction deficiencies have not been corrected. The Agent may elect not to make further precover inspections until the reinspection fee is paid.

(iv) With the exceptions of sand filter and pressure distribution



systems, a \$25 fee may be added to all permits that specify the use of a pump or dosing siphon.

- (B) For systems with projected daily sewage flows greater than one thousand (1,000) gallons, the Construction-Installation permit fee shall be equal to the fee required in OAR 340-71-140 (1)(b)(A) plus ~~\$50~~ ~~[\$15]~~ for each five hundred (500) gallons or part thereof above one thousand (1,000) gallons.

**NOTE:** Fees for construction permits for systems with projected daily sewage flows greater than five thousand (5,000) gallons shall be in accordance with the fee schedule for WPCF permits.

(C) Commercial Facility System, Plan Review:

- (i) For a system with a projected daily sewage flow of less than six hundred (600) gallons, the cost of plan review is included in the permit application fee.
- (ii) For a system with a projected daily sewage flow of six hundred (600) gallons, but not more than one thousand (1,000) gallons projected daily sewage flow \$ 200 ~~[\$100]~~
- (iii) **[Plus] For a system with a projected sewage flow greater than 1,000 gallons, the plan review fee shall be \$200, plus an additional \$25 for each five hundred (500) gallons or part thereof above one thousand (1,000) gallons, to a maximum sewage flow limit of five thousand (5,000) gallons per day. [.....\$25]**
- (iv) Plan review for systems with projected sewage flows greater than five thousand (5,000) gallons per day shall be pursuant to OAR 340, Division 52.

(D) Permit Renewal:

- (i) If Field Visit Required . . . . . \$ 290 ~~[\$150]~~
- (ii) No Field Visit Required . . . . . \$ 85

**NOTE:** Renewal of a permit may be granted to the original permittee if an application for permit renewal is filed prior to the original permit expiration date. Refer to OAR 340-71-160(10).

- (E) Alteration Permit . . . . . \$ 555 ~~[\$245]~~

- (F) Repair Permit:
  - (i) Single Family Dwelling:
    - (I) Major . . . . . **\$ 310** ~~[\$115]~~
    - (II) Minor . . . . . **\$ 150** ~~[\$75]~~
  - (ii) Commercial Facility:
    - (I) Major — The appropriate fees identified in paragraphs (1)(b)(A), (B), and (C) of this rule apply.
    - (II) Minor . . . . . **\$ 280** ~~[\$75]~~
- (G) Permit Denial Review . . . . . **\$ 335** ~~[\$200]~~
- (c) Authorization Notice:
  - (A) If Field Visit Required . . . . . **\$ 350** ~~[\$150]~~
  - (B) No Field Visit Required . . . . . **\$ 90** ~~[\$85]~~
  - (C) Authorization Notice Denial Review . . . . . **\$ 335** ~~[\$200]~~
- (d) Annual Evaluation of Alternative System (Where Required) **\$ 280** ~~[\$150]~~
- (e) Annual Evaluation of Large System (2501 to 5000 GPD) . . . **\$ 280** ~~[\$150]~~
- (f) Annual Evaluation of Temporary or Hardship Mobile Home . . . . . **\$ 280** ~~[\$90]~~
- (g) Variance to On-Site System Rules . . . . . \$ 225

**NOTE:** The variance application fee may be waived if the applicant meets the requirements of OAR 340-71-415(5).

- (h) Rural Area Variance to Standard Subsurface Rules:
  - (A) Site Evaluation . . . . . **\$ 380** ~~[\$245]~~

**NOTE:** In the event there is on file a site evaluation report for that parcel that is less than ninety (90) days old, the site evaluation fee shall be waived.

- (B) Construction-Installation Permit — The appropriate fee identified in subsection (1)(b) of this rule applies.

- (i) Sewage Disposal Service:
  - (A) New Business License . . . . . \$ 300**
  - ~~[(A)]~~ **(B) [Annual] Renewal of Existing and Valid**  
Business License . . . . . **\$ 200** ~~[\$175]~~
  - ~~[(B)]~~ **(C) Transfer of or Amendments to License . . . . . \$ 150** ~~[\$100]~~
  - ~~[(C)]~~ **(D) Reinstatement of Suspended License . . . . . \$ 175** ~~[\$125]~~
  - ~~[(D)]~~ **(E) Pumper Truck Inspection, First Vehicle:**
    - (i) Each Inspection . . . . . **\$ 100** ~~[\$50]~~
    - (ii) Each Additional Vehicle, Each  
Inspection . . . . . **\$ 50** ~~[\$35]~~
  - (j) Experimental Systems: Permit . . . . . **\$ 5,000** ~~[\$1,000]~~
  - (k) Existing System Evaluation Report . . . . . **\$ 350** ~~[\$150]~~

**NOTE:** The fee shall not be charged for an evaluation report on any proposed repair, alteration or extension of an existing system.

(2) Contract County Fee Schedules. Pursuant to ORS 454.745(4), fee schedules which exceed the maximum fees in ORS 454.745(1)~~[,]~~ and section (1) of this rule~~[,]~~ shall be established by rule. ~~fare established for contract counties as follows:~~

~~(a) Multnomah County: See OAR 340-72-070.~~

~~(b) Jackson County: See OAR 340-72-080.~~

~~(c) Linn County: See OAR 340-72-090.]~~

(3) Contract County Fee Schedules, General:

(a) Each county having an agreement with the Department under ORS 454.725 shall adopt a fee schedule for services rendered and permits to be issued. The county fee schedule shall not include the Department's surcharge fee identified in section 4 of this rule.

(b) A copy of the fee schedule and any subsequent amendments to the schedule shall be forwarded to the Department.

(c) Fees shall not:

- (A) Exceed actual costs for efficiently conducted services; ~~for~~
  - (B) Exceed the maximum *fee* established in section (1) of this rule, unless approved by the Commission pursuant to ORS 454.745(4).
- (4) Surcharge. In order to offset a portion of the administrative ***and program oversight*** costs of the statewide on-site sewage disposal program, a surcharge ~~for each activity, as set forth in the following schedule,~~ ***of \$35 for each site evaluated, for each construction installation permit and all other activities for which an application is submitted,*** shall be levied by the Department and by each Agreement County. Proceeds from surcharges collected by the Department and Agreement Counties shall be accounted for separately. Each Agreement County shall forward the proceeds to the Department as negotiated in the memorandum of agreement (contract) between the county and the Department.

***[Activity]*** ***[Surcharge]***

~~(a) Site evaluation, for each site examined, based on a projected flow of:~~

<del>(A) 1,000 gallons or less</del> .....	<del>\$ 20</del>
<del>(B) 1,001 gallons to 2,000 gallons</del> .....	<del>\$ 40</del>
<del>(C) 2,001 gallons to 3,000 gallons</del> .....	<del>\$ 60</del>
<del>(D) 3,001 gallons to 4,000 gallons</del> .....	<del>\$ 80</del>
<del>(E) 4,001 gallons or more</del> .....	<del>\$ 100</del>

<del>(b) Construction Installation Permit</del> .....	<del>\$ 10</del>
<del>(c) Repair Permit</del> .....	<del>\$ 10</del>
<del>(d) Alteration Permit</del> .....	<del>\$ 10</del>
<del>(e) Authorization Notice</del> .....	<del>\$ 10</del>
<del>(f) Existing System Evaluation Report</del> .....	<del>\$ 10]</del>

- (5) Refunds. The Agent may refund a fee accompanying an application if the applicant withdraws the application before the Agent has done any field work or other substantial review of the application.

PROPOSED AMENDMENTS TO  
OAR 340-72-070, 340-72-080, & 340-72-090

NOTE:

The ***bold italicized underlined*** portions of text represent proposed additions made to the rules.

The ***bold italicized bracketed*** portions of text represent proposed deletions made to the rules.

***[340-72-070 MULTNOMAH COUNTY FEE SCHEDULE***

***(1) Septic Tank and Disposal Fields:***

- (a) New site evaluation, 1st lot . . . . . \$120.00***
- (b) Each additional lot evaluation while on site . . . . . \$120.00***

***(2) Seepage Pits, Cesspools or Holding Tanks***

***(New Site Evaluation)***

- (a) Commercial site . . . . . \$120.00***
- (b) Industrial site . . . . . \$120.00***
- (c) (A) Multiple residential site, 1st system . . . . . \$ 70.00***
  - (B) Each additional system . . . . . \$ 50.00***
- (d) Single family residential site . . . . . \$ 70.00***

***(3) Construction Installation Permit:***

- (a) Standard septic tank/drainfield, with daily flow of 450-  
gallons per day maximum . . . . . \$ 65.00***
- (b) Septic tank capping fill on disposal area . . . . . \$ 75.00***
- (c) Sand filter system . . . . . \$100.00***

(d)	Septic tank/drainfield system in excess of 450 gallons per day .....	\$ 65.00
	<i>Plus \$20.00 for each increment of 450 gal/day</i>	
(e)	Septic tank/drainfield lift pump system .....	\$ 85.00
(f)	All alternative systems other than capping fill and sand filter systems .....	\$100.00
(g)	Cesspool .....	\$ 65.00
(h)	Cesspool excess of 20' of rings .....	\$100.00
(i)	Septic tank (maximum capacity 2500 gallons) and one 15' or 20' seepage pit .....	\$ 65.00
(j)	Septic tank (maximum capacity 2500 gallons) and two 15' x 20' seepage pits .....	\$100.00
(k)	System with septic tank larger than 3000 gallons shall be prorated at increments of \$50.00/1000 gallon capacity. \$50.00 for each increment of 1000 gallons of capacity .....	\$100.00
(l)	Holding tank permits .....	\$100.00
(4)	Replacement of Cesspool .....	\$ 65.00
(5)	Alteration of septic tank and drainfield .....	\$ 40.00
(6)	Extension of septic tank and drainfield .....	\$ 40.00
(7)	Repair of septic tank and drainfield .....	\$ 40.00
(8)	Repair of septic tank/drainfield with lift pump .....	\$ 55.00
(9)	(a) Inspection of sewage disposal pump truck .....	\$ 25.00
	(b) Each additional licensed truck on premises .....	\$ 10.00
(10)	Evaluation of existing system adequacy .....	\$ 30.00
(11)	Annual evaluation of alternative system .....	\$ 40.00
	<i>(When required including holding tank)</i>	
(12)	Annual evaluation of temporary mobile homes .....	\$ 25.00

~~(13) Abandonment of subsurface system . . . . . \$ 35.00~~

~~(14) Any person commencing work without having first been issued a permit, as required in section 340 71 160(1), if subsequently permitted to obtain a permit, shall pay double the fee established in this rule.]~~

~~[340 72 080 JACKSON COUNTY FEE SCHEDULE~~

~~ON-SITE SEWAGE DISPOSAL SYSTEMS~~

~~(1) New Site Evaluation:~~

~~(a) Single Family Dwelling:~~

~~(A) First Lot . . . . . \$ 175~~

~~(B) Each Additional Lot Evaluated During Initial Visit . . . . . \$ 160~~

~~(b) Commercial Facility System:~~

~~(A) For First 1,000 Gallons Projected Daily Sewage Flow . . . . . \$ 175~~

~~(B) Plus For Each 500 Gallons or Part Thereof Above 1,000 Gallons . . . . . \$ 40~~

~~(2) Preliminary Site Inspection . . . . . \$ 75~~

~~This fee will be credited to the site evaluation fee if application for a site evaluation on the same property is made within 90 days.~~

~~(3) Construction Installation Permit:~~

~~(a) For First 1,000 Gallons Projected Daily Sewage Flow:~~

~~(A) Standard On-Site System . . . . . \$ 80~~

~~(B) Alternative System:~~

~~Aerobic System . . . . . \$ 130~~

~~Capping Fill . . . . . \$ 130~~

~~Evapotranspiration Absorption . . . . . \$ 130~~

~~Gray Water Waste Disposal Sump . . . . . \$ 80~~

~~Holding Tank . . . . . \$ 100~~

<del>Pressure Distribution</del> .....	<del>\$ 130</del>
<del>Redundant</del> .....	<del>\$ 110</del>
<del>Sand Filter</del> .....	<del>\$ 150</del>
<del>Seepage Trench</del> .....	<del>\$ 80</del>
<del>Steep Slope</del> .....	<del>\$ 80</del>
<del>Tile Dewatering</del> .....	<del>\$ 130</del>

~~(b) For systems with projected daily sewage flows greater than 1,000 gallons, the construction installation permit fee shall be equal to the fee required in subsection (3)(a) of this rule, plus \$10 for each 500 gallons or part thereof above 1,000 gallons.~~

~~NOTE: Fees for construction permits for systems with projected daily sewage flows greater than 5,000 gallons shall be in accordance with the fee schedule for WPCF permits.~~

~~(c) Construction-Installation Permit Renewal:~~

<del>(A) If Field Visit Required</del> .....	<del>\$ 50</del>
<del>(B) No Field Visit Required</del> .....	<del>\$ 10</del>

~~NOTE: Renewal of a permit may be granted to the original permittee if an application for permit renewal is filed prior to the original permit expiration date.~~

~~(4) Alteration Permit .....~~ ~~\$ 50~~

~~(5) Repair Permit:~~

<del>(a) Single Family Dwelling</del> .....	<del>\$ 40</del>
<del>(b) Commercial Facility</del> .....	<del>The appropriate fee identified in subsections (3)(a) and (b) of this rule apply.</del>

~~(6) Authorization Notice:~~

<del>(a) If Field Visit Required</del> .....	<del>\$ 40</del>
<del>(b) No Field Visit Required</del> .....	<del>\$ 0</del>

~~(7) Annual Evaluation of Alternative System (Where Required) .....~~ ~~\$ 25~~

~~(8) Annual Evaluation of Large System (2,501 to 5,000 GPD) .....~~ ~~\$ 50~~

~~(9) Annual Evaluation of Temporary Mobile Home .....~~ ~~\$ 25~~



~~(10) Rural Area Variance to Standard Subsurface Rules:~~

~~(a) Site Evaluation ..... \$ 175~~

~~NOTE: In the event there is on file a site evaluation report for that parcel that is less than ninety days old, the site evaluation fee shall be waived.~~

~~(b) Construction Installation Permit . . . . The appropriate fee identified in Section (3) of this rule applies.~~

~~(11) Sewage Disposal Service:~~

~~Pumper Truck Inspection, Each Business Licensed ..... \$ 25]~~

**[340-72-090 LINN COUNTY]**

~~Linn County is authorized to establish fees for permits to repair failing on-site sewage disposal systems in amounts not to exceed the following:~~

~~(1) System serving a single family dwelling ..... \$ 163.~~

~~(2) System serving a commercial facility ..... The appropriate fee identified in OAR 340-71-140(1)(b)(A) and (B).]~~

**NOTICE OF PROPOSED RULEMAKING HEARING**

(Rulemaking Statements and Statement of Fiscal Impact must accompany this form.)

Department of Environmental Quality    Water Quality Division  
**OAR Chapter 340**

<b>DATE:</b>	<b>TIME:</b>	<b>LOCATION:</b>
June 23, 1994	10 am	Room 140 Washington County Public Services Building 155 North First Street Hillsboro, Oregon
June 23, 1994	10 am	Pendleton Convention Center West Meeting Room #1 1601 Westgate Pendleton, Oregon
June 23, 1994	10 am	Roseburg City Council Chambers 900 S.E. Douglas Roseburg, Oregon

**HEARINGS OFFICERS:** Hillsboro--Kent Ashbaker  
Pendleton--Ed Liggett  
Roseburg--Delbert Cline

**STATUTORY AUTHORITY:**    ORS 454.625  
ORS 454.745

**ADOPT:**    OAR 340-72-071  
               OAR 340-72-072

**AMEND:**    OAR 340-71-140

**REPEAL:**    OAR 340-72-070  
               OAR 340-72-080  
               OAR 340-72-090

- This hearing notice is the initial notice given for this rulemaking action.
- This hearing was requested by interested persons after a previous rulemaking notice.
- Auxiliary aids for persons with disabilities are available upon advance request.

**SUMMARY:**

The counties of Benton and Washington have requested the Environmental Quality Commission (EQC) adopt fees for on-site services that exceed the fees established for the Department. The Department has requested the EQC adopt an amended schedule of fees the Department may charge for various on-site sewage treatment and disposal actions. Most of the fees are proposed to be increased. The application fees the counties of Benton and Washington collect are used to fund each county's cost for implementation of the on-site program. The fees the Department collects for on-site actions are the sole source of funding

for its efforts in the program. The current fees assessed by the counties of Washington and Benton, and the Department, do not provide the revenue necessary to pay the costs of program implementation.

**LAST DATE FOR COMMENT:** June 24, 1994

**DATE PROPOSED TO BE EFFECTIVE:** Upon adoption by the Environmental Quality Commission and subsequent filing with the Secretary of State.

**AGENCY RULES COORDINATOR:**

Harold Sawyer, (503) 229-5776

**AGENCY CONTACT FOR THIS PROPOSAL:**

Sherman Olson, (503) 229-5776

**ADDRESS:**

Water Quality Division

811 S. W. 6th Avenue

Portland, Oregon 97204

**TELEPHONE:**

(503) 229-6443

or Toll Free 1-800-452-4011

Interested persons may comment on the proposed rules orally or in writing at the hearing. Written comments will also be considered if received by the date indicated above.

Michael Loma

Signature

May 13, 1994

Date

*Oregon Department of Environmental Quality*

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

**Proposed Adoption of Rule Amendments to On-Site Sewage Disposal Fees**

Date Issued:	May 23, 1994
Public Hearings:	June 23, 1994
Comments Due:	June 24, 1994

**WHO IS  
AFFECTED:**

All persons submitting applications pertaining to on-site sewage disposal activities and all sewage disposal service licensees.

**WHAT IS  
PROPOSED:**

Most of the on-site sewage disposal program fees established for the Department are proposed to be increased. The increased revenue generated by the new fees will provide the funding necessary to support the administration, oversight, and field service activities of the on-site program implemented by the Department.

The counties of Benton and Washington have requested adoption of rules that will allow them to establish application fees for on-site services that may be higher than those established in the current maximum schedule of fees. The proposed fee schedule for Washington County covers all program services they provide. Benton County proposes that the major repair permit fee be increased to reflect the average actual cost they incur in processing that permit.

**WHAT ARE THE  
HIGHLIGHTS:**

Many fees are being increased by various amounts ranging from \$5 to \$4000, however most of the fee increases are less than \$160. For example, the base application fees for the more common applications, such as site evaluation reports and standard construction-installation permits will be increased by amounts ranging from \$125 to \$320. Alternative system construction permit increases will be higher. License fees for sewage disposal service businesses will increase by \$125 for a new license and \$25 for a license renewal. The surcharge applicable to all on-site applications is proposed to be established at a flat rate of \$35 (surcharges currently range from \$10 to \$100 depending on the type of application).



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.

Benton County will be authorized to set the major repair permit fee at \$306.

Washington County's fee schedule will increase the residential site evaluation report fee to \$415, but will lower the fee for evaluating additional residential lots conducted during the same site visit. New construction-installation permits will increase by \$80 for a standard system, and will increase by amounts ranging from \$125 to \$420 for alternative system permits. Some of the other program fees are also being increased.

**HOW TO  
COMMENT:**

Public Hearings to provide information and receive public comment are scheduled to begin at **10 am** on June 23, 1994, at the following locations:

Pendleton Convention Center  
West Meeting Room # 1  
1601 Westgate  
Pendleton, Oregon

Roseburg City Council Chambers  
900 S.E. Douglas  
Roseburg, Oregon

Room 140  
Washington County Public Service Building  
155 North First Street  
Hillsboro, Oregon

Written comments must be received by 5:00 p.m. on June 24, 1994 at the following address:

Department of Environmental Quality  
Water Quality Division  
811 S. W. 6th Avenue  
Portland, Oregon, 97204

A copy of the Proposed Rule and related documents may be reviewed at the above address. A copy of the Proposed Rule may be obtained from the Department by calling the Water Quality Division at 229-6443 or calling Oregon toll free 1-800-452-4011.

**WHAT IS THE  
NEXT STEP:**

The Department will evaluate comments received and will make a recommendation to the Environmental Quality Commission. Interested parties can request to be notified of the date the Commission will consider the matter by writing to the Department at the above address.

## **ACCOMMODATION OF PHYSICAL IMPAIRMENTS:**

In order to accommodate persons with physical impairments, please notify the Department of any special physical or language accommodations you may need as far in advance of the meeting date as possible. To make these arrangements, contact Ed Sale at 229-5766 or toll free in Oregon at 1-800-452-4011. For the hearing impaired, the Department's TTD number is 229-6993.

## **ACCESSIBILITY INFORMATION:**

This publication is available in alternate format (e.g. large print, braille) upon request. Please contact Ed Sale in DEQ Public Affairs at 229-5766 to request an alternate format.

MW\WC12\WC12574.5

State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY

Rulemaking Proposal  
for  
Proposed Adoption of Rule Amendments to On-Site Sewage Disposal Fees

## Rulemaking Statements

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

1. Legal Authority

ORS 468.020  
ORS 454.625  
ORS 454.745

2. Need for the Rule

The Department of Environmental Quality (Department) is charged with the responsibility for regulating the design and construction of subsurface sewage disposal systems, alternative sewage disposal systems and nonwater-carried sewage disposal facilities, and the regulation of persons or businesses that provide sewage disposal services, and other program matters of concern. Funding to support the Department's regulatory efforts in the on-site program is derived from application fees. The current schedule of maximum fees was adopted in 1991. That fee schedule no longer generates the revenue necessary for the Department to implement the program effectively. The proposed new schedule of maximum fees is expected to provide the funding needed to adequately support the administrative, oversight, and field services portions of the program.

Letters petitioning for higher application fees have been received from the counties of Benton and Washington. Both counties implement portions of the on-site program as agents for the Department. These counties state that the Department's schedule of maximum fees for specific on-site services are lower than their costs to provide the services. The counties may not adopt higher fees than established for the Department unless the Environmental Quality Commission authorizes higher fees by adoption of an administrative rule for each county. The counties of Benton and Washington have requested that the application fees for one or more program activities be higher than those currently established for the Department.

3. Principal Documents Relied Upon in this Rulemaking

- (a) ORS 454.745(4)
- (b) Oregon Administrative Rule 340-71-140.
- (c) Letter from Bob Wilson dated July 6, 1993.
- (d) Letter from the Benton County Board of Commissioners dated July 6, 1993.
- (e) Monthly on-site activity reports from the Department's field services offices.
- (f) Monthly and quarterly surcharge and activity reports from delegated counties.
- (g) Department budget report concerning enhanced on-site program costs.
- (h) Report of estimated time required to perform on-site activities in eastern and western Oregon.
- (i) Letter and supporting documentation from William Ross dated January 24, 1994.

4. Advisory Committee Involvement

The Procedural Sub-Committee of the On-Site Rules Advisory Committee was provided a draft copy of the rule amendments pertaining to the Department's proposed fee schedule on April 12, 1994. The sub-committee did not assist in the development of the proposed amendments, nor did it make suggestions for revisions. The sub-committee was supportive of the Department's effort to increase the application fees to the level necessary to fund a strong and viable program.

The fees proposed by Benton and Washington Counties were not reviewed by an advisory committee established by the Department. It is the Department's opinion that an advisory committee review would be at the discretion of the counties.



State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY

Rulemaking Proposal  
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Proposed Adoption of Rule Amendments to On-Site Sewage Disposal Fees

## Fiscal and Economic Impact Statement

### Introduction

The Department is proposing to increase most of the fees it collects for services provided in the on-site sewage treatment and disposal program. This will result in higher fees to most applicants. Although the increases range from 6% to 700%, the majority of increases are less than 160%. The fees collected are used only to support the Department's activities within this program.

The counties of Benton and Washington have requested approval to establish fees for on-site sewage treatment and disposal applications that are higher than currently established by the Environmental Quality Commission. The higher fees are projected to cover each county's cost in processing and completing the services demanded by the application.

### General Public

Individuals will see a direct increase in the fees they pay to the Department for on-site services. In counties where the Department provides field services, the cost of a site evaluation report will increase by about \$135. A standard construction-installation permit will rise as much as \$320. Fees for other types of services the public may submit applications for will be increased by amounts ranging from \$5 (authorization notice without a site visit) to approximately \$4,000 (experimental systems permit). The surcharge on each application is proposed to be set at a fixed \$35 (surcharges currently range from \$10 to \$100, depending on the type of application). In counties where the Department has delegated the program implementation to local units of government, the direct cost increase will be due to establishing the surcharge at \$35 for each site evaluated and for each application for permit, authorization notice, etc. However, because each delegated office may increase the fees they charge to the maximum limit established for the Department, applicants in those counties may be indirectly impacted by the Department's new fee schedule also.

In Washington County, the general public will see an increase in most of the application fees they pay for various on-site program services. The cost of a residential site evaluation report will increase by \$170, however the cost for evaluating each additional lot during the same visit will decrease by \$75. The standard system construction-installation permit will be increased by \$80. Alternative system permits will increase by amounts

ranging from \$25 to \$420. Many other on-site fees are either not being increased, or the increase ranges from \$5 to \$85.

Benton County has asked for the authority to increase the cost of a major repair permit fee to \$306, which is the amount the county has determined it costs to process and the permit.

The general public may be indirectly impacted by the proposal to raise the sewage disposal service license fees. The businesses providing these services may pass the additional license costs on in the form of higher costs to construct on-site systems, pumping septic tanks, and other services these businesses provide.

### **Small Business**

The fee changes may affect small businesses both directly and indirectly. Those that submit applications for on-site activities to the Department or to the counties of Washington and Benton will be subjected to the same costs as the public. The fee for a new sewage disposal service license is proposed to be \$300, and the license renewal fee will be raised to \$200 from the current \$175 fee. There will also be a \$50 increase in the pumping equipment vehicle inspection fee for companies that pump septic tanks, holding tanks, and portable toilets. These licensees may also be subject to a \$200 reinspection fee if septic system construction deficiencies for work they have done are not corrected. Some licensees may have bid for construction projects without considering higher application fees, and may have to pay the difference without compensation.

### **Large Business**

The fee changes will affect large businesses to the same extent as the public and small businesses.

### **Local Governments**

The fee changes will affect local governments to the same extent as the public and small businesses. However, those local governments having an intergovernmental agreement with the Department, to implement portions of the on-site program within specific counties, will collect from applicants the increased application surcharge, and remit the collected surcharges to the Department consistent with the agreement. This should have no appreciable affect on these offices because they have been collecting the application surcharge from the Department since 1981. An indirect impact is that each agreement office will have the ability to adjust its on-site fee schedule to a higher level, provided the adjustments are not contrary to the intergovernmental agreement with the Department.

### **State Agencies**

The new fee schedule is projected to generate a revenue base of approximately \$2.5 million, to be used by the Department of Environmental Quality to offset an estimated \$2.2 million in expenses to be incurred by the Department in its administration and implementation of the on-site sewage treatment and disposal program. The fee revenue will provide funding for 22 FTE in field services, and about 11 FTE for program administration

and oversight. All these staff positions are necessary to accomplish the program objectives.

Other state agencies will be affected to the same extent as large and small businesses and the public.

### **Assumptions**

It is assumed that the level of on-site activity in the coming year will equal the average activity level of the last two years. If the activity level turns out to be significantly higher, additional field services staff may need to be hired to process the additional workload. However, if the number of activities are lower than expected, staff levels will need to be reduced to match the workload. Because field service staff levels are directly linked to the number of applications that come in, there should not be any need to adjust fees due to workload changes.

It is assumed that the Department's field services workload in Western Oregon will remain in the same proportion with the workload in Eastern Oregon. A portion of the application fees for services provided by the Department in Western Oregon are used to offset the cost of providing services in Eastern Oregon. It costs more for the Department to provide on-site services in Eastern Oregon for several reasons. In Western Oregon the Department has a field office in each of the four counties it services. Travel times and distances between each field site are relatively short. In Eastern Oregon, the Department serves 10 counties from two offices (soon to be three offices). One of the field offices is located within a county where program responsibility has been delegated to the county. The Eastern Oregon counties being served have low populations, relatively low numbers of applications, and the counties are considerably larger than those in Western Oregon. These factors cause travel times and distances to be significantly greater, and cause the Department to be less efficient in the delivery of services.

It is also assumed that the Department will maintain the current level of program delegation to local units of government. Additional staff will be needed if a county decides to return program responsibility back to the Department, but this should not cause the Department to consider modifying the fee schedule. However, if a local unit of government in Western Oregon requests and is given program delegation, it is very likely the schedule of fees will need to be reviewed, and if necessary modified to compensate for the loss of Western Oregon revenue that is used to support field services performed by the Department in Eastern Oregon.

State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY

Rulemaking Proposal  
for  
Proposed Adoption of Rule Amendments to On-Site Sewage Disposal Fees

## Land Use Evaluation Statement

**1. Explain the purpose of the proposed rules.**

The purpose is to establish a fee revenue base to cover the cost of implementing the on-site sewage treatment and disposal program by the Department of Environmental Quality and by the counties of Benton and Washington.

**2. Do the proposed rules affect existing rules, programs or activities that are considered land use programs in the DEQ State Agency Coordination (SAC) Program?**

Yes X No \_\_\_\_\_

**a. If yes, identify existing program/rule/activity:**

The on-site sewage treatment and disposal program regulates the placement and construction on standard and alternative sewage facilities. These facilities receive sanitary wastewaters that are generated within fixed or mobile structures. The proposed rule is intended to provide the revenue base to allow continued implementation of the program by the Department and by the counties of Benton and Washington. Without an adequate revenue base, the program can not be implemented effectively or responsibly.

**b. If yes, do the existing statewide goal compliance and local plan compatibility procedures adequately cover the proposed rules?**

Yes X No \_\_\_\_\_ (if no, explain):

**c. If no, apply the following criteria to the proposed rules.**

Staff should refer to Section III, subsection 2 of the SAC document in completing the evaluation form. Statewide Goal 6 - Air, Water and Land Resources is the primary goal that relates to DEQ

authorities. However, other goals may apply such as Goal 5 - Open Spaces, Scenic and Historic Areas, and Natural Resources; Goal 11 - Public Facilities and Services; Goal 16 - Estuarine Resources; and Goal 19 - Ocean Resources. DEQ programs or rules that relate to statewide land use goals are considered land use programs if they are:

1. Specifically referenced in the statewide planning goals; or
2. Reasonably expected to have significant effects on
  - a. resources, objectives or areas identified in the statewide planning goals, or
  - b. present or future land uses identified in acknowledged comprehensive plans.

In applying criterion 2. above, two guidelines should be applied to assess land use significance:

- The land use responsibilities of a program/rule/action that involves more than one agency, are considered the responsibilities of the agency with primary authority.
- A determination of land use significance must consider the Department's mandate to protect public health and safety and the environment.

**In the space below, state if the proposed rules are considered programs affecting land use. State the criteria and reasons for the determination.**

N/A

3. **If the proposed rules have been determined a land use program under 2. above, but are not subject to existing land use compliance and compatibility procedures, explain the new procedures the Department will use to ensure compliance and compatibility.**

N/A

Michael Downs  
Division

Hydrea Taylor  
Intergovernmental Coord.

5/13/94  
Date

## **Questions to be Answered to Reveal Potential Justification for Differing from Federal Requirements.**

The following questions should be clearly answered, so that a decision regarding the stringency of a proposed rulemaking action can be supported and defended:

Note: If a federal rule is relaxed, the same questions should be asked in arriving at a determination of whether to continue the existing more stringent state rule.

1. *Are there federal requirements that are applicable to this situation? If so, exactly what are they?*

No.

2. *Are the applicable federal requirements performance based, technology based, or both with the most stringent controlling?*

There are no applicable federal requirements.

3. *Do the applicable federal requirements specifically address the issues that are of concern in Oregon? Was data or information that would reasonably reflect Oregon's concern and situation considered in the federal process that established the federal requirements?*

No, there are no applicable federal requirements.

4. *Will the proposed requirement improve the ability of the regulated community to comply in a more cost effective way by clarifying confusing or potentially conflicting requirements (within or cross-media), increasing certainty, or preventing or reducing the need for costly retrofit to meet more stringent requirements later?*

The proposed requirement is an adjustment of fees pertaining to the on-site sewage treatment and disposal program. The fee schedule applies to systems with sewage flows that do not exceed 5,000 gallons per day. The systems do not discharge to public waters, and they do not discharge treated wastewaters to the surface of the ground. The proposal does not include technical changes to the way program activities are conducted.

5. *Is there a timing issue which might justify changing the time frame for implementation of federal requirements?*

No, there are no federal requirements to impliment with this proposal.

6. *Will the proposed requirement assist in establishing and maintaining a reasonable margin for accommodation of uncertainty and future growth?*

The fees pay for the cost of providing services. As the number of activities increases, so does the revenue generated by the fees. At some point, the available resources will be used at the maximum limit to respond to the applications in a timely manner. When that limit is reached, additional staff resources will be required to process the work.

7. *Does the proposed requirement establish or maintain reasonable equity in the requirements for various sources? (level the playing field)*

Not Applicable. The proposal does not alter the existing equity.

8. *Would others face increased costs if a more stringent rule is not enacted?*

Not Applicable.

9. *Does the proposed requirement include procedural requirements, reporting or monitoring requirements that are different from applicable federal requirements? If so, Why? What is the "compelling reason" for different procedural, reporting or monitoring requirements?*

No. There are no applicable federal requirements.

10. *Is demonstrated technology available to comply with the proposed requirement?*

Not Applicable. The proposal is to alter an existing fee schedule for services.

11. *Will the proposed requirement contribute to the prevention of pollution or address a potential problem and represent a more cost effective environmental gain?*

Yes, the fee schedule will provide a revenue base to fund program activities. Without this, the program would need to use other sources of revenue, such as state general fund monies, or program activities would be eliminated. The elimination of various aspects of the program would be expected to have a negative impact on the quality of public waters, both surface and groundwaters, and would increase the potential of health risks to the public.



State of Oregon  
Department of Environmental Quality

Memorandum

Date: June 23, 1994

**To:** Environmental Quality Commission

**From:** Charles K. Ashbaker

**Subject:** Presiding Officer's Report for Rulemaking Hearing  
Hearing Date and Time: June 23, 1994 beginning at 10:00 a.m.  
Hearing Location: Washington County Public Service  
Building, Hillsboro

Title of Proposal: On-site Sewage Disposal Fee Increase

The rulemaking hearing on the above titled proposal was convened at 10:05 a.m.. People were asked to sign witness registration forms if they wished to present testimony. People were also advised that the hearing was being recorded and of the procedures to be followed.

Five (5) people were in attendance, four (4) people signed up to give testimony. The one who did not testify was there representing Washington County in order to respond to any questions regarding the specific fee schedule for Washington County.

Prior to receiving testimony, Sherman Olson briefly explained the specific rulemaking proposal, the reason for the proposal, and responded to questions from the audience.

People were then called to testify in the order of receipt of witness registration forms and presented testimony as noted below.

1. Ben Nussbaumer, an on-site system installer, was opposed to the fee increase as proposed. He testified that the fees were too high. He wanted to see justification for the large increase. He said that as an installer, he has a good idea as to what staff time it takes for DEQ to do various kinds of on-site activities. Based on his knowledge of that, he objected to the fees and indicated that they were excessive. He indicated that some of the fees were more than he would charge for the actual installation, less materials. He expressed outrage. No written testimony was presented at the hearing.
2. Diana Godwin, an attorney representing a number of parties, first of which is Clearwater Ecological Systems, Inc., expressed opposition to the fee increase, as proposed. She was concerned about the percentage increase over current fees, particularly as it related to the percentage of the program that was subsidized by

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general funds. She thought that the percentage increase in fees should better relate to the percentage decrease in general funds. She indicated that clearly the DEQ was doing something other than replacing general fund revenue. She also indicated that she was working with an informal group of companies and organization to work with DEQ to reinvent the wheel with regards to the on-site sewage disposal program. She indicated that there would probably be proposed legislation to put more responsibility upon the installers and less on the governmental regulators. She gave a summary of the process the DEQ has been involved in over the past year on updating the on-site rules. She was raising the questions as to whether under the present knowledge of on-site systems, a permit should even be required. Could this not be included in just a part of the building inspection? No written testimony was presented at the hearing, it was presented later, however.

3. John Smits (an on-site consultant) objected to the drastic fee increase. He used to work for DEQ as an on-site employee and he has been in the on-site consulting and construction business since. He believes the fees are excessive. It was his opinion that the work could be done with much less. He felt that a better job should be done on informing the public about things which affect their pocketbook. He discussed what he considered a wide difference between what Benton County was proposing as fees compared with what DEQ was proposing. He had calculated what he thought a reasonable fee was considering the staff time involved. By his calculations, the DEQ proposed fee is excessive. He also specifically referred to the high percentage increase in the fee for sand filters and holding tanks. He indicated that the sand filter permit fee is much bigger than the fee he charges to design a sand filter system. He indicated that the fees should be regional. Western Oregon should not have to subsidize Eastern Oregon because of their travel distances. He suggested charging an hourly rate for inspections. He expressed the opinion that some people may become violent when they go to get a permit and find what the fees are. No written testimony was presented at the hearing.
4. Nanette Mauck, representing EEE ZZZ Lay Drain Co., objected to the fee increase. She feels that the fee increase is premature because of the pending rule changes. She also indicated that the Department used poor judgement on its choice of hearing times. The general public should have been given a better opportunity to participate. She presented a brief written statement as well.

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The following people handed in written comments but did not present oral testimony:

There was no further testimony and the hearing was closed at 11:10 a.m..

Attachments:

Written Testimony Submitted for the Record.

# Northwest **EEE ZZZ Lay Drain Co.**

155 First  
Room 140

Post Office Box 654 • Gresham Oregon 97030 • Phone (503) 492-2500 Fax (503) 492-0208

CCB# 88436  
WBE# 2831  
DEQ# 37194

June 23, 1994

**TO WHOM IT MAY CONCERN,**

As owner, I represent NW EEE ZZZ Lay Drain Co.

I am **in favor of** a strong on-site sewage program, however, due to the forthcoming proposed rule changes, I feel that fee increases of any kind are premature at this time.

I don't appreciate your scheduling this meeting in the middle of all of our busiest season. An evening meeting would have allowed better representation.

Regards,



Nanette Mauck  
Owner



RECYCLING FOR A CLEANER ENVIRONMENT



State of Oregon  
Department of Environmental Quality

Memorandum

Date: July 6, 1994

To: Environmental Quality Commission

From: Del Cline, R.S.

Subject: Presiding Officer's Report for Rulemaking Hearing  
Hearing Date and Time: June 23, 1994, beginning at 10:00 a.m.  
Hearing Location: Roseburg City Council Chambers

Title of Proposal: Proposed Fee Increases For Septic System Program

The rulemaking hearing on the above titled proposal was convened at 10:00 a.m.. People were asked to sign witness registration forms if they wished to present testimony. People were also advised that the hearing was being recorded and of the procedures to be followed.

Six (6) people were in attendance, four (4) people signed up to give testimony.

During and after testimony, Greg Farrell, R.S., briefly explained the specific rulemaking proposal, the reason for the proposal, and responded to questions from the audience.

People were then called to testify in the order of receipt of witness registration forms and presented testimony as noted below.

- 1) Kip Morgan  
730 NE Leon  
Myrtle Creek, OR 97457

SUMMARY:

Mr. Morgan is a licensed installer, owner of Morgan General Contracting, and Director of Umpqua Building Associates. He is opposed to the rate increase of the Sand Filter and Capping Fill. His concerns are: Increase of all fees in general with no rise in income. Less people will qualify for home loans, therefore the market becomes depressed. Looking at doubling on Standard systems and tripling Sand Filter plus \$1300. Capping Fill also up. Every \$1,000 increase requires an additional \$300 to qualify for loans. Someone will have to work an extra two weeks to pay for Sand Filter particularly. Wants DEQ to look at cost side, not just revenue so as not to impact consumer. Increase of surcharge opposed. It is difficult as a contractor to keep having

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\_\_\_\_\_(date of memo)\_\_\_\_\_  
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to go back to the consumer to ask for more money - will cause shrinking of market.  
Concerned that on-site not pay for other programs.

- 2) John Atkinson  
2831 NW Klein St.  
Roseburg, OR 97470

**SUMMARY:**

Mr. Atkinson is associated with the Homebuilding Association. He feels the increase would have a negative impact on the industry. The increase will require an additional \$400 a month. An increase of \$4,000 decreases qualifiers by 7%. Mr. Atkinson also stated he would submit written testimony to the Roseburg office on June 24, 1994 to be faxed to the Portland office.

- 3) Brad Prior  
Environmental Quality Supervisor  
Jackson County Department of  
Planning Development.

**SUMMARY:**

Mr. Prior is also the on-site program manager in Jackson County. Generally supported fee increase to increase staff in order to decrease time delays. But concerned with level of increases. The general purpose of the current rules is to restore and maintain the quality of public waters and to protect the public health and general welfare of the people of the State. The person most affected or benefitted is the applicant, the property owner. Because there is a general benefit feels there should be a general contribution from general funds. Feels an increase of repair costs will delay repairs. The increase may be justified but will discourage individuals from making adequate repairs and will cause non repair of systems. Minor repair increase to \$280 is not justified. It is very counter productive. Feels these fees should be reduced. Should get money from the general fund. Surcharge should be there generally, except for a preliminary site inspection, which Jackson County does. Also questions surcharge on permit renewals where there is no field activity. Should strike language which states surcharge will be charged for all actions requiring an application.

- 4) Terry Bounds  
Engineer, Vice President

Memo To: Environmental Quality Commission

\_\_\_\_\_ (date of memo) \_\_\_\_\_

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Co-Owner of Orenco Systems  
2826 Colonial Rd.  
Roseburg, OR 97470  
Phone 673-0155

#### SUMMARY:

Orenco manufactures on-site equipment in standard packages based on Oregon Rules. Supports the solid foundation of the on-site program. However, these fees are extremely huge and am opposed to them for some of the following reasons: On June 23, 1993, the Director, Fred Hansen, directed the On-Site Committee to establish rule changes that would serve the public better and give the Department and Department Agents more flexibility without sacrificing the public health and the environment. While the Department's plans and inspection services have been economically throttled for too many years and adjustments in these fees are in order, it is premature to make these fee changes prior to the adoption of the new rule package. The sub-committee was asked but declined to approve the fee increases and has not endorsed the proposal. Committee sentiments are that a strong and viable program is necessary. That some increases in fees are necessary, but not to this extreme, and not without first evaluating other more cost effective solutions including a review of and potential changes in legislature requirements. The present fee structure needs to be revised and adjusted, but not by arbitrarily doubling, tripling or quadrupling charges. Re-inspection fees for example, are recommended for a 700% increase. Sand Filter fees are proposed to be increased by 252%. Oregon Statute ORS 454.775 encourages the development and application of alternative on-site systems. Increases of these magnitudes do the opposite. The difference in fees among alternatives is inequitable and must also be addressed as absurd, for example to charge the same fee for a cesspool as for a sophisticated aerobic system. And about 3 times more for an off-the-shelf standard Sand Filter system that has been standardized throughout the state. The primary objection voiced by local installers, realtors, Home Builders Assoc., and property owners has been the number and redundancy of inspections required and the lack of timely scheduling. Before new fees are instituted inspection requirements should first be investigated and modified as necessary to make them cost effective. It is imperative that the inspection process be streamlined rather than impose these cost burdens on the public. Also concerned about the fee income distribution among Regions based on regional budget needs. Fee structures should be adjusted within each region to make these services self-supporting.

Feels the proposal has been pushed through with insufficient preparation. The document is riddled with inequities and should be sent to the On-Site review committee for

Memo To: Environmental Quality Commission

(date of memo)

Presiding Officer's Report on  
\_\_\_\_\_, 19\_\_ Rulemaking Hearing

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thorough review. First step should be for the Department to assess the limits of their personnel, funds, plans review and inspection procedures then trim and tailor the criteria to satisfy the ability of the Department to provide an efficient, quality, cost effective, and essential service. We are great supporters of the Department and the on-site programs and some fee increases are necessary, but we first need to look at the inspections and tailor those so that the fees can be reasonable.

This same testimony was also submitted in writing on June 23, 1994.

The following people handed in written comments but did not present oral testimony:

- 1) Helen Early & Mike Van Dam  
Grants Pass, OR 97526

We would like to have this letter submitted to the proper Hearing Board that is reviewing the proposed new fees for septic systems.

We would like to request that the new fee NOT BE IMPOSED ON EXISTING PERMIT APPROVALS, OR PERMITS THAT ARE HELD UP IN THE COUNTY PLANNING DEPARTMENT BECAUSE OF ZONING CHANGES.

Our septic system was approved in 1992. Because we are required to install a sand filter system, it took us two years to save up enough money to have one installed. In April, 1994, we attempted to install the system through our contractor, Sam Michel. Because of zoning changes in the Planning Department, our once approved building permit was no longer valid, and we have had to apply again and may not finish the process until after July 1.

Once again, please do not impose this new fee on existing approvals, or at least on the ones that are working their way through the Planning process. If you would like to verify that our building permit is being processed, you may call Rick Riker in the County Planning Department at 474-5421.

Thank you for your consideration.

- 2) Premix Concrete Pipe Co.  
1950 NE Diamond Lake  
P.O. Box 1184



Memo To: Environmental Quality Commission

(date of memo)

Presiding Officer's Report on

, 19\_\_ Rulemaking Hearing

Page 5

Roseburg, OR 97470

Phone 672-2684

Gentlemen:

Your methods regarding the above increases are causing the very problems you want to avoid: or stop.

You must use reasonable pricing for permits and inspection.

Your reputation has scared people to the point they won't talk to you unless they can't avoid it. You are pushing people into illegal repairs and installations.

Also how do you expect people to pay fees that add approximately 200% additional cost to their job?

A reasonable approach, fazed in over an extended time period, on the increases would be better for everyone involved.

We are aware that you have funding problems, but I sincerely feel that you must take a slower and more reasonable approach to this increase.

Very truly yours,  
PRE-MIX CONCRETE PIPE CO.  
Jack H. Knife  
Superintendent

There was no further testimony and the hearing was closed at 10:52 a.m..

Attachments:

Written Testimony Submitted for the Record.

## ORENCO SYSTEMS INC.

2826 Colonial Road, Roseburg, OR 97470 .....503 673-0165  
FAX: (503) 673-1126

June 23, 1994

To: DEQ Hearings Committee

Re: Proposed Rule Amendments to On-Site Rules Sewage Disposal Fees

On June 23, 1993, Fred Hansen directed the On-Site committee to establish rule changes that would "serve the public better and give the department and the department's agents more flexibility without sacrificing public health or the environment." While the Department's plans and inspection services have been economically throttled for too many years and adjustments in the fees are in order, it is premature to make these fee changes prior to the adoption of the new rules package, especially since fees are addressed within the rules and governed by the plan review and inspection criteria.

In fact, the sub-committee was asked, but declined, to approve fee increases and has not endorsed this proposal. The committee's sentiments are that a strong and viable program is necessary, that some increase in fees may be necessary, but not to this extreme and not without first evaluating other more cost effective solutions, including a review of and potential changes in legislative requirements.

The present fee structure needs to be reviewed and adjusted, but not by arbitrarily doubling, tripling or quadrupling charges. Reinspection fees, for example, are recommended for a 700% increase. Oregon's standard sand filter fee is proposed to be increased 252%; more sophisticated aerobic systems are increased 159%. Oregon Statute, ORS 454.775, encourages the development and application of alternative on-site systems, but increases of these magnitudes do the opposite.

The difference in fees among alternatives is inequitable and must also be addressed. It's absurd, for example, to charge the same fee for a cesspool as for a sophisticated aerobic treatment system and about three times more for a off-the-shelf sand filter system that is standardized throughout the state, that requires no special design, and for which plan review and inspection time should be minimal.

The primary objection voiced local installers, Realtors, the Home Builders Association and property owners has been the number and redundancy of inspections required, and lack of timely scheduling. Before new fees are instituted, inspection requirements should first be investigated and modified as necessary to make them cost effective. Some of these proposed increases are huge, and increasing the Department's efficiency, even if it takes legislative action to streamline the inspection process, is imperative rather than imposing these cost burdens on the public.

Another inequity that must be addressed is the method of fee income disbursement among regions based on regional budget needs. The result is that users, especially those in populated or growth areas, subsidize the Department's operations in less populated areas. Thus, regions that provide the greatest service have to do so at a reduced budget so there are funds available to subsidize those regions that generate lower income at a higher operating cost. Fee structures should be adjusted within each region to make these services self-supporting.

It's absurd for the Department to charge, as it proposes, hourly rates greater than those that the industry would charge. In some instances, proposed review or inspection fees approach the cost of the materials or the cost of the labor to install the system.

The proposal has obviously been pushed through with insufficient preparation. The document is riddled with inequities and should be sent to the On-Site review committee for thorough review.

The first step should be for the department to assess the limits of their personnel, funds, plan review and inspection procedures; then trim and tailor the criteria to satisfy the abilities of the department to provide an efficient, quality, cost effective and essential service.

STATE OF OREGON  
DEPARTMENT OF  
ENVIRONMENTAL QUALITY

June 15, 1994

JUN 20 1994

**RECEIVED**  
WEST REGION GRANTS PASS

Department of Environmental Quality  
510 NW 4th Street  
Grants Pass, OR 97526

Dear Sir:

RE: PROTEST OF NEW FEES FOR EXISTING SEPTIC SYSTEM APPROVALS  
9217-034 - O'Brien Road - 40-8-19-1000 & 1007

We would like to have this letter submitted to the proper Hearing Board that is reviewing the proposed new fees for septic systems.

We would like to request that the new fee NOT BE IMPOSED ON EXISTING PERMIT APPROVALS, OR PERMITS THAT ARE HELD UP IN THE COUNTY PLANNING DEPARTMENT BECAUSE OF ZONING CHANGES.

Our septic system was approved in 1992. Because we are required to install a sand filter system, it took us two years to save up enough money to have one installed. In April, 1994, we attempted to install the system through our contractor, Sam Michel. Because of zoning changes in the Planning Department, our once approved building permit was no longer valid, and we have had to apply again and may not finish the process until after July 1.

Once again, please do not impose this new fee on existing approvals, or at least on the ones that are working their way through the Planning process. If you would like to verify that our building permit is being processed, you may call Rick Riker in the County Planning Department at 474-5421.

Thank you for your consideration.

Sincerely,



Helen Early and  
Mike Van Dam

Ready-Mix Concrete - Excavating  
Sewer & Culvert Pipe - Dump Trucks  
Septic Tanks & Installation  
Backhoes - Drag Line - Loaders



**PRE-MIX**

P.O. Box 1166  
1969 N.E. Diamond Lake  
Roseburg, Oregon 97470  
(503) 672-2894

June 24, 1994

DEQ  
725 S.E. Main  
Roseburg, Oregon 97470

RE: Increased Cost of Permits

Gentlemen:

Your methods regarding the above increases are causing the very problems you want to avoid: or stop.

You must use reasonable pricing for permits and inspection.

Your reputation has scared people to the point they won't talk to you unless they can't avoid it. You are pushing people into illegal repairs and installations.

Also how do you expect people to pay fees that add approximately 200% additional cost to their job?

A reasonable approach, fazed in over an extended time period, on the increases would be better for everyone involved.

We are aware that you have funding problems, but I sincerely feel that you must take a slower and more reasonable approach to this increase.

Very truly yours,

PRE-MIX CONCRETE PIPE CO.

Jack H. Knife  
Superintendent

JHK:dd

DEPARTMENT OF ENVIRONMENTAL QUALITY  
**RECEIVED**  
JUN 24 1994

ROSEBURG BRANCH OFFICE

Post-It Fax Note	7871	Date	# of pages
To	DEL CLINE	From	GA
Co./Dept.		Co.	
Phone #		Phone #	
Fax #		Fax #	

State of Oregon  
Department of Environmental Quality

Memorandum

Date: June 23, 1994

To: Environmental Quality Commission

From: Edward A. Liggett  
Environmental Specialist  
Eastern Region

Subject: Presiding Officer's Report for Rulemaking Hearing

Hearing Date and Time: June 23, 1994, beginning at 10:00 a.m.

Hearing Location: Pendleton Convention Center  
Pendleton, OR

Title of Proposal: Proposed Fee Increases for  
On-Site Sewage Disposal Systems

The rulemaking hearing on the above titled proposal was convened at 10:00 a.m. People were asked to sign witness registration forms if they wished to present testimony. People were also advised that the hearing was being recorded and of the procedures to be followed.

Three people were in attendance, two people signed up to give testimony.

Prior to receiving testimony, Joni Hammond, Eastern Region Water Quality Manager, briefly explained the specific rulemaking proposal, the reason for the proposal, and responded to questions from the audience.

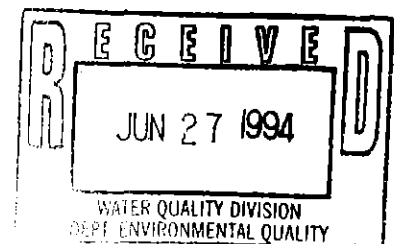
People were then called to testify in the order of receipt of witness registration forms and presented testimony as noted below.

1. Bruce H. Morrison  
4205 S. Auburn  
Kennewick, WA 99337

**SUMMARY:**

Mr. Morrison objected to the increases in fees contending that the revised fee structure does not consider the average salary base of eastern Oregon.

Mr. Morrison expressed concern that the fee increases will correspond to increases in installation of illegal on-site systems.



Memo To: Environmental Quality Commission  
June 23, 1994  
Presiding Officer's Report on  
June 23, 1994 Rulemaking Hearing  
Page 2

2. Gary W. Sewell  
Garton & Associates Realtors  
440 S.W. 1st  
Pendleton, OR 97801

**SUMMARY:**

Mr. Sewell described the fee increases as another tax on the already overtaxed population of eastern Oregon. Mr. Sewell contends that the salary base of eastern Oregon cannot support the fee increases. Mr. Sewell noted that building costs are already high and that developing new construction in eastern Oregon is already sufficiently difficult (without fee increases).

Mr. Sewell explained that in many cases, home loan borrowers are at their maximum line of credit---that at closing, any increased fees could put those borrowers over their credit limit and thus cause the deal to fall through.

Mr. Sewell noted the significant difference in fees between conventional and sand filter systems. Mr. Sewell expressed concern that the higher fees for sand filter systems could influence the Department to require a sand filter system in cases where a conventional system is acceptable. Mr. Sewell explained that he knew of one or two instances where sand filter systems were, in his opinion, unnecessarily required.

No written comments were received.

There was no further testimony and the hearing was closed at 11:00 a.m.

PROPOSED AMENDMENTS TO

340-72-072

NOTE:

The ***bold italicized underlined*** portions of text represent proposed additions made to the rules.

The ~~***bold italicized bracketed***~~ portions of text represent proposed deletions made to the rules.

3400-72-072 BENTON COUNTY

*Benton County is authorized to establish an application fee for major repair permits that does not exceed \$306, unless otherwise allowed in OAR 340-71-140(3).*



PROPOSED AMENDMENTS TO

340-72-071

NOTE:

The ***bold italicized underlined*** portions of text represent proposed additions made to the rules.

The ~~***bold italicized bracketed***~~ portions of text represent proposed deletions made to the rules.

**340-72-071 WASHINGTON COUNTY**

*Washington County is authorized to establish application fees that do not exceed the following amounts, unless otherwise allowed in OAR 340-71-140(3):*

- (1) Site Evaluation Report for a Single Family Dwelling Lot (1st or only lot).....\$395**
- (2) Construction-Installation Permit for a Gray Water Waste Disposal Sump.....\$360**

## ATTACHMENT D

### List of Written Comments Received

John Brenneman, Government Relations Counsel, Manufactured Housing Communities of Oregon: Mr. Brenneman purports to represent the greater than 600 member Manufactured Home parks in Oregon. He states that hundreds of the members and thousands of the residents within the parks urge that the fee increases not be adopted at this time, and emphasizes an awareness of how disaffected voters are reacting to overly burdensome government regulations and fee increases such as this proposal. (Received 6/24/94)

Frank Spiering, Contractor in Washington County: Mr. Spiering expresses support for the on-site sewage disposal program fee increases proposed by Washington County. He further states he doesn't generally favor increased fees, but that he operates a business and understands the concept of rising costs. He does not support any actions that may reduce the Washington County Staff or alter the program to make it less accessible. (Received 6/24/94)

Dave Picar, Aloha Sanitary Service: As a contractor in Washington County for more than 20 years, his company has an interest in the County sewage disposal inspection program. He believes they provide a good level of service and would like it to continue. Although he does not like to see the cost of doing business increase, he supports the fee increase if that's what it takes to maintain the current level of service the County provides. (Received 6/24/94)

John Oppertshauser, Oakland, Oregon: Mr. Oppertshauser believes the on-site fees are high enough. He opined that DEQ is not practical and does not follow efficient business practices. He does not support any fee increases at this time, and not until DEQ can be more efficient, cooperative, and businesslike. He believes higher fees will inhibit growth and add the inflationary trend in housing. (Received 6/24/94)

Joseph Fowler, R.S., Chair, Conference of Local Environmental Health Supervisors: Mr Fowler states that the current fees do not cover the costs for most counties that contract with the DEQ to administer the on-site program. They must have the ability to recover their costs through fees. In cases where a public health hazard exists and financial hardship can be demonstrated, provision should be made to allow for a reduction of the repair application fee. Mr. Fowler suggested that surcharges should be used solely for program administration functions. (Received 6/23/94)

Richard Polson, Building Services Supervisor, Clackamas County Department of Transportation and Development: Mr. Polson supports the adoption of a fee schedule that realistically reflects actual costs for completing the work. However, he believes the proposed DEQ fees are based on inflated time estimates, that the actual time would be about 1/2 of those used in calculating the fees. The fees proposed by Washington County appear to be a more realistic accounting of actual costs west of the Cascades than those proposed by the DEQ. The 175% to 350% increase in surcharge fees must be matched by an equally significant increase in DEQ efforts in the program. Mr. Polson opined the increase in permit fees will reduce the level of cooperation between the public and DEQ. He suggests consideration be given to the adoption of a two fee schedules, one applicable to Western Oregon, and the other to apply to the Eastern side of the state. (Received 6/24/94)

Dian Sharma, Director, Washington County Department of Health & Human Services: Washington County is in support of the proposed fee increase for the DEQ on-site program. Because of increased costs, the current DEQ/Washington County fee structure requires nearly a \$60,000 subsidy. Costs have increased due to additional time needed to evaluate proposed sites. Due to population pressures, the buildable land with well drained soils has been developed. With the lands remaining, it takes considerably more time to evaluate the proposed building sites today. With the proposed fee increases the County anticipates the subsidy to support the program will be reduced to approximately \$13,000, and at the time the County would be able to maintain a high level of service. (Received 6/24/94)

Roger Everett, Director, Environmental Health Division of Deschutes County: Mr. Everett states that Deschutes County has attempted to become fee-for-service oriented, but that the current fee schedule will only support a limited staffing level that can not provide responsive service. The County supports the proposed fee increases because they will support the staffing needed to better serve the public. He expressed concern that the proposed repair permit fee may discourage property owners from contacting the County before commencing with repairs, he feels the fee should be reduced to encourage this contact. Mr. Everett states the administrative/support portion of the program has been neglected in the last several years, the proposed surcharge fees should provide the funds needed to improve this part of the program. (Received 6/24/94)

George M. Dollowitch, Dollowitch & Morgan: Mr. Dollowitch is opposed to the proposed rule making and fee schedules for on-site sewage disposal activities, and is opposed to any fee increases. Many of his clients are on tight budgets, he feels the fee increases may delay or completely stop their projects. The fees are already quite expensive already, the increases are unwarranted. The passage of Measure 5 was to send government a message to draw the line on expenses. He recommends the Department continue to use the schedule of fees adopted effective July 1, 1991. (Received 6/22/94)

John Earls, R.S., Manager, On-Site Waste Management Program for Tillamook County: The proposed increase appears necessary in light of increasing demands for service at a time when increased tax revenues are not available to subsidize the service. The fee increases will provide a cap giving Tillamook County the flexibility to adjust fees as costs increase. He is concerned the fee increases are sending a negative message with regard to the program goals of public health and water quality. The repair permit fee should be lower than proposed so as to encourage contact by the affected property owners. The difference could be made up by increasing the site evaluation fee. (Received 6/22/94)

Fred VanNatta, Oregon State Home Builders Association: The Association is strongly opposed to the fee increases. The increases are significant and there is no reason to believe DEQ costs have increased that much suddenly. Mr. VanNatta expressed it would be cheaper to hire a lawyer to review a standard septic tank installation. The proposed fee levels are not justified. The repair permit fee will be counter-productive, the homeowners, when they discover the fee, will have incentive to go "underground" and have the repair work done by unlicensed personnel without a permit. If these fees are adopted, the Oregon State Home Builders Association intends to ask for legislative review and perhaps legislative establishment of the fees. (Received 6/23/94)

Jerry W. Law: Mr. Law objects to the proposed fee increases for several reasons. The time allowed for public comment was insufficient, and not all affected property owners were contacted so that they might offer comment. The fee increases are not justified. The fee increases seem to favor Benton and Washington Counties, and penalize other counties. He questions the level of service that will be provided with the increased fees. DEQ has failed to provide adequate services in the past for small systems, higher fees do not guarantee adequate services in the future. The higher fees will not promote good will or a spirit of cooperation to the regulated community. Mr. Law believes that the fee increases will penalize rural counties and low-income system owners. (Received 6/23/94)

Board of Commissioners, Douglas County: The Board does not believe the proposed fee increases are warranted, fair, wise or justified by DEQ's appalling level of performance dealing with on-site systems. They suggest it is time to re-visit DEQ's role in this program, and the purpose of the program. Why not decrease the size and cost of bureaucracy by reformulating the administrative rules to allow design and inspection of on-site facilities by registered professional engineers and sanitarians instead of DEQ personnel. Douglas County is willing to help initiate this type of program, and the Board is willing to meet with the Environmental Quality Commission to discuss concepts. Received 6/6/94)

Brad Mason, President, Klamath Basin Home Builders Association: Mr. Mason expressed concern over the proposed increases for residential and commercial sewage disposal system installations, inspections and repairs. The size of the proposed fee increases seems to be out of line. He asks that consideration be given to the impact this will have on residential and commercial construction in the state. (Received 6/14/94)

Representative John Meek, District 5: Representative Meek opposes the fee increases for residential and commercial sewage disposal system installation, inspections and repair. The fees are not justified. He suggests the Department needs to look at changing the rules and regulations if they are structured in such a way as to create a need to increase fees in such a large proportion. (Received 6/10/94)

Elaine Correia, M & E Septic Service: Ms. Correia states that their company does not install systems, but they work on a lot of septic systems and diagnose systems needing repair. Many of their customers can not afford to spend a lot of money repairing their systems. The large fee increase would place an additional burden on the homeowner. She recommends the rate increase would be more acceptable if it is made in small increments of up to \$100. (Received 6/8/94)

David L. Peterson: Mr. Peterson is firmly convinced that unless all governmental regulatory agencies, including the DEQ, resolve to operate within their existing monetary limits, this country is not going to survive. Raising fees is easy. By raising fees, the message being sent to those paying the higher fees is to live with less. Mr. Peterson suggests the program should be streamlined, and cut back where necessary, to bring spending into line with the existing income. He does not support the proposal to increase fees. (Received 6/15/94)

William G. Nokes, General Counsel, Tidewater Contractors Inc.: DEQ has not gotten the message of Measure 5 that the people of Oregon want less government, not more fees or more regulation. The amount of fee increases is not justified. Government needs to become more efficient. Mr. Nokes attributes the critical housing shortage in lower cost housing to government regulation and fees. He suggests the Department should figure out ways to reduce the need to regulate, ways to do jobs more efficiently, decrease the need for internal paperwork.

(Received 6/8 & 20/94)

**Department's Evaluation of Public Comment**

**COMMENT:** 15 commenters (1,3,4,5,8,9,10,15,16,17,18,19,21,22,27) expressed the opinion that the proposed application fees are too high, unreasonable, excessive, or should not be adopted.

**RESPONSE:** The Department established the application fees based on an analysis of field service activities in each office for the last two years, a time evaluation for each type of application a field office might receive (for both eastern and western Oregon), a determination of staffing requirements in each DEQ field office based on workload, and a budget report support the costs of providing field services by office. The cost used to calculate most application fees was \$88.00/hour of field service time spent processing and completing work on an application. This amount includes a factor for support staff, supervision, training, equipment and supplies, mileage, employee benefits, staff training, etc. The time factor used is the average time it takes to process each type of application using the eastern and western Oregon time analysis. The Department believes the proposed fees represent an accurate and fair determination of field services costs for each type of application. However, the time analysis was reexamined based on the public comment, and some of the times were found to be in error. Corrections to these times resulted in a reduction to some of the proposed permit application fees.

**COMMENT:** 3 commenters (1,10,27) expressed the opinion that the Department should use regional fees.

**RESPONSE:** The Department is responsible for providing program field services throughout the state. In 22 counties, program responsibilities have been delegated to local units of government. Primarily, delegation has occurred in those counties where the program can be administered efficiently. With one exception, each county that has received delegation has at least one office to provide field services from. In the 14 counties the Department implements the program in, there are 6 field service offices. In western Oregon, each county the Department implements the program in has a field office, and these counties are served with efficiency. However, the Department has only 2 field service offices in eastern Oregon to serve 10 counties. Only one of those offices is in a county it provides service to. It is not possible for the Department to implement the on-site program in the 10 eastern Oregon counties it serves with the same efficiency as would be enjoyed by having an office in each county. The Department believes it is fair and reasonable to determine the total costs of providing field services, and having that cost shared equally by having a single schedule of fees that applies to all counties the Department serves.

**COMMENT:** One commenter (17) expressed the opinion that the Department should consider



allowing portions of the program to be privatized.

**RESPONSE:** The statutory laws of Oregon do not authorize the Department to delegate program responsibilities other than to local units of government. The Department continues to examine and develop ways to streamline program activities, within the limits allowed by law.

**COMMENT:** One commenter (23) expressed the opinion that percentage increases in fees should better relate to the percentage decrease in general funds.

**RESPONSE:** The fee schedule adopted by the Commission in 1991 was developed based on a time evaluation of on-site activities provided only in western Oregon, and was not intended to generate the revenue needed to fund all field service costs. The proposed schedule of maximum fees was developed with considerably more care and thought as to program costs, based on a review of the differences of providing services between eastern and western Oregon, projected activity levels for the various types of applications, resulting workload to provide all aspects of field services, and staff levels within each field office. The proposed fees do not rely upon general funds to support portions of the program.

**COMMENT:** One commenter (1) expressed the opinion that an hourly rate should be charged for inspections.

**RESPONSE:** The proposed fee schedule was developed using average times to process each type of application. The Department believes this is fair and reasonable.

**COMMENT:** One commenter (2) expressed the opinion that the Department used poor judgement on its choice of hearing times.

**RESPONSE:** The Department believes that the choice of hearing times and locations are adequate to provide the chance for the public to provide comment on the proposed fees. The opportunity to submit written comment is provided in all rulemaking procedures. Individuals that want to provide comment but are unable to attend the scheduled hearings must submit their comments in writing. Written comment is considered by the Department with the same diligence as verbal testimony, and often the author presents his or her concerns in a more concise manner.

**COMMENT:** Two commenters (2,27) expressed the opinion that the Department should not have proceeded to rulemaking on fees until the technical rule amendments are adopted.

**RESPONSE:** This issue was considered by the Department. The decision was made to keep the fee amendments separate from the proposed technical amendments, but to coordinate the two

rulemaking packages to make sure they are properly integrated.

**COMMENT:** One commenter (27) expressed the opinion that the fee structure needs to be reviewed and adjusted, but not by arbitrarily doubling, tripling, or quadrupling charges.

**RESPONSE:** The Department's proposal to establish fees that reflect actual costs for providing field services as efficiently as is possible in the counties it serves was not done arbitrarily. The response to issue #1 describes briefly how the fee schedule was developed. Some fees have been reduced in response to public comment.

**COMMENT:** One commenter (29) expressed the opinion that the proposed fees should not be imposed on applicants that have favorable site reports or where permits are held up because of planning conflicts.

**RESPONSE:** The Department intends that the proposed fee schedule take effect upon filing with the Secretary of State or shortly thereafter. Applications submitted prior to the proposed fee schedule taking effect will be subject to the current fee schedule. Applications received on or after that date will be subject to the schedule of fees in effect at that time.

**COMMENT:** Two commenters (6,7) expressed the opinion that the fee increases do not take into account the average salary base of eastern Oregon.

**RESPONSE:** The proposed fee schedule establishes fee levels that are lower than the Department's cost of providing services in eastern Oregon.

**COMMENT:** Three commenters (12,28,30) expressed the opinion that the level of service provided by Washington County should not be reduced.

**RESPONSE:** The proposed fee levels for Washington County will reduce the anticipated shortfall in funding for the program, but will not cover all costs the County will incur. The County does not expect a reduction in the level of service it provides.

**COMMENT:** Four commenters (11,12,13,14) expressed the opinion that the counties must be able to recover their costs for implementing the program requirements through fees.

**RESPONSE:** The counties have always had the opportunity to adopt fee schedules up to a level authorized by the Commission, within specific statutory and contractual restrictions. It is expected that all contract counties are able to implement the program with greater efficiency than

the Department. Provided the Commission adopts a schedule of fees that accurately reflect efficiently conducted services provided by the Department, most counties should have no need to adopt fees that are higher. However, if it can be documented that it costs more for a county to provide efficiently conducted minimum services than the schedule of maximum fees would provide, the county may request that the Commission establish higher fees for that county.

COMMENT: Six commenters (5,11,13,14,16,26) expressed the opinion that the fee for a repair permit should be established at a level that does not discourage the public from seeking assistance and guidance from the regulators.

RESPONSE: The Department is sympathetic to this issue. It is recognized that fees, no matter at what levels, may be difficult for some persons suffering financial hardship to pay. Without the clear authority to waive or lower fees, this will remain a problem that needs a solution. However, some fees, including those for residential repair permits, have been reduced in response to public comment.

COMMENT: One commenter (13) expressed the opinion that the administrative/oversight and technical support portion of the Department's on-site program has been neglected in recent years and needs to be strengthened.

RESPONSE: The proposed schedule of fees will increase license fees and surcharge fees. These fees are identified to fund the administrative/oversight and technical support portion of the program. The Department intends to seek additional staff to enhance this area.

COMMENT: One commenter (15) expressed the opinion that the time allowed for public comment was not sufficient, and not all affected property owners received notice.

RESPONSE: The Department followed all statutory and administrative requirements in providing notice, and made reasonable efforts to notify all affected individuals.

COMMENT: One commenter (17) expressed the opinion that the DEQ's appalling level of performance with the on-site program does not justify the proposed fee increases.

RESPONSE: The Department agrees there is opportunity to improve its level of service. The proposed fee levels will provide the funding needed to enhance and support an improved field services effort.

COMMENT: One commenter (26) expressed the opinion that the DEQ surcharge should not be charged on all actions requiring an application.

**RESPONSE:** The Department believes that the application for service is the appropriate trigger to determine when a surcharge is correct.

## Detailed Changes to Original Rulemaking Proposal made in Response to Public Comment

## Proposed Rule (Attachment A)

## OAR 340-71-140(1)(b)(A)(ii) Alternative System:

(I)	Aerobic System	<u>\$ 565</u>	<del>[\$245]</del>
(II)	Capping Fill	<u>\$ 860</u>	<del>[\$415]</del>
(III)	Cesspool	<u>\$ 565</u>	<del>[\$245]</del>
(IV)	Disposal Trenches in Saproliite	<u>\$ 565</u>	<del>[\$245]</del>
(V)	Evapotranspiration-Absorption	<u>\$ 565</u>	<del>[\$245]</del>
(VI)	Gray Water Waste Disposal Sump	<u>\$ 240</u>	<del>[\$120]</del>
(VII)	Holding Tank	<u>\$ 565</u>	<del>[\$245]</del>
(VIII)	Pressure Distribution	<u>\$ 860</u>	<del>[\$350]</del>
(IX)	Redundant	<u>\$ 565</u>	<del>[\$245]</del>
(X)	Sand Filter	<u>\$1,100</u>	<del>[\$445]</del>
(XI)	Seepage Trench	<u>\$ 565</u>	<del>[\$245]</del>
(XII)	Seepage Trench	<u>\$ 565</u>	<del>[\$245]</del>
(XIII)	Steep Slope	<u>\$ 565</u>	<del>[\$245]</del>
(XIV)	Tile Dewatering	<u>\$ 860</u>	<del>[\$350]</del>

## Hearing Proposal:

## OAR 340-71-140(1)(b)(A)(ii) Alternative System:

(I)	Aerobic System	<u>\$ 635</u>	<del>[\$245]</del>
(II)	Capping Fill	<u>\$1,340</u>	<del>[\$415]</del>
(III)	Cesspool	<u>\$ 635</u>	<del>[\$245]</del>
(IV)	Disposal Trenches in Saproliite	<u>\$ 635</u>	<del>[\$245]</del>
(V)	Evapotranspiration-Absorption	<u>\$ 635</u>	<del>[\$245]</del>
(VI)	Gray Water Waste Disposal Sump	<u>\$ 635</u>	<del>[\$120]</del>
(VII)	Holding Tank	<u>\$ 635</u>	<del>[\$245]</del>
(VIII)	Pressure Distribution	<u>\$ 860</u>	<del>[\$350]</del>
(IX)	Redundant	<u>\$ 635</u>	<del>[\$245]</del>
(X)	Sand Filter	<u>\$1,565</u>	<del>[\$445]</del>
(XI)	Seepage Trench	<u>\$ 635</u>	<del>[\$245]</del>
(XII)	Seepage Trench	<u>\$ 635</u>	<del>[\$245]</del>
(XIII)	Steep Slope	<u>\$ 635</u>	<del>[\$245]</del>
(XIV)	Tile Dewatering	<u>\$ 860</u>	<del>[\$350]</del>

Reason: The time basis used to establish the permit fees was re-examined, specifically with respect to the number of inspection visits that are needed to insure proper construction. Several of the alternative system permits were lowered because the amount of time needed to process them should have been very similar to the time needed for a standard system. The sand filter system and the capping fill system each contained two construction inspections that could be

eliminated with efficient planning. The gray water waste disposal sump permit was analyzed and found typically require about 165 minutes to process. All of these changes resulted in a reduction of the permit fee for that type of system.

**Repair Permit**

**Proposed Rule (Attachment A)**

OAR 340-71-140(1)(b)(F)(i) Single Family Dwelling:		
(I) Major.....	<b><u>\$310</u></b>	<del>[\$115]</del>
(II) Minor.....	<b><u>\$150</u></b>	<del>[\$75]</del>

**Hearing Proposal:**

OAR 340-71-140(1)(b)(F)(i) Single Family Dwelling:		
(I) Major.....	<b><u>\$615</u></b>	<del>[\$115]</del>
(II) Minor.....	<b><u>\$280</u></b>	<del>[\$75]</del>

Reason: The repair permit fees originally proposed reflected average pro-rated costs to the Department in processing these types of permits. The Department recognizes these fees may discourage some in single family dwellings from contacting the Department for guidance on making the repair or for the construction permit. It is believed that by lowering the fee to the level in the recommendation, homeowners will be more likely to work with the Department and ensure that repairs are made to protect human health and the environment.

**Proposed Rule (Attachment A)**

OAR 340-71-140(2) Contract County Fee Schedules. Pursuant to ORS 454.745(4), fee schedules which exceed ~~the~~ maximum fees in ORS 454.745(1)~~,],~~ and section (1) of this rule~~,],~~ ***shall be established by rule.*** ~~fare established for contract counties as follows:~~

- ~~(a) Multnomah County: See OAR 340-72-070.~~
- ~~(b) Jackson County: See OAR 340-72-080.~~
- ~~(c) Linn County: See OAR 340-72-090.]~~

**Hearing Proposal:**

OAR 340-71-140(2) Contract County Fee Schedules. Pursuant to ORS 454.745(4), fee schedules which exceed maximum fees in ORS 454.745(1), and section (1) of this rule, are established for contact counties as follows:

- (a) ~~{Multnomah}~~ **Washington** County: See OAR 340-72-~~{070}~~ **071**.
- (b) ~~{Jackson}~~ **Benton** County: See OAR 340-72-~~{080}~~ **072**.
- ~~{(c) Linn County: See OAR 340-72-090.]~~

Reason: The major repair permit fee proposed for adoption by the Commission and as listed in Attachment A exceeds the fee proposed by Benton County.

The schedule of fees proposed by Washington County and taken to public hearing contained the base fee the County uses to fund its program activities and the Department's surcharge fee. The surcharge is a Department fee imposed on all applications submitted throughout the state that are subject to the surcharge. The Department requested over 10 years ago that the counties not include the Department surcharge in the county fee schedule since it is not a county fee. The surcharge was to be identified as a state fee that the county collects with the application, and later forwards to the Department in accordance with the memorandum of agreement between the Department and the county. The Department was not aware the surcharges were included in the Washington County fee schedule early enough to have corrections made. In this report, Attachment H represents the proposed County fee schedule with the Department's surcharges removed. With two exceptions, the fees proposed the the County do not exceed the Department's proposed fee schedule (Attachment A). The County requested the site evaluation report for a single family dwelling be established at \$395, and the permit for a gray water waste disposal sump be set at \$360. The Department is not recommending Commission adoption of Washington County's request for higher fees for these two activities because the County has not demonstrated to the Department's satisfaction why higher fees are needed to conduct these activities at the county level. Attachment J was developed to represent Washington County's request for higher fees, for those that would exceed the fees in Attachment A.

Proposed Rule (Attachment A)

OAR 340-71-140(3) Contract County Fee Schedules, General:

- (a) Each county having an agreement with the Department under ORS 454.725 shall adopt a fee schedule for services rendered and permits to be issued. The county fee schedule shall not include the Department's surcharge fee identified in section 4 of this rule.
- (b) A copy of the fee schedule and any subsequent amendments to the schedule shall be forwarded to the Department.
- (c) Fees shall not:
  - (A) Exceed actual costs for efficiently conducted services; ~~for~~
  - (B) Exceed the maximum fee established in section 1 of this rule, unless approved by the Commission pursuant to ORS 454.745(4).

Hearing Proposal:

OAR 340-71-140(3) Contract County Fee Schedules, General:

- (a) Each county having an agreement with the Department under ORS 454.725 shall adopt a fee schedule for services rendered and permits to be issued.
- (b) A copy of the fee schedule and any subsequent amendments to the schedule shall be forwarded to the Department.
- (c) Fees shall not:
  - (A) Exceed actual costs for efficiently conducted services; ~~for~~
  - (B) Exceed the maximum *fee* established in section 1 of this rule, unless approved by the Commission pursuant to ORS 454.745(4).

Reason: The Department wants to prevent confusion concerning county fee schedules by stating in this subsection of the rule that the state surcharges are not to be included in the county fee schedules.

Recommendation: The Department does not recommend the Commission adopt a schedule of maximum fees for Washington County that exceed the proposed fees in Attachment A, which is Attachment J in this staff report, or the application fee for a major repair permit fee for Benton County, which is Attachment I in this staff report.

Hearing Proposal: Refer to Attachments H and J for the proposed Washington County fee rule (the differences are explained in the preceding reason above), and Attachment I for the proposed Benton County fee rule.

Reason: Please refer to the preceding reason above.



State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY

Rulemaking Proposal  
for  
Proposed Adoption of Rule Amendments to On-Site Sewage Disposal Fees

## Rule Implementation Plan

### Summary of the Proposed Rule

The proposed rule will increase many of the application fees established by the Department of Environmental Quality. The fees provide the revenue base to fund the program administered by the Department. The proposed rule will affect all persons, businesses, and others that submit applications for on-site activities.

### Proposed Effective Date of the Rule

The proposed rule will become effective upon filing with the Secretary of State, on or about August 1, 1994.

### Proposal for Notification of Affected Persons

Affected persons will be notified at the time they inquire about submitting an application for an on-site activity.

### Proposed Implementing Actions

Upon filing with the Secretary of State, the Department will notify all Department field service offices and all agreement counties that are implementing the program on behalf of the Department that the amended fee schedule is in effect. The Department's field services offices will collect application fees consistent with the new fee schedule, while the agreement counties will collect the new surcharge on all applications they receive.

### Proposed Training/Assistance Actions

Once the Department's field services offices and the agreement counties are notified of the amended fee schedule and its effective date, they will collect fees consistent with that fee schedule instead of the schedule of fees it replaces. Because these offices already are collecting application and surcharge fees consistent with the current fee schedule, they will not require additional training to interpret and implement the new schedule. The regulated community will be guided by the Department and agreement county offices when an application is submitted.

### **Proposed Training/Assistance Actions**

Once the Department's field services offices and the agreement counties are notified of the amended fee schedule and its effective date, they will collect fees consistent with that fee schedule instead of the schedule of fees it replaces. Because these offices already are collecting application and surcharge fees consistent with the current fee schedule, they will not require additional training to interpret and implement the new schedule. The regulated community will be guided by the Department and agreement county offices when an application is submitted.

PROPOSED AMENDMENTS TO

340-72-071

NOTE:

The ***bold italicized underlined*** portions of text represent proposed additions made to the rules.

The ~~***bold italicized bracketed***~~ portions of text represent proposed deletions made to the rules.

340-72-071 WASHINGTON COUNTY FEE SCHEDULE

Washington County is authorized to establish fees for site evaluation reports, permits, and other on-site program applications. The amounts shall not exceed the fees identified in sections 1 through 9 of this rule, unless otherwise allowed in OAR 340-71-140(3).

(1) Site Evaluation Reports:

(a) Single Family Dwelling:

- (A) New Site (1st or only lot) . . . . . \$ 395
- (B) New Site (each additional lot) . . . . . \$ 110
- (C) Re-evaluation of previously approved lot . . . . . \$ 110

(b) Commercial Facility System:

- (A) 1st 1000 gallons . . . . . \$ 375
- (B) Each 500 gallons above 1000 gallons . . . . . \$ 75
- (C) Re-evaluation of previously approved lot . . . . . \$ 170

(2) Construction-Installation permits for sewage flows not exceeding 1000 gallons per day:

- (a) Standard system . . . . . \$ 315
- (b) Holding tank . . . . . \$ 360

(c)	<i>Pressure distribution</i>	\$ 485
(d)	<i>Redundant system</i>	\$ 360
(e)	<i>Seepage pit</i>	\$ 360
(f)	<i>Steep slope</i>	\$ 360
(g)	<i>Tile dewatering</i>	\$ 485
(h)	<i>Seepage trench</i>	\$ 360
(i)	<i>Aerobic system</i>	\$ 260
(j)	<i>Grey water waste disposal sump</i>	\$ 360
(k)	<i>Capping fill</i>	\$ 730
(l)	<i>Sand filter</i>	\$ 855
(m)	<i>Saprolite</i>	\$ 360
(n)	<i>Gravel-less trench system</i>	\$ 360
(o)	<i>Repair Permit:</i>	
	(A) <i>Major</i>	\$ 190
	(B) <i>Minor</i>	\$ 70
(p)	<i>Permit renewal:</i>	
	(A) <i>With a field visit</i>	\$ 150
	(B) <i>Without a field visit</i>	\$ 75
(q)	<i>Alteration Permit</i>	\$ 275
(3)	<i>The permit application fee for systems with sewage flows greater than 1,000 gallons per day shall be calculated using the appropriate fee described in section 2 of this rule, plus an additional \$25 for each 500 gallon flow increment above 1,000 gallons.</i>	

(4) At the discretion of the Agent, the permittee may be assessed a reinspection fee, not to exceed \$150, when a precover inspection correction notice requires correction of improper construction and at a subsequent inspection the Agent finds the system construction deficiencies have not been corrected. The Agent may elect not to make further precover inspections until the reinspection fee is paid.

(5) A plan review fee may be assessed for systems with sewage flows greater than 600 gallons that serve commercial facilities. The base plan review fee shall not be more than \$165 for sewage flows up to 1,000 gallons. For sewage flows greater than 1,000 gallons, an additional fee of not more than \$25 shall be assessed for each 500 gallons of sewage flow above 1,000 gallons.

(6) Authorization Notice:

(a) With a field visit . . . . . \$ 225

(b) Without a field visit . . . . . \$ 75

(7) Pumper Truck Inspections:

(a) 1st Truck inspection . . . . . \$ 50

(b) Each additional truck inspection . . . . . \$ 35

(8) Existing System Report:

(a) Loan Inspection . . . . . \$ 160

(b) Septic system & water (Col. &/or Nit.) . . . . . \$ 225

(9) Annual/Biennial Evaluation Inspections:

(a) Temporary/hardship mobile home . . . . . \$ 85

(b) Alternative system . . . . . \$ 160

**TO:** ENVIRONMENTAL QUALITY COMMISSION      **DATE:** July 11, 1994

**FROM:** Linda K. Zucker, Hearings Officer

**SUBJECT:** Appeal of Hearings Officer's Findings of Fact and Conclusions of Law and of the Final Order in DEQ v Garcia, Case No. WQIW-SWR-93-043.  
EQC Meeting, July 21, 1:00 p.m.

Geoff Garcia has filed a timely appeal of the hearings officer's January 21, 1994 decision finding him liable for a civil penalty of \$4,800 for violating Oregon law by discharging wastes into state waters without a permit, increasing turbidity by more than ten per cent.

Garcia did not challenge the hearings officer's factual findings and did not require transcription of the hearing record.

In his appeal, Garcia raised three issues:

- 1) Whether DEQ must prove harm to the environment in order to establish a violation of ORS 468B.050(1);
- 2) Whether the turbidity standard contained in OAR 340-41-365(2)(c) is enforceable as a reasonable exercise of agency rulemaking authority;
- 3) Whether the prohibition against double jeopardy prohibits pursuit of a civil penalty in this case.

DEQ did not file a Notice of Cross Appeal.

DEQ did file a response to Garcia's appeal, asking the Commission to find that Garcia is estopped from defending the penalty for the discharge of waste without a permit.



811 SW Sixth Avenue  
Portland, OR 97204-1390  
(503) 229-5696

**Environmental Quality Commission**  
**July 11, 1994**  
**Page 2**

On July 1, 1994, DEQ filed a Motion to Present Additional Evidence. DEQ has also prepared and submitted a proposed order.

The Commission is asked to decide the July 1, 1994 motion and then to address the appeal.

Attached are a copy of OAR 340-11-132 and the following portions of the record:

- 1) Notice of Assessment of Civil Penalty, dated April 15, 1993.
- 2) Appeal of Charges and Notice of Assessment of Civil Penalty, dated April 21, 1993.
- 3) Post hearing letter from DEQ to hearings officer, dated October 18, 1993.
- 4) Post hearing rulings on evidence, dated October 27, 1993.
- 5) Response from Garcia to hearings officer's rulings, dated November 6, 1993.
- 6) Exhibits 1 through 19.
- 7) Hearings Officer's Findings of Fact and Conclusions of Law and Final Order and Judgment, dated January 21, 1994.
- 8) Notice of Appeal by Garcia, dated February 11, 1994.
- 9) Exceptions and memorandum from Garcia, dated April 7, 1994.
- 10) Department's Response to Respondent's Appeal, dated May 12, 1994.
- 11) Cover letter and Motion to Present Additional Evidence with attached documents and proposed Commission's Findings of Fact, Conclusions of Law, Opinion and Order.

LKZ:z  
HZ170032  
Enclosures

PS Form 3811, December 1991 U.S. GPO: 1993-74-241

**SENDER**

- 1. Complete items 1 and/or 2 for additional services.
- 2. Complete items 3 and 4a/b.
- 3. Print your name and address on the reverse of this form so that we can return this card to you.
- 4. Attach this form to the front of the mailpiece, or on the back if space does not permit.
- 5. Write "Return Receipt Requested" on the mailpiece below the article number.
- 6. The return receipt will show to whom the article was delivered and the date delivered.

7. I also wish to receive the following services (for an extra fee):
- 1.  Addressee's Address
  - 2.  Restricted Delivery
- Consult postmaster for fee.

3. Article Addressed to  
 C. Coffey Garcia  
 12303 Calace Road  
 Milwaukie, OR 97132

4. Article Number  
 P003440241

5. Service Type  
 Registered  Insured  
 Certified  COD  
 Express Mail  Return Receipt for Merchandise

6. Date of Delivery  
 6/28/91

5. Signature (Addressee)

8. Addressee's Address (Only if requested and fee is paid)

6. Signature (Agent)

Thank you for using Return Receipt Service



UNITED STATES POSTAL SERVICE



Official Business

PENALTY FOR PRIVATE USE TO AVOID PAYMENT OF POSTAGE \$300

Print your name, address and ZIP Code here

Monika Johnson  
DEPT. OF ENVIRONMENTAL QUALITY  
BILLY GOULD AVE  
PHILADELPHIA, PA 19106



**OREGON ADMINISTRATIVE RULES**  
**CHAPTER 340, DIVISION 11 - DEPARTMENT OF ENVIRONMENTAL QUALITY**

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**340-11-132** In accordance with the procedures and limitations which follows, the Commission's designated Hearing Officer is authorized to enter a final order in contested cases resulting from imposition of civil penalty assessments:

- (1) **Hearing Officer's Final Order:** In a contested case if a majority of the members of the Commission have not heard the case or considered the record, the Hearing Officer shall prepare a written Hearing Officer's Final Order including findings of fact and conclusions of law. The original of the Hearing Officer's Final Order shall be filed with the Commission and copies shall be served upon the parties in accordance with OAR 340-11-097 (regarding service of written notice).
- (2) **Commencement of Appeal to the Commission:**
  - (a) The Hearing Officer's Final Order shall be the final order of the Commission unless within 30 days from the date of mailing, or if not mailed then from the date of personal service, any of the parties, a member of the Commission, or the Department files with the Commission and serves upon each party and the Department a Notice of Appeal. A proof of service thereof shall also be filed, but failure to file a proof of service shall not be a ground for dismissal of the Notice of Appeal;
  - (b) The timely filing and service of a Notice of Appeal is a jurisdictional requirement for the commencement of an appeal to the Commission and cannot be waived; a Notice of Appeal which is filed or served late shall not be considered and shall not affect the validity of the Hearing Officer's Final Order which shall remain in full force and effect;
  - (c) The timely filing and service of a sufficient Notice of Appeal to the Commission shall automatically stay the effect of the Hearing Officer's Final Order.
- (3) **Contents of Notice of Appeal.** A Notice of Appeal shall be in writing and need only state the party's or a Commissioner's intent that the Commission review the Hearing Officer's Final Order.
- (4) **Procedures on Appeal:**
  - (a) **Appellant's Exceptions and Brief -** Within 30 days from the date of service or filing of his Notice of Appeal, whichever is later, the Appellant shall file with the Commission and serve upon each other party written exceptions, brief and proof of service. Such exceptions shall specify those findings and conclusions objected to and reasoning, and shall include proposed alternative findings of fact,

OREGON ADMINISTRATIVE RULES  
CHAPTER 340, DIVISION 11 - DEPARTMENT OF ENVIRONMENTAL QUALITY

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conclusions of law, and order with specific references to those portions to the record upon which the party relies. Matters not raised before the Hearing Officer shall not be considered except when necessary to prevent manifest injustice. In any case where opposing parties timely serve and file Notices of Appeal, the first to file shall be considered to be the appellant and the opposing party the cross appellant;

- (b) Appellee's Brief - Each party so served with exceptions and brief shall then have 30 days from the date of service or filing, whichever is later, in which to file with the Commission and serve upon each other party an answering brief and proof of service;
- (c) Reply Brief - Except as provided in subsection (d) of this section, each party served with an answering brief shall have 20 days from the date of service or filing, whichever is later, in which to file with the Commission and serve upon each other party a reply brief and proof of service;
- (d) Cross Appeals - Should any party entitled to file an answering brief so elect, he may also cross appeal to the Commission the Hearing Officer's Final Order by filing with the Commission and serving upon each other party in addition to an answering brief a Notice of Cross Appeal, exceptions (described in subsection (a) of this section), a brief on cross appeal and proof of service, all within the same time allowed for an answering brief. The appellant-cross appellee shall then have 30 days in which to serve and file his reply brief, cross answering brief and proof of service. There shall be no cross reply brief without leave of the Chairman or the Hearing Officer;
- (e) Briefing on Commission Invoked Review - Where one or more members of the Commission commence an appeal to the Commission pursuant to subsection (2)(a) of this rule, and where no party to the case has timely served and filed a Notice of Appeal, the Chairman shall promptly notify the parties of the issue that the Commission desires the parties to brief and the schedule for filing and serving briefs. The parties shall limit their briefs to those issues. Where one or more members of the Commission have commenced an appeal to the Commission and a party has also timely commenced such a proceeding, briefing shall follow the schedule set forth in subsections (a), (b), (c), (d), and (f) of this section;

OREGON ADMINISTRATIVE RULES  
CHAPTER 340, DIVISION 11 - DEPARTMENT OF ENVIRONMENTAL QUALITY

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- (f) Extensions - The Chairman or a Hearing Officer, upon request, may extend any of the time limits contained in this section. Each extension shall be made in writing and be served upon each party. Any request for an extension may be granted or denied in whole or in part;
  - (g) Failure to Prosecute - The Commission may dismiss any appeal or cross appeal if the appellant or cross appellant fails to timely file and serve any exceptions or brief required by these rules;
  - (h) Oral Argument - Following the expiration of the time allowed the parties to present exceptions and briefs, the Chairman may at his discretion schedule the appeal for oral argument before the Commission;
  - (i) Scope of Review - In an appeal to the Commission of a Hearing Officer's Final Order, the Commission may substitute its judgment for that of the Hearing Officer in making any particular finding of fact, conclusion of law, or order. As to any finding of fact made by the Hearing Officer the Commission may make an identical finding without any further consideration of the record;
  - (j) Additional Evidence - In an appeal to the Commission of a Hearing Officer's Final Order the Commission may take additional evidence. Requests to present additional evidence shall be submitted by motion and shall be supported by a statement specifying the reason for the failure to present it at the hearing before the Hearing Officer. If the Commission grants the motion, or so decides of its own motion, it may hear the additional evidence itself or remand to a Hearing Officer upon such conditions as it deems just.
- (5) In exercising the authority to enter a final order pursuant to this rule, the Hearing Officer:
- (a) Shall not reduce the amount of civil penalty imposed by the Director unless:
    - (A) The department fails to establish some or any of the facts regarding the violation; or
    - (B) New information is introduced at the hearing regarding mitigating and aggravating circumstances not initially considered by the Director. Under no circumstances shall the Hearing Officer reduce or mitigate a civil penalty based on new information submitted at the hearing below the minimum established in the schedule of civil penalties contained in

**OREGON ADMINISTRATIVE RULES**  
**CHAPTER 340, DIVISION 11 - DEPARTMENT OF ENVIRONMENTAL QUALITY**

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**Commission rules.**

- (b) May elect to prepare proposed findings of fact and a proposed order and refer the matter to the Commission for entry of a final order pursuant to the general procedure for contested cases prescribed under OAR 340-11-098.

Stat. Auth.: ORS Ch. 183 & 468

Hist.: DEQ 78, f. 9-6-74, ef. 9-25-74; DEQ 115, f. & ef. 7-6-76; DEQ 25-1979, f. & ef. 7-5-79; DEQ 7-1988, f. & cert. ef. 5-6-88 (and corrected 9-30-88)

**Presiding Officer's Proposed Order in Hearing Before the Department**

340-11-133 [DEQ 78, f. 9-6-74, ef. 9-25-74;  
Repealed by DEQ 122,  
f. & ef. 9-13-76]

**Presiding Officer's Proposed Order in Hearing Before the Department**

340-11-134 [DEQ 122, f. & ef. 9-13-76;  
Repealed by DEQ 7-1988,  
f. & cert. ef. 5-6-88]

**Final Orders in Contested Cases Notification**

340-11-135 [DEQ 69(Temp), f. & ef. 3-22-74;  
DEQ 72, f. 6-5-74, ef. 6-25-74;  
Repealed by DEQ 7-1988,  
f. & cert. ef. 5-6-88]

**Powers of the Director**

340-11-136

- (1) Except as provided by OAR 340-12-075, the Director, on behalf of the Commission, may execute any written order which has been consented to in writing by the parties adversely affected thereby.
- (2) The Director, on behalf of the Commission, may prepare and execute written orders implementing any action taken by the Commission on any matter.
- (3) The Director, on behalf of the Commission, may prepare and execute orders upon default where:
  - (a) The adversely affected parties have been properly notified of the time and manner in which to request a hearing and have failed to file a proper, timely request for a hearing; or
  - (b) Having requested a hearing, the adversely affected party has failed to appear at the hearing or at any

APR 15 1993

DEPARTMENT OF  
ENVIRONMENTAL  
QUALITY

CERTIFIED MAIL P 991 113 577

Geoff Garcia  
12303 Galice Road  
Merlin, OR 97532

Re: Notice of Assessment of  
Civil Penalty  
No. WQIW-SWR-93-043  
Josephine County

On January 24, 1993, representatives of the Oregon Department of Fish and Wildlife (DFW) and Oregon State Police investigated your gold mining operation along Rocky Gulch Creek located at 12303 Galice Road, Merlin, Oregon. The investigation was prompted by observations of turbidity in the Rogue River downstream from where Rocky Gulch Creek enters the river.

DFW staff obtained samples of the creek upstream and downstream from your operation. These showed a background stream turbidity of 5 turbidity units, while the stream downstream from the discharge had a turbidity of 34 turbidity units. The discharge into Rocky Gulch Creek from your operation had a turbidity of 2,800 turbidity units.

Oregon Revised Statutes (ORS) 468B.025(1)(a) prohibits pollution of waters of the state. ORS 468B.050(1) prohibits any discharge of industrial or commercial wastes to waters of the state without a permit. Oregon Administrative Rule (OAR) 340-41-365(2)(c) prohibits a cumulative increase in natural stream turbidity of more than 10 percent. OAR 340-41-365(2)(i) and (l) prohibit the creation of conditions deleterious to fish or aquatic life and aesthetic conditions offensive to the human sense of sight in the Rogue Basin. You violated all of these prohibitions.

Your discharge of wastewater without a permit is an intentional violation, as you know from past years that such discharges are prohibited. In 1983, you contacted the Department of Environmental Quality (DEQ) concerning a permit for your operation. However, your permit request was not fully considered as you never submitted the application fee and other information required to make your application complete. In 1987, DFW investigated turbid water from your operation. You then submitted a complete permit application to



811 SW Sixth Avenue  
Portland, OR 97204-1390  
(503) 229-5696  
TDD (503) 229-6993  
DFW-1

Geoff Garcia  
Case No. WQIW-SWR-93-043  
Page 2

the DEQ. The permit request was denied because you could not demonstrate to the DEQ's satisfaction that your operation could comply with state water quality/turbidity standards. This stemmed from your having no room at your site to construct enough settling pond capacity to settle out solids in your turbid wastewater.

Also, your discharges of turbid wastewater have been occurring for years. In addition to the 1987 DFW investigation of turbid water from your operation, the U.S. Department of the Interior's Bureau of Land Management issued you a Notice of Noncompliance in 1989 for a discharge of turbid waters into Rocky Gulch Creek. On January 14, 1993, DEQ received a complaint that turbidity from your operation was reaching the Agness area of the Rogue River, more than 40 river miles downstream from your operation. The Oregon State Police has also issued you several citations for water pollution from your operation. Your most recently documented violations occurred on January 24, 1993, and these are addressed in the enclosed notice.

The Rogue River is a nationally designated wild and scenic river and is widely used for fishing and other recreational purposes. Turbidity from your operation has affected the Rogue River. Continued pollution of the Rogue River by your gold mining operation is unacceptable.

Because you violated the Department's rules, you are liable for a civil penalty assessment. The civil penalty schedule provides for a penalty up to \$10,000 per day for each violation of these rules. In the enclosed Notice, I have assessed a civil penalty of \$1,600 for discharging wastes without a permit and \$3,200 for excessive turbidity, for a total civil penalty of \$4,800. In determining the amount of the penalty, I used the procedures set forth in OAR 340-12-045. The Department's findings and civil penalty determination are attached to the Notice as Exhibits 1 and 2.

Appeal procedures are outlined in Section IV of the Notice. If you fail to either pay or appeal the penalty within twenty (20) days, a Default Order will be entered against you.

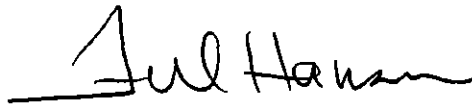
If you wish to discuss this matter, or if you believe there are mitigating factors which the Department might not have considered in assessing the civil penalty, you may request an informal discussion by attaching your request to your appeal. Your request to discuss this matter with the Department will not waive your right to a contested case hearing.

I look forward to your cooperation in complying with the Department's rules in the future. However, if any additional violations occur, you may be assessed additional civil penalties.

Geoff Garcia  
Case No. WQIW-SWR-93-043  
Page 3

Copies of referenced rules are enclosed. If you have any questions about this action, please contact Larry Cwik with the Department's Enforcement Section in Portland at 229-5728 or toll-free at 1-800-452-4011.

Sincerely,



Fred Hansen  
Director

FH:lc:b

W:\CPNOTICE\GB12218L

Enclosures

cc: Southwest Region, DEQ  
Water Quality Division, DEQ  
Environmental Quality Commission  
Oregon State Police  
Oregon Department of Fish and Wildlife, Josephine County  
Oregon Department of Justice  
U.S. Environmental Protection Agency  
U.S Department of the Interior, Bureau of Land Management  
Josephine County District Attorney



BEFORE THE ENVIRONMENTAL QUALITY COMMISSION  
OF THE STATE OF OREGON

DEPARTMENT OF ENVIRONMENTAL QUALITY )  
OF THE STATE OF OREGON, )  
Department, )  
v. )  
GEOFF GARCIA, )  
Respondent. )

NOTICE OF ASSESSMENT  
OF CIVIL PENALTY  
No. WQIW-SWR-93-043  
JOSEPHINE COUNTY

I. AUTHORITY

This notice is issued to Respondent, Geoff Garcia, by the Department of Environmental Quality (Department) pursuant to Oregon Revised Statutes (ORS) 468.126 through 468.140, ORS Chapter 183 and Oregon Administrative Rules (OAR) Chapter 340, Divisions 11 and 12.

II. VIOLATIONS FOR WHICH A CIVIL PENALTY IS BEING ASSESSED

1. On or about January 24, 1993, Respondent violated ORS 468B.050(1)(a) in that Respondent discharged wastes from an industrial or commercial establishment to waters of the state without first obtaining a permit from the Department. Specifically, Respondent discharged wastes from Respondent's gold mining operation along Rocky Gulch Creek at or near 12303 Galice Road, Merlin, Josephine County, Oregon into Rocky Gulch Creek, waters of the state. This is a Class I violation pursuant to OAR 340-12-055(1)(b).

2. On or about January 24, 1993, Respondent violated ORS 468B.025(1)(b) and OAR 340-41-365(2)(c) in that Respondent's above described discharge reduced the quality of Rocky Gulch Creek below the Department's standards for waters of the Rogue Basin. Specifically, Respondent's discharge caused a greater than 10% cumulative increase in the natural stream turbidity of Rocky Gulch Creek, a Rogue Basin stream, through increasing the turbidity of the creek by 580%, from 5 nephelometric turbidity units (NTU) upstream from Respondent's discharge to 34 NTU downstream from Respondent's discharge. This is a Class II

1 violation pursuant to OAR 340-12-055(2)(f).

2 **III. ASSESSMENT OF CIVIL PENALTIES**

3 The Director imposes civil penalties for the following violations cited in Section II:

<u>Violation</u>	<u>Penalty Amount</u>
4 1	\$1,600
5 2	\$3,200

7 Respondent's total civil penalty is \$4,800.

8 The findings and determinations of Respondent's civil penalties pursuant to OAR 340-12-  
9 045 are attached and incorporated as Exhibits Nos. 1 and 2.

10 **IV. OPPORTUNITY FOR CONTESTED CASE HEARING**

11 Respondent has the right to have a formal contested case hearing before the  
12 Environmental Quality Commission (Commission) or its hearings officer regarding the matters  
13 set out above, at which time Respondent may be represented by an attorney and subpoena and  
14 cross-examine witnesses. **The request for hearing must be made in writing and must be**  
15 **received by the Commission's hearings officer within twenty (20) days from the date of**  
16 **service of this Notice, and must be accompanied by a written "Answer" to the charges**  
17 **contained in this Notice.**

18 In the written "Answer," Respondent shall admit or deny each allegation of fact contained  
19 in this Notice and Respondent shall affirmatively allege any and all affirmative claims or  
20 defenses to the assessment of this civil penalty that Respondent may have and the reasoning in  
21 support thereof. Except for good cause shown:

- 22 1. Factual matters not controverted shall be presumed admitted;
- 23 2. Failure to raise a claim or defense shall be presumed to be a waiver of such claim  
24 or defense;
- 25 3. New matters alleged in the "Answer" shall be presumed to be denied unless  
26 admitted in subsequent pleading or stipulation by the Department or Commission.

1 Send the request for hearing and "Answer" to: **Linda K. Zucker, Hearings Officer,**  
2 **Environmental Quality Commission, 811 S.W. Sixth Avenue, Portland, Oregon 97204.**

3 Following receipt of a request for hearing and an "Answer," Respondent will be notified of the  
4 date, time and place of the hearing.

5 Failure to file a timely request for hearing and "Answer" may result in the entry of a  
6 Default Order for the relief sought in this Notice.

7 Failure to appear at a scheduled hearing or meet a required deadline may result in a  
8 dismissal of the request for hearing and also an entry of a Default Order.

9 The Department's case file at the time the Notice was issued may serve as the record for  
10 purposes of entering the Default Order.

11 **V. OPPORTUNITY FOR INFORMAL DISCUSSION**

12 In addition to filing a request for a contested case hearing, Respondent may also request  
13 an informal discussion with the Department by attaching a written request to the hearing request  
14 and "Answer".

15 **VI. PAYMENT OF CIVIL PENALTY**

16 The civil penalty is due and payable ten (10) days after the Order imposing the civil  
17 penalty becomes final by operation of law or on appeal. Respondent's check or money order in  
18 the amount of \$4,800 should be made payable to "State Treasurer, State of Oregon" and sent to  
19 the **Business Office, Department of Environmental Quality, 811 S.W. Sixth Avenue,**  
20 **Portland, Oregon 97204.**

21 **APR 15 1993**

22 Date

22   
Fred Hansen, Director

**EXHIBIT 1**

**FINDINGS AND DETERMINATION OF RESPONDENT'S CIVIL PENALTY  
PURSUANT TO OREGON ADMINISTRATIVE RULE (OAR) 340-12-045**

**VIOLATION NO:** 1 (Discharging wastes to waters of the state without a permit)

**CLASSIFICATION:** The violation is a Class I violation pursuant to OAR 340-12-055(1)(b).

**MAGNITUDE:** The magnitude of the violation is minor, as there is insufficient information upon which to base any other determination.

**CIVIL PENALTY FORMULA:** The formula for determining the amount of penalty of each violation is:  
$$BP + [(.1 \times BP) (P + H + O + R + C)] + EB.$$

"BP" is the base penalty which is \$1,000 for a Class I, minor magnitude violation in the matrix listed in OAR 340-12-042(1).

"P" is Respondent's prior significant action(s) and receives a value of 0, as Respondent has no prior significant actions as defined in OAR 340-12-030(14).

"H" is the past history of Respondent in taking all feasible steps or procedures necessary to correct any prior significant action(s) and receives a value of 0, as Respondent has no prior significant actions as defined in OAR 340-12-030(14).

"O" is whether or not the violation was a single occurrence or was repeated or continuous during the period of the violation and receives a value of 0, as this was a single occurrence.

"R" is the cause of the violation and receives a value of +6, as Respondent's violation was intentional. Respondent contacted the Department on at least two prior occasions concerning a permit for Respondent's operation and was told that a permit could not be issued because of adverse topographical conditions at Respondent's site. Respondent did not have a permit, yet discharged waste into Rocky Gulch Creek anyway.

"C" is Respondent's cooperativeness in correcting the violation and receives a value of 0, as Respondent was neither cooperative nor uncooperative in correcting the violation. The action causing the violation had stopped by the time the investigation occurred. The pollution was ongoing, but the action that caused it had stopped and nothing could be done to stop the pollution at that time.

"EB" is the approximate dollar sum of the economic benefit that the Respondent gained through noncompliance, and receives a value of 0, as Department has insufficient information upon which to base a determination.

PENALTY CALCULATION:

$$\begin{aligned} \text{Penalty} &= \text{BP} + [(.1 \times \text{BP}) (\text{P} + \text{H} + \text{O} + \text{R} + \text{C})] + \text{EB} \\ &= \$1,000 + [(.1 \times \$1,000) (0 + 0 + 0 + 6 + 0)] + 0 \\ &= \$1,000 + [(100) (6)] + 0 \\ &= \$1,000 + 600 + 0 \\ &= \$1,600 \end{aligned}$$

**EXHIBIT 2**

**FINDINGS AND DETERMINATION OF RESPONDENT'S CIVIL PENALTY  
PURSUANT TO OREGON ADMINISTRATIVE RULE (OAR) 340-12-045**

**VIOLATION NO:** 2 (Increasing the turbidity of waters of the state)

**CLASSIFICATION:** The violation is a Class II violation pursuant to OAR 340-12-055(2)(f).

**MAGNITUDE:** The magnitude of the violation is major, as specified in OAR 340-12-090(2)(a) because the Respondent increased the turbidity by greater than 1.6 times the turbidity concentration limitation set forth in OAR 340-41-365(2)(c) for the water quality standards for the Rogue Basin. The background sample collected on January 24, 1993 had a turbidity of 5 turbidity units. The water quality standards state that no wastes shall be discharged and no activities shall be conducted which will increase stream turbidity by more than 10 percent above background. The downstream turbidity was 34 turbidity units, which is greater than 1.6 times the allowed turbidity concentration.

**CIVIL PENALTY FORMULA:** The formula for determining the amount of penalty of each violation is:  
$$BP + [(1 \times BP) (P + H + O + R + C)] + EB.$$

"BP" is the base penalty which is \$2,000 for a Class II, major magnitude violation in the matrix listed in OAR 340-12-042(1).

"P" is Respondent's prior significant action(s) and receives a value of 0, as Respondent has no prior significant actions as defined in OAR 340-12-030(14).

"H" is the past history of Respondent in taking all feasible steps or procedures necessary to correct any prior significant action(s) and receives a value of 0, as Respondent has no prior significant actions as defined in OAR 340-12-030(14).

"O" is whether or not the violation was a single occurrence or was repeated or continuous during the period of the violation and receives a value of 0, as this was a single occurrence.

"R" is the cause of the violation and receives a value of +6, as Respondent's violation was intentional. Respondent has recognized in past discussions and correspondence that the discharges from his mining activities increase the turbidity of Rocky Gulch Creek more than 10% above the natural background stream turbidity. Respondent further knows that this is the reason the Department will not grant him a permit for his operation. Nonetheless, Respondent intentionally chose to operate and cause the increased turbidity in violation of Oregon law.

"C" is Respondent's cooperativeness in correcting the violation and receives a value of 0, as Respondent was neither cooperative nor uncooperative in correcting the turbidity violation. The activity causing the violation had stopped by the time the investigation occurred. The pollution was ongoing, but the activity that caused it had stopped and nothing could be done to stop the pollution at that time.

"EB" is the approximate dollar sum of the economic benefit that the Respondent gained through noncompliance, and receives a value of 0, as Department has insufficient information upon which to base a determination.

PENALTY CALCULATION:

$$\begin{aligned} \text{Penalty} &= \text{BP} + [(.1 \times \text{BP}) (\text{P} + \text{H} + \text{O} + \text{R} + \text{C})] + \text{EB} \\ &= \$2,000 + [(.1 \times \$2,000) (0 + 0 + 0 + 6 + 0)] + 0 \\ &= \$2,000 + [(200) (6)] + 0 \\ &= \$2,000 + 1,200 + 0 \\ &= \$3,200 \end{aligned}$$

CERTIFICATE OF MAILING

I hereby certify that I served Notice of Assessment of Civil Penalty  
Order No. WQIW-SWR-93-043

Geoff Garcia

12303 Galice Road

Merlin OR 97532

by mailing a true copy of the above by placing it in a sealed  
envelope, with postage prepaid, at the U.S. Post office in  
Portland, Oregon, on April 16, 1993

*Peggy Sheldon*  
Department of Environmental Quality



Geoffrey Garcia

REGIONAL OPERATIONS DIVISION  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
**RECEIVED**  
APR 27 1993

Consulting Geologist

12303 Galice Rd.  
Merlin, Oregon 97532  
(503) 474-2717

4/21/93

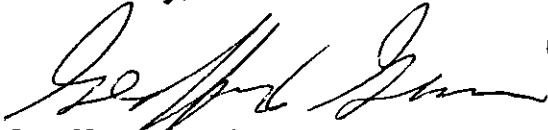
Department of Environmental Quality  
811 S.W. Sixth Avenue  
Portland, Oregon 97204-1390

Re: Appeal of Charges and notice of Assessment of Civil Penalty No. WQIW-  
SWR-93-043 Josephine County

Gentlemen:

I am appealing your decision on grounds that no pollution has occurred in waters of the State of Oregon due to my mining operation. I would like to get together with you and discuss this sometime in the future.


Yours truly,

  
Geoffrey Garcia

CC: Southwest Region  
Water Quality Div.  
Van Hollis/T. Bishop  
L. Cwik, Enb. (file)

DEPARTMENT OF ENVIRONMENTAL QUALITY  
APR 23 1993  
OFFICE OF THE DIRECTOR

October 18, 1993

  
~~Linda Zucker~~  
Hearings Officer  
Environmental Quality Commission  
811 S.W. 6th Avenue  
Portland, Oregon 97204

Re: DEQ v. Geoff Garcia

Dear Ms. Zucker:

This letter is to advise you that the Department has completed our presentation for the contested case hearing in the Geoff Garcia case, with the following three exceptions.

1. The Department has asked the Department of Justice to file a letter/brief evaluating the double jeopardy concerns that Mr. Garcia raised. You said that you would allow the record to remain open to receive this.
2. The Department also requests a copy of the 1937 water quality study that Mr. Garcia provided, and which you admitted as an exhibit. We do not expect to comment on it but would like a copy.
3. Because of the need to end the presentation at 4:45 on October 15, 1993, I was unable to point out the relevant language in Exhibits 15, 16, 17, and 18, which I offered and you admitted into evidence. Exhibit 15, paragraphs 2 and 3, and Exhibit 16, paragraph 5, indicate Mr. Garcia's operation of the Last Chance mine without the required permit was intentional. Exhibit 17, lines 4, 5, and 6, and Exhibit 18, letter of March 9, 1989, second paragraph, item 1, indicate that Mr. Garcia's causing turbidity in waters of the state was intentional.

The Department believes that these exhibits together with other evidence, including the photograph of stream turbidity from Mr. Garcia's mine taken before January 24, 1993, and Mr. Haight's testimony during the hearing, establish intent.

The Department appreciates that you continued the Friday, October 15, hearing but has no objection to you deciding that the record will be complete with the addition of the three items above, and any comment Mr. Garcia may make on these.



811 SW Sixth Avenue  
Portland, OR 97204-1390  
(503) 229-5696  
TDD (503) 229-6993  
DEQ-1



Linda Zucker  
October 18, 1993  
Page 2

Thank you for your consideration.

Sincerely,



Larry Cwik  
Lay Representative  
Environmental Law  
Specialist  
Enforcement Section

cc: Western Region, Medford Office  
Larry Edelman, Department of Justice  
Van Kollias  
Geoff Garcia

October 27, 1993

ENVIRONMENTAL  
QUALITY  
COMMISSION

Larry Cwik, Environmental Law Specialist  
Department of Environmental Quality  
811 SW 6th  
Portland, OR 97210

Re: DEQ v Geoffrey Garcia  
Case No. WQIW-SWR-93-043  
Josephine County

At the conclusion of the hearing on Friday, October 15, 1993, you offered the following exhibits:

- EX. 15 Affidavit of D. Belsky, dated October 12, 1993
- EX. 16 Letter from A. K. Smith, dated February 18, 1987
- EX. 17 Letter from G. Garcia, dated February 19, 1987
- EX. 18 Letter and attachment from H. J. Belisle, dated March 10, 1989.

I am admitting EX. 17.

I am excluding EXs. 15 and 16 on the grounds that they are cumulative of EX. 17 in which G. Garcia advises DEQ of the improbability of operating without raising the turbidity level above state "guidelines". I am excluding EX. 18 as immaterial.

As a result of these exclusions, I am excluding EX. 18 for cross examination.

Geoffrey Garcia is entitled to examine the exhibits he may do so in writing post

During the course of the hearing, the case register recording findings are conclusive of liability in the appeal. Claim determination. The requisite finality for cl

LKZ:y  
HZ109000  
cc: Geoffrey Garcia

P 991 115 171



**Receipt for Certified Mail**

No Insurance Coverage Provided  
Do not use for International Mail  
(See Reverse)

Sent to	Garcia 10/21/93
Street and No.	12303 Spalding
P.O. Name and Zip Code	Muslini 971532
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	

PS Form 3800, June 1991

..., A. K. Smith or H. J. Belisle

letter, I am advising him that

ed to G. Garcia and copies of a  
dit these copies and to find they  
the citations and case register.  
egister are still subject to  
ts are barred or exhausted.



811 SW Sixth Avenue  
Portland, OR 97204-1390  
(503) 229-5696



Geoffrey Garcia

Consulting Geologist

12303 Galice Rd.  
Merlin, Oregon 97532  
(503)474-2717

11/6/93

Linda K. Zucker  
Environmental Quality Commission  
811 SW Sixth Avenue  
Portland, Oregon 97204-1390

Re: Department of Environmental Quality v Geoffrey Garcia  
Case No. WQIW - SWR - 93 - 043

Linda K. Zucker:

This is a response to your letter of Oct. 27. As my response to exhibit 17, I wish to examine witnesses. Please note that exhibit 17 was not only addressed to Dennis Belsky but also to the DEQ. For this reason I would like to examine Fred Hansen in that although he may have been acting in his capacity of the head of the office, he did sign the notice of assessment of civil penalty and supporting letter. I would also like to examine Randy Fisher of the ODFW as it is employees under his guidance and direction who both instigated and investigated 1987 attempt at litigation and the 1993 litigation on which this case rests. Please supply me with 5 subpoenas for the time you continue the hearing. I am anxiously looking forward to presenting this critical part of my defense at your convenience.

I would also like to use this opportunity to renew my objection to your tribunal's use of rules which may have not been properly promulgated as set forth in the Oregon Attorney Generals Administrative Law Manual.

Please allow 2 days for the continuation of the hearing.

Yours truly,

  
Geoffrey Garcia

cc Fred Hansen  
Randy Fisher

MEMORANDUM  
Oregon State Police

DATE: July 5, 1994

TO: Shelley McIntyre  
Oregon Department of Justice

FROM: Jack L. Baker, Senior Trooper  
Oregon State Police - Grants Pass

SUBJECT: Geoffrey Garcia case

Regarding your phone message that you left me needing my time spent working on the investigation and the cost for that time. I estimate the time at 8 hours and the cost at \$167.76. The cost was figured from my monthly salary but did not include the cost of the benefits that are also part of my employment package. I am not sure how they figure that out on an hourly scale. If you use the DEQ formula I am sure that would be close.

Post-It™ brand fax transmittal memo 7871		# of pages: 1	
To: Shelley McIntyre	From: Jack Baker	Senior Trooper	
Co: Ore Dept Justice	Co: DSP-Grants Pass		
Dept:	Phone #	774-3175 ext 307	
Fax #	Fax #		

## Department of Environmental Quality

### Notice of Periodic Rule Review of Department's Administrative Rules and Solicitation of Public Comment Pursuant to ORS 183.550.

1. In accordance with ORS 183.545 and ORS 183.550, the Oregon Department of Environmental Quality will conduct a review of all of its administrative rules. These rules affect all of the Department's programs, including its regulation of air quality, water quality, noise, solid waste, on-site sewage disposal, hazardous substances and waste, underground storage tanks, environmental cleanup of contaminated sites, and the Department's administrative practices.

The review will determine whether the rules should be continued without change or should be amended or rescinded, consistent with the stated objectives of applicable law.

2. In reviewing the rules, the Department will consider, among other things:
  - a. Economic impact of the rule;
  - b. Continued need for the rule;
  - c. Complexity or redundancy of the rule;
  - d. Extent to which the rule overlaps, duplicates or conflicts with other state rules, federal regulations, and local government regulations;
  - e. Degree to which technology, economic conditions or other factors have changed in the affected subject area;
  - f. Statutory citation or legal basis for the rule;
  - g. The rule's potential for enhancement of job producing enterprises;
  - h. Internal consistency of the rule.

If you would like to comment on any of the Department's adopted rules, address your comments, no later than November 1, 1991, to:

Rules Coordinator/MSD  
Department of Environmental Quality  
811 S.W. Sixth  
Portland, Oregon 97204

The Department of Environmental Quality staff will review the rules and all of the public comments on the rules in the context of the criteria identified above. The Environmental Quality Commission will consider changes to the rules based on public comments and staff review. Any rulemaking actions resulting from the review will be taken in accordance with the rulemaking requirements in ORS 183.325 through 183.410.

Ex 1

Copies of the Department's rules, Oregon Administrative Rules, Chapter 340, can be purchased from Department of Environmental Quality. The current set, with updates through December 1990 costs \$35, including postage and handling. A subscription update service is also available for \$80 a year. To order a set of rules, send a check or money order made out to DEQ, with your name and address, to:

Oregon Administrative Rules, Chapter 340  
Department of Environmental Quality  
Attention: Management Services Division  
811 S.W. Sixth Avenue  
Portland, Oregon 97204

The Department's administrative rules are available for inspection at the offices listed below during regular business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday.

Headquarters Office  
811 S.W. Sixth Ave.  
Portland, Oregon 97204,

Roseburg Branch Office  
1937 W. Harvard Blvd.  
Roseburg, Oregon 97470

Astoria Branch Office  
Clatsop County Courthouse  
749 Commercial  
Astoria, Oregon 97103

Southwest Region Office  
201 W. Main Street  
Suite 2-D  
Medford, Oregon 97501

Willamette Valley Region Office  
750 Front Street N.E. Suite 120  
Salem, Oregon 97310

Central Region Office  
2146 N.E. 4th  
Bend, Oregon 97701

Coos Bay Branch Office  
340 N. Front Street  
Coos Bay, Oregon 97420

Eastern Region Office  
700 S.W. Emigrant #330  
Pendleton, Oregon 97801



# LEGAL

Location/Site: Rocky Gulch Date: 1/24/93 Date Received Lab: 1/27/93  
 Collected By: David R. Haight Program: OR Dept. Fish & Wildlife Date Reported: FEB 5 1993  
 Purpose: Please measure turbidity in each sample. Report Data To: \_\_\_\_\_  
 Comments: evidence for mining discharge violation.

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

Item No.	Sampling Point Description (include time)	*Sample Container (bottle) #'s				Test Required
		Nutrients		DO	Metals	
		Basic	BOD		Organic	
1	Sample taken from discharge entering Rocky Gulch 1/24/93 1320				# 3	Turbidity
2	Sample taken in Rocky Gulch above point of discharge 1/24/93 1320				# 21	"
3	Sample taken in Rocky Gulch below point of discharge 1/24/93 1300				# 2	"
4						
5						
6						

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

EXHIBIT  
E42-1

7-2

DEPARTMENT OF ENVIRONMENTAL QUALITY LABORATORIES

Analytical Records Report

PAGE 1 of 1

LEGAL \*\*\*

THURSDAY FEBRUARY 4th, 1993

NAME: 930060 Rocky Gulch

OPERATOR: Pettit, Gregory A.

COLLECTOR: OR. Dept. of Fish & Wildlife

CODE: 3256G Water Monitoring- Interagency

#	RESULT	UNITS	TEST
---	--------	-------	------

001 SAMPLE TAKEN FROM DISCHARGE ENTERING ROCKY GULCH  
01/24/93 @ 13:20

2800 Est NTU Turbidity

TURB : Estimate - all samples received beyond holding time.

002 SAMPLE TAKEN IN ROCKY GULCH BELOW POINT OF DISCHARGE  
01/24/93 @ 13:20

34 Est NTU Turbidity

TURB : Estimate - all samples received beyond holding time.

003 SAMPLE TAKEN IN ROCKY GULCH ABOVE POINT OF DISCHARGE  
01/24/93 @ 13:00

5 Est NTU Turbidity

TURB : Estimate - all samples received beyond holding time.

\*\*\*\*\* COMMENT TEST REFERENCE \*\*\*\*\*

: Turbidity

2-13

JOSEPHINE CO

DEPARTMENT OF ENVIRONMENTAL QUALITY

Laboratories and Applied Research Division  
1712 S.W. 11th Avenue, Portland, OR 97201

CASE

93-01-89 M

LEGAL SAMPLE

Chain of Custody Record

Site Name: Rocky Gulch  
Location: Josephine County  
Date Sampled: 1/24/93  
Time Sampled: 1300-1320  
Collected By: David R. Haight  
OR Dept. Fish + Wildlife

Laboratory Number: 930060  
Program Code: 3256 G  
Date Received: 01/27/93  
Time Received: 10:00

Sample Container Information

Container Type/Number	Container Type/Number	Container Type/Number
<u>Plastic Jar #1 (Hershey's)</u>	<u>1</u>	<u>1</u>
<u>Glass Jar #2 (Hershey's)</u>	<u>1</u>	<u>1</u>
<u>PLASTIC BOTTLE #1</u>	<u>1</u>	<u>1</u>
<u>PLASTIC BOTTLE #2</u>	<u>1</u>	<u>1</u>
<u>GLASS JAR #3</u>	<u>1</u>	<u>1</u>
<u>1</u>	<u>1</u>	<u>1</u>

Total Number of Containers Received: 3

Relinquished By: David R. Haight  
(signature)

Received By: [Signature]  
(signature)

Initial Placement in Refrigerator # 50073

Subsequent Out of Laboratory Transfers:

Relinquished By: \_\_\_\_\_  
(time/date)  
\_\_\_\_\_  
\_\_\_\_\_

Received By: \_\_\_\_\_  
(time/date)  
\_\_\_\_\_  
\_\_\_\_\_

7-2

Oregon

January 26, 1993

Department of Environmental Quality Laboratory  
1712 SW 11th Avenue  
Portland, OR 97201



DEPARTMENT OF  
FISH AND  
WILDLIFE

ROGUE DISTRICT  
OFFICE

Enclosed are three water samples taken as evidence in a case involving the discharge of mining waste into Rocky Gulch. Please analyze each sample for turbidity and send the results to me at the above address.

You can call me at the above telephone number if you have any questions.

Sincerely,

*David R. Haight*

David R. Haight  
Assistant District Fisheries Biologist  
Rogue District



5286 Table Rock Road  
Central Point, OR 97502  
(503) 776-6170  
FAX (503) 776-6194

EXHIBIT \_\_\_\_\_

AFFADAVIT

I, Kenan Smith, have been employed by Oregon State Department of Environmental Quality since February 1, 1989. My position with the state is Environmental Engineer 2. This position is responsible for inspecting industrial sources and individual operations for compliance with the Departments regulations.

This memo recaps my recollection of the events that transpired when I accompanied Oregon State Trooper Jack Baker and ODFW Biologist David Haight to the mining operations of Geoff Garcia on Rocky Gulch near Galice, Oregon, on January 25, 1993.

This office had received a call about 8:30 A.M. on 1-25-93 regarding the aboved mentioned mining operation causing a illegal discharge into the Rogue River on January 23 and 24, 1993. We were told that this discharge had been observed by David Haight from ODFW on 1-24-93 and that he had taken pictures of the operation and the discharge, and that he had taken samples. Mr. Haight and Officer Baker were proceeding to the operation on the morning of 1-25-93 to issue a citation and had asked Gary Grimes of this Department if he would like to have someone accompany them to document it if the discharge was still occurring. I gathered sampling material and left to meet the other two individuals in Galice.

When I arrived in Galice, Officer Baker and Mr. Haight, had already checked to see if the discharge was ongoing but it had ceased. We then proceeded to Mr. Garcias' mining operation on Rocky Gulch. When we arrived at the site we found that Mr. Garcia was gone but was expected to return momentarily. His wife asked us in to wait and asked if we were there because of Geoff's mining operations over the weekend. We stated that we were there for that reason and she stated that she had told her husband that the waters were getting too clear to do the mining.

When Mr. Garcia returned he stated that he had been working the mining operation over the weekend but that it was to have been the last time for that season. Officer Baker proceeded to issue Mr. Garcia a ticket for discharging mining waste to waters of the state and I informed Mr. Garcia that he could also expect an enforcement action from DEQ.

Dated October 11, 1993

Kenan Smith

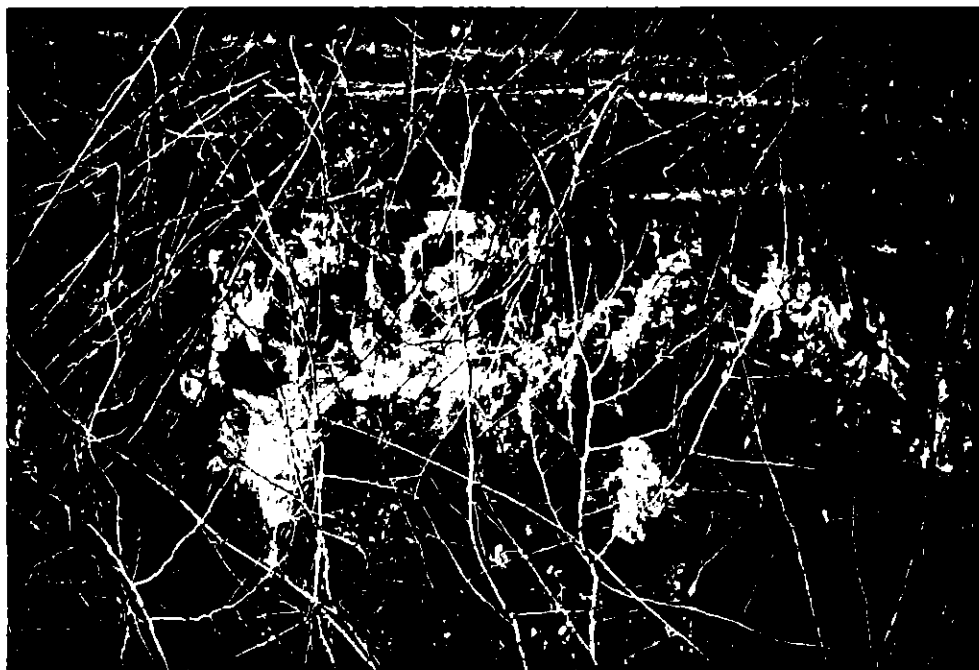
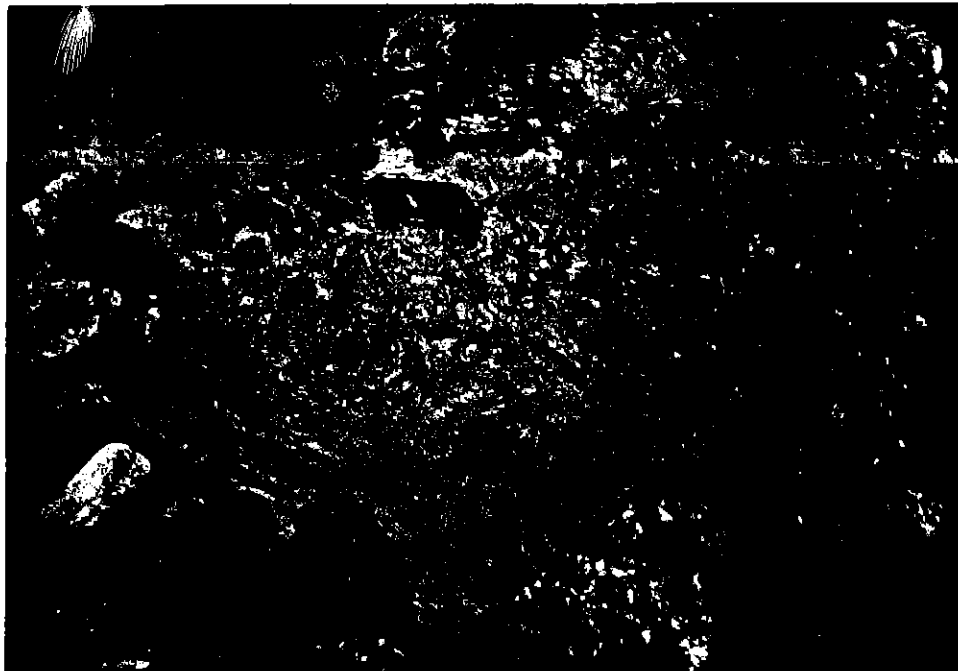
Kenan Smith  
Field Representative, DEQ

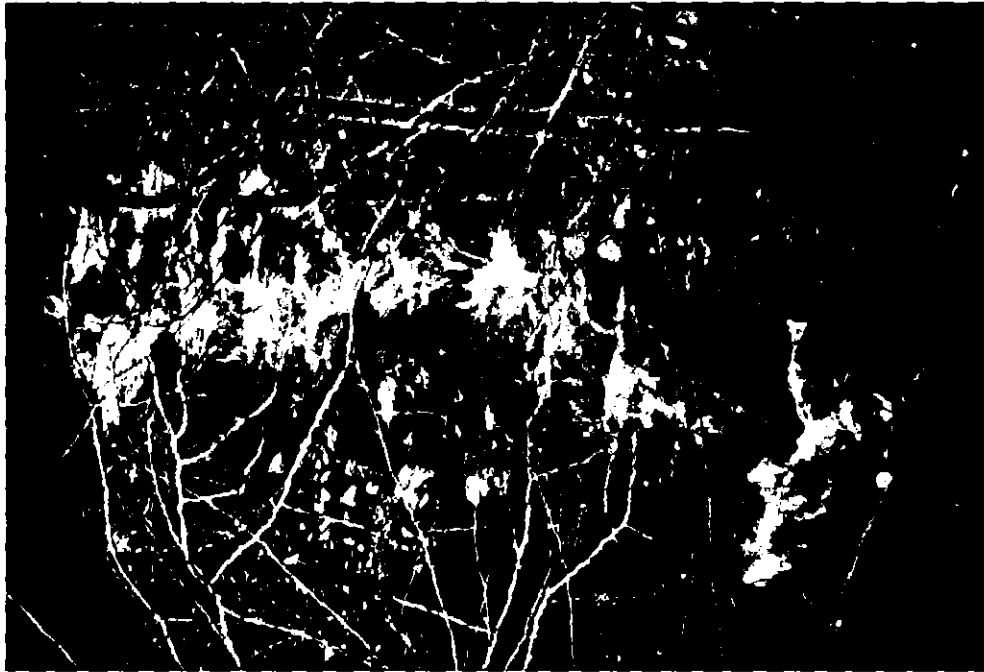
SUBSCRIBED and SWORN to before me this 11th day of October, 1993.

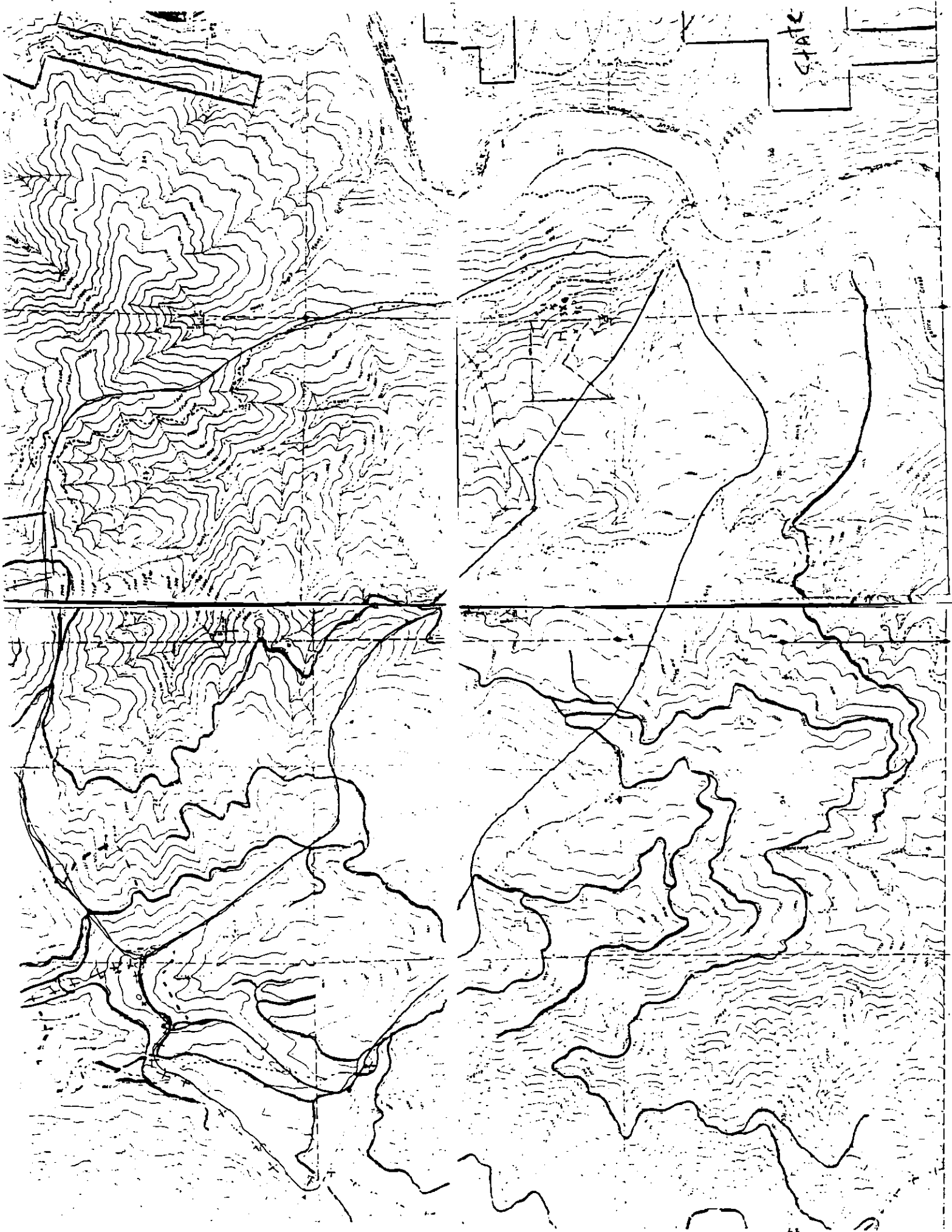


Koleen M. Wertz  
NOTARY PUBLIC FOR OREGON  
My commission expire: 2/3/97

Ex 9







Map of Meade River Section  
T. 34 S. 8 W. R. 10

19



Timothy R. Thompson  
District Attorney  
Room 202, Justice Building  
County Courthouse  
Grants Pass, OR. 97526

Date 9/27/93

Dear Mr. Thompson,

Geoffrey J Garcia requested Rogue River statistics for the months of December 1992 and January 1993. I have dated and signed each monthly report on page 1 and page 6. On page #1 you can find ambient temperatures, inches rainfall, river level in feet, river temperature, river condition such as steady, rising etc. , and weather condition. On page six in the first column you will find river turbidity listed as "INFLUENT TURBID JTU". If you have any questions please feel free to call us here at the water filtration plant. Our phone number is 474-6353

Ken Johnson, City of Grants Pass Water Filtration Plant Operator



Ex 111

CITY OF GRANTS PASS  
WATER FILTRATION PLANT  
MONTHLY OPERATING REPORT

D A T E	TOTAL FLOW		WATER SOLD MGD	TEMPERATURE OF		RNFALL 24 HR INCHES	RIVER DATA 0800			WEATHER CONDITIONS
	MGD	EFF		MAX	MIN		LEVEL	TEMP	COND	
1	0.0000	0.0000		44	28					
2	3.5408	3.0987		37	25	.01	3.43	42	FS	CLDY
3	4.4083	3.5904		42	33	.16	2.75	42	FS	CLDY
4	3.1974	2.8677		46	32	.31	2.57	42	FS	CLDY
5	2.6108	2.4905		39	33	0.00	2.69	42	RS	RAIN
6	2.7592	2.1314		42	32	.08	2.84	42	S	CLDY
7	2.4444	2.1757		49	38	.12	2.52	42	FS	CLDY
8	2.6597	2.4471		49	38	.10	3.20	44	RS	CLDY
9	2.5719	2.2434		40	30	.11	3.81	42	RS	SNOW
10	3.1470	2.7509		43	33	0.00	3.12	42	FS	CLDY
11	3.0226	2.6751		40	31	.01	2.69	42	FS	LT.SNOW
12	.8377	0.0000		44	29	0.00	2.45	42	S	FOGGY
13	3.0894	2.5671		44	33	.33	2.28	42	S	PT.CLDY
14	3.2013	2.7834		48	37	.04	2.32	43	S	PT.CLDY
15	3.4065	3.0934		40	33	.10	3.26	43	R	PT.CLDY
16	3.1815	2.6972		50	34	.02	2.92	42	FS	PT.CLDY
17	3.3179	2.9458		46	35	0.00	2.97	43	S	CLDY
18	0.0000	0.0000		38	30	0.00				FOG
19	4.7566	4.3244		44	34	1.43	2.55	41	FS	CLDY
20	3.0068	2.8241		55	44	.22	4.42	44	R	RAIN
21	1.6370	1.0321		41	36	.96	7.82	43	FS	CLDY
22	3.2086	2.6302		48	40	0.00	9.99	44	FS	PT.CLDY
23	3.1912	2.6607		39	26	.01	5.96	42	F	PT.CLDY
24	3.2661	2.7534		52	35	.01	4.60	43	F	P.CLDY
25	3.5116	2.8800		40	34	.01	3.84	44	F	FOG
26	2.7285	2.2135		40	35	.01	3.50	43	FS	FOG
27	3.1268	2.3816		44	34	.02	3.31	43	FS	FOG
28	3.5980	2.9618		46	34	0.00	3.17	43	FS	LT.FOG
29	3.0486	2.6143		58	39	0.00	3.05	45	FS	LT.FOG
30	2.9575	2.5575		59	26	0.00	2.98	43	FS	LT.FOG
31	3.0368	2.5120		57	26	0.00	2.84	42	FS	FOG
TOT	85.4337	72.3914	.00	1347	1001	4.06	101.01	1195		
MAX	4.7566	4.3244	ERR	59	44	1.43	9.99	45		
MIN	.0000	.0000	ERR	37	25	.00	2.28	41		
AVG	2.8478	2.4130	ERR	45	33	.14	3.61	43		

Ex 11-2

CITY OF GRANTS PASS  
 WATER FILTRATION PLANT  
 MONTHLY OPERATING REPORT

RESERVOIR LEVELS FT.

D A T E	#1,2,3	#4	#5	#6	#8	#13	#15
1							
2	14.8	17.6	26.2	20.9	10.4	6.2	0.0.S.
3	16.0	19.3	29.1	23.3	12.5	7.2	0.0.S.
4	17.1	21.1	29.2	24.0	11.7	9.0	0.0.S.
5	17.8	19.4	29.9	24.6	11.0	7.1	0.0.S.
6	17.6	20.3	29.6	23.3	9.2	8.3	0.0.S.
7	17.3	18.1	29.1	22.4	9.1	9.4	0.0.S.
8	17.6	18.7	29.0	21.6	13.0	7.5	0.0.S.
9	17.3	19.5	28.6	21.9	12.4	8.5	0.0.S.
10	17.5	20.7	29.1	22.6	11.6	8.7	0.0.S.
11	17.9	21.2	29.7	23.4	10.8	7.0	0.0.S.
12	15.0	15.9	22.4	21.2	10.1	8.5	0.0.S.
13	14.5	18.1	24.8	20.3	6.8	6.2	0.0.S.
14	13.9	16.0	24.9	21.4	13.1	7.5	0.0.S.
15	14.3	18.0	26.3	23.6	12.3	8.7	0.0.S.
16	16.5	15.2	29.9	21.1	11.6	6.5	0.0.S.
17	16.7	21.1	28.2	24.0	10.8	7.9	0.0.S.
18							0.0.S.
19	16.6	18.1	30.3	20.2	9.3	7.0	0.0.S.
20	16.8	20.3	28.3	22.9	10.9	8.1	0.0.S.
21	13.8	16.3	23.4	21.9	10.1	9.0	0.0.S.
22	15.6	16.7	27.3	20.1	9.5	7.1	0.0.S.
23	15.1	16.4	26.9	22.8	11.9	8.3	0.0.S.
24	15.7	19.2	28.2	22.9	11.2	9.1	0.0.S.
25	17.8	20.0	30.0	20.9	10.3	7.0	0.0.S.
26	17.9	18.1	29.1	20.6	15.2	8.2	0.0.S.
27	16.2	18.5	28.2	23.7	14.6	6.1	0.0.S.
28	17.0	19.9	29.0	22.4	16.8	7.7	0.0.S.
29	17.3	21.0	29.0	22.7	14.9	9.0	0.0.S.
30	17.4	20.9	29.8	23.6	14.2	6.7	0.0.S.
31	17.7	19.3	29.7	25.3	13.4	7.9	0.0.S.
TOT	459.0	525.6	785.5	624.3	325.3	217.5	.0
MAX	17.9	21.2	30.3	24.6	16.8	9.4	.0
MIN	13.8	15.2	22.4	20.1	6.8	6.1	.0
AVG	16.4	18.8	28.1	22.3	11.6	7.8	.0

CITY OF GRANTS PASS  
 WATER FILTRATION PLANT  
 MONTHLY OPERATING REPORT

D A T E	INTAKE HOUSE	PUMP OPERATION - HOURS								
		INFLUENT PUMPS				EFFLUENT PUMPS				
	WEST	#1	#2	#3	#4	#1	#2	#3	#4	#5
1		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2		8.00	8.00	0.00	0.00	8.00	7.00	0.00	0.00	0.00
3		7.00	7.00	3.00	3.00	10.50	10.00	0.00	0.00	0.00
4		7.50	7.50	0.00	0.00	0.00	0.00	7.50	.75	7.50
5		6.00	6.00	0.00	0.00	0.00	0.00	6.00	1.25	6.00
6		0.00	0.00	6.50	6.50	0.00	0.00	6.50	.50	5.75
7		5.75	5.75	0.00	0.00	0.00	0.00	5.75	.50	5.75
8		0.00	0.00	6.00	6.00	6.00	0.00	5.50	0.00	0.00
9		0.00	0.00	6.50	6.50	6.50	0.00	5.50	0.00	0.00
10		0.00	0.00	7.25	7.25	0.00	0.00	7.25	0.00	7.25
11		0.00	0.00	7.00	7.00	0.00	0.00	7.00	.75	7.00
12		0.00	0.00	2.00	2.00	0.00	0.00	0.00	0.00	0.00
13		0.00	0.00	7.50	7.50	7.50	0.00	7.50	.50	0.00
14		7.50	7.50	0.00	0.00	0.00	0.00	7.50	1.00	7.00
15		0.00	0.00	8.00	8.00	8.00	0.00	8.00	0.00	0.00
6		0.00	0.00	8.00	8.00	8.00	0.00	7.50	0.00	0.00
17		0.00	0.00	7.75	7.75	0.00	0.00	7.75	.50	7.75
18		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19		8.00	8.00	0.00	6.50	6.50	0.00	6.00	1.50	8.00
20		7.00	7.00	0.00	0.00	0.00	0.00	7.00	1.00	7.00
21		3.75	3.75	0.00	0.00	0.00	0.00	2.75	0.00	1.75
22		0.00	0.00	6.50	7.50	7.00	0.00	2.25	3.50	0.00
23		0.00	0.00	7.50	7.50	7.50	0.00	6.50	0.00	0.00
24		7.50	7.50	0.00	0.00	0.00	0.00	7.50	.50	7.50
25		0.00	0.00	7.75	7.75	0.00	0.00	7.75	.25	7.75
26		0.00	0.00	6.00	6.00	5.50	0.00	5.50	0.00	0.00
27		5.00	5.00	2.00	2.00	7.00	0.00	5.00	0.00	0.00
28		0.00	0.00	8.00	8.00	8.00	0.00	7.50	0.00	0.00
29		0.00	0.00	6.50	6.50	6.50	0.00	6.50	0.00	0.00
30		6.50	6.50	0.00	0.00	6.50	0.00	6.50	0.00	0.00
31		0.00	0.00	6.75	6.75	6.75	0.00	0.00	5.25	0.00
TOT		79.50	79.50	113.75	121.25	109.00	17.00	160.00	12.50	86.00
MAX		8.00	8.00	8.00	8.00	10.50	10.00	8.00	3.50	8.00
MIN		.00	.00	.00	.00	.00	.00	.00	.00	.00
AVG		2.65	2.65	3.79	4.04	3.63	.57	5.33	.42	2.87

CITY OF GRANTS PASS  
 WATER FILTRATION PLANT  
 MONTHLY OPERATING REPORT

FILTER OPERATION - BACKWASH

	#1	#1	#2	#2	#3	#3	#4	#4	#5	#5	#6	#6	#7	#7	#8
D	RATE	3800	RATE	3800	RATE	3800	RATE	5600	RATE	5600	RATE	4900	RATE	4900	RATE
A	B.W.	B.W.	B.W.	B.W.	B.W.	B.W.	B.W.	B.W.	B.W.	B.W.	B.W.	B.W.	B.W.	B.W.	B.W.
T	TIME	TIME	TIME	TIME	TIME	TIME	TIME	TIME	TIME	TIME	TIME	TIME	TIME	TIME	TIME
E															
=====															
1															
2	1630						1600		1230		1050		1020		1500
3	1745		1000	1720	635	1540	1430		1400		830	1640	800	1700	1500
4							1130		1300		1520				1410
5													900		1340
6			1115		1545		930		1400		1015	1600	1310		1500
7	1130		1500				1305						1545		
8									1315		1350				1430
9	1430		830	1500	900		1100	1530	1230						
10					1230				845		1430		715		1330
11			1345				1050		1230				1515		1450
12											1500				
13	1500		1530				1300		1330						1430
14			1430		850		1450		1245		900		1345		1320
15	1545				1520				1130		1300				1330
16			750	1450			1130		1100		1515		820		130
17	1510				1305		1415		845				745		
18															
19			1030		1530		210		920	1500	1130		1315		805
20	1130										1415				830
21			1720						1620						
22			1545		1650		1430		1500				945		1030
23	1300		1500								830		900		1530
24			1350		815						1130		1315		1500
25							830		1000		1340		1500		1245
26	1050		1245		1310		1540		1415						
27	1435		1400		1430						1030	1600	935	1540	1000
28			1430				1015		1045				1530		1500
29							1420		1450		830				
30	1000				1300						1030				1150
31			1130						1415		800		700		1245
=====															

CITY OF GRANTS PASS  
WATER FILTRATION PLANT  
MONTHLY OPERATING REPORT

CHEMICAL FEEDING

DATE	ALUM		CARBON		CHLORINE		FILTER AID		KMNO4		LIME	
	LBS USED	Mg/1	LBS USED	Mg/1	LBS USED	Mg/1	LBS USED	Mg/1	LBS USED	Mg/1	LBS USED	Mg/1
1	0	0.0	0	0.0	0	0.0	0.00	*****	0.0	0.00	0	0.0
2	1205	40.8	0	.0	105	3.6	.72	.024	22.0	.74	517	17.5
3	1388	37.8	0	.0	120	3.3	.72	.020	23.7	.64	596	16.2
4	746	28.0	0	.0	90	3.4	.78	.029	16.6	.62	278	10.4
5	581	26.7	0	.0	100	4.6	.46	.021	10.5	.48	175	8.0
6	797	34.6	0	.0	75	3.3	.62	.027	13.8	.60	190	8.3
7	619	30.4	0	.0	65	3.2	.27	.013	11.3	.55	287	14.1
8	904	40.8	0	.0	75	3.4	.38	.017	13.8	.62	219	9.9
9	1272	59.3	0	.0	75	3.5	.79	.037	21.0	.98	387	18.0
10	897	34.2	0	.0	90	3.4	.60	.023	16.6	.63	347	13.2
11	772	30.6	0	.0	80	3.2	.47	.019	15.5	.61	321	12.7
12	220	31.5	0	.0	20	2.9	0.00	.000	4.0	.57	0	.0
13	787	30.5	0	.0	90	3.5	.33	.013	14.7	.57	313	12.1
14	742	27.8	0	.0	80	3.0	.33	.012	13.1	.49	219	8.3
15	1170	41.2	0	.0	80	2.8	.46	.016	17.0	.60	283	10.0
6	942	35.5	0	.0	80	3.0	.45	.017	15.6	.59	293	11.0
17	729	26.3	0	.0	80	2.9	.38	.014	14.5	.52	274	9.9
18	0	0.0	0	0.0	0	0.0	0.00	0.00	0.0	0.00	0	0.0
19	1071	27.0	0	.0	80	2.0	.69	.017	16.6	.42	466	11.7
20	2475	98.7	0	.0	85	3.4	.55	.022	22.9	.91	778	15.0
21	1049	76.8	0	.0	50	3.7	.20	.015	12.8	.94	218	16.0
22	2034	76.0	0	.0	85	3.2	.59	.022	25.3	.95	494	18.5
23	1324	49.7	0	.0	85	3.2	.52	.020	15.9	.60	578	21.7
24	1109	40.7	0	.0	80	2.9	.65	.024	12.5	.46	359	13.2
25	959	32.7	0	.0	80	2.7	.68	.023	12.9	.44	291	9.9
26	1039	45.7	0	.0	70	3.1	.23	.010	11.7	.51	250	11.0
27	787	30.2	0	.0	80	3.1	.52	.020	13.7	.53	277	10.6
28	727	24.2	0	.0	90	3.0	.72	.024	13.3	.44	237	7.9
29	524	20.6	0	.0	65	2.6	.49	.019	10.0	.39	233	9.2
30	496	20.1	0	.0	70	2.8	.55	.022	10.0	.41	198	8.0
31	500	19.7	0	.0	80	3.2	.50	.020	7.9	.31	169	6.7
TOT	27365	*****	0	.0	2225	88.4	14.15	.54	421.2	*****	8677	332.4
MAX	2475	98.7	0	.0	120	4.6	.79	.04	25.3	.98	596	21.7
MIN	0	.0	0	.0	0	.0	.00	.00	.0	.00	0	.0
AVG	912	36.6	0	.0	74	2.9	.47	.02	14.0	.56	289	11.1

CITY OF GRANTS PASS  
WATER FILTRATION PLANT  
MONTHLY OPERATING REPORT

PAGE 6 OF 7

GENERAL DATA

DATE	INFLUENT		MIXED WATER			EFFLUENT			OPERATOR SHIFT #1	OPERATOR SHIFT #2
	TURBID JTU	pH	TURBID JTU	pH	CL2 RESIDUAL	TURBID JTU	pH	CL2 RESIDUAL		
1										
2	17	7.1	.63	6.6	1.9	.41	7.2	1.1	DHG	
3	11	7.1	.32	6.7	1.9	.38	7.2	1.1	DHG	
4	9	7.2	.34	6.9	1.9	.18	7.3	1.1	KJ/JP	
5	9	7.2	.30	6.9	1.9	.12	7.2	1.0	KJ	
6	12	7.2	.25	6.9	1.8	.45	7.2	1.0	KJ/JP	
7	9	7.2	.53	6.9	2.0	.25	7.2	1.0	KJ	
8	15	7.1	.24	6.8	1.9	.15	7.2	1.0	DHG/JP	
9	20	7.1	.22	6.6	2.1	.21	7.1	1.0	DHG	
10	13	7.2	.49	6.9	1.8	.19	7.2	1.0	KJ	
11	9	7.2	.50	6.9	2.0	.21	7.2	1.1	KJ/JP	
12	9								KJ	
13	7	7.1	.21	6.9	1.9	.19	7.2	1.0	DHG/JP	
14	5	7.1	.22	6.8	1.9	.26	7.2	1.1	DHG/JP	
15	15	7.1	.21	6.8	1.9	.18	7.2	1.1	DHG	
16	10	7.1	.24	6.8	1.8	.19	7.2	1.0	DHG	
17	10	7.2	.39	6.9	1.8	.19	7.2	1.0	KJ	
18										
19	7	7.2	.30	7.0	1.9	.43	7.2	1.1	KJ	
20	130	7.2	.60	6.8	1.7	.17	7.2	1.1	KJ	
21	57	7.3	1.17	6.6	1.9	.28	7.1	1.1	KJ	
22	76	7.0	.84	6.5	2.1	.30	6.9	1.0	DHG/JP	
23	22	7.0	.39	6.7	1.9	.24	7.1	1.0	1-6	
24	16	7.2	.45	6.8	1.8	.35	7.1	1.0	KJ	
25	13	7.1	.44	6.8	1.7	.27	7.2	1.0	KJ	
26	10	7.0	.20	6.8	1.8	.27	7.2	1.0	DHG	
27	9	7.1	.20	6.8	1.8	.26	7.2	1.0	DHG	
28	9	7.1	.18	6.9	1.7	.14	7.2	1.0	DHG	
29	7	7.1	.17	6.8	1.6	.14	7.2	1.0	DHG	
30	7	7.2	.12	6.8	1.6	.07	7.2	1.0	DHG	
31	7	7.3	.23	7.0	1.4	.10	7.2	1.0	KJ	
TOT	542	192.7	10.15	183.8	50.0	6.48	193.8	28.1		
MAX	130	7.3	1.17	7.0	2.1	.45	7.3	1.1		
MIN	5	7.0	.12	6.5	1.6	.07	6.9	1.0		
AVG	19	7.1	.38	6.8	1.9	.24	7.2	1.0		

CITY OF GRANTS PASS  
WATER FILTRATION PLANT  
MONTHLY OPERATING REPORT

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STATE OF OREGON  
DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES

704 Lewis Building  
Portland, Oregon

Bulletin No. 10

**Placer Mining on the Rogue River, Oregon,  
in Its Relation to the Fish and  
Fishing in that Stream**

By

Dr. HENRY BALDWIN WARD, Consultant

An Ecological Study Made for the  
Oregon State Department of Geology and Mineral Industries  
September, 1937 - May, 1938



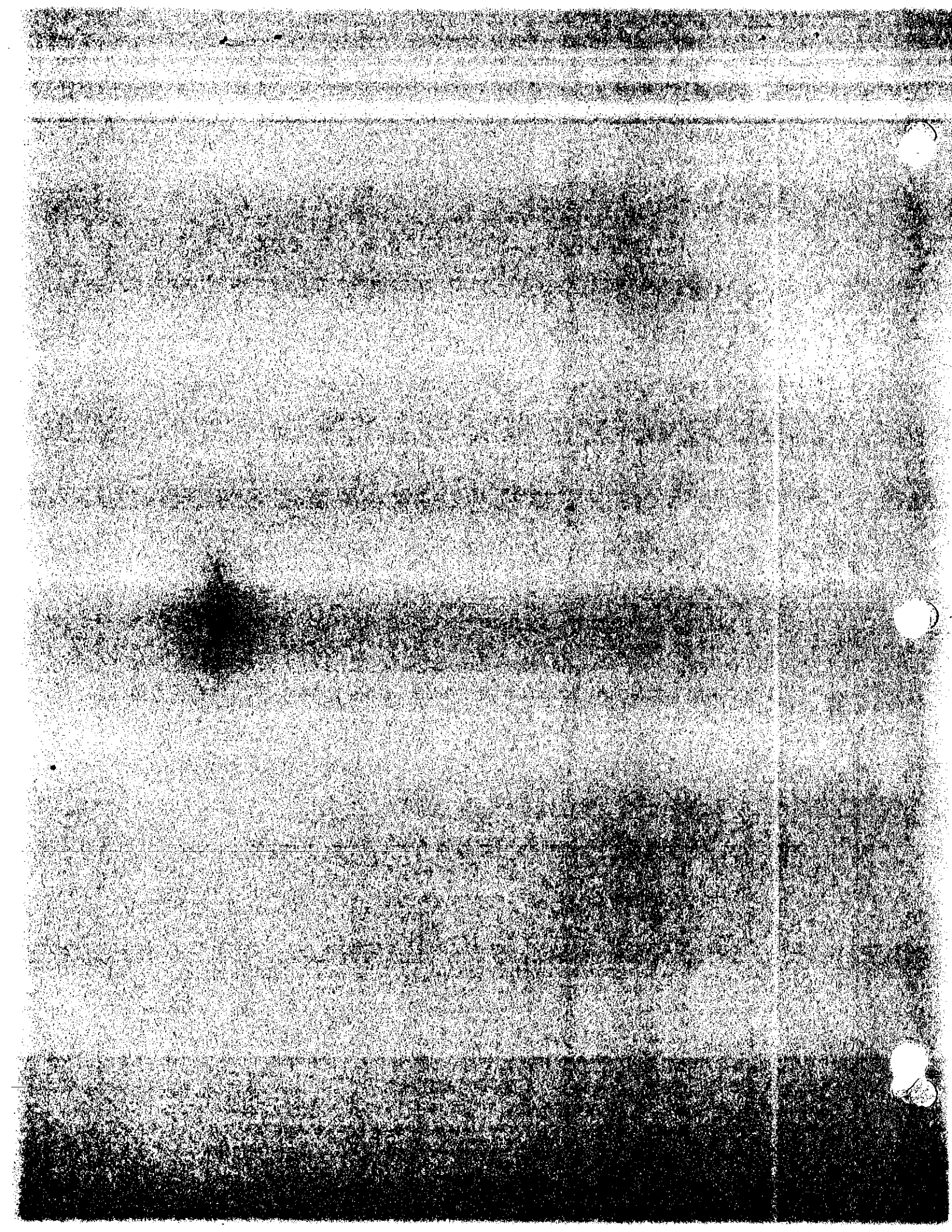
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EARL K. NIXON  
DIRECTOR

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PRICE 35 CENTS

## FOREWORD

Any matter which seriously affects the status, or which might conceivably cause the stoppage, of mining in a considerable portion of a state, must be of interest to other mining communities and of concern in the area affected as well as to the state agency formed to foster mining and mineral industries.

A controversy during 1937 between fishing and recreational interests, and mine operators in the Rogue River drainage, caused the former to bring injunction proceedings—later terminated by compromise—which would have gone far to kill both placer and quartz gold mining in southwest Oregon. One of the principal objections of the complainants, the fishermen-recreationists, was the alleged harmful effect on fish and fish life of the discharging into streams muddy water from placer mining.

For no other reason than to determine the true facts as to this phase of the controversy—the effect of muddy, mine water on fish and fish life—the State Department of Geology and Mineral Industries caused a strictly scientific study of the situation to be made. This report by Dr. Ward is the result of the investigation. The impeccable record of the author and his standing as a biologist among American men of science must be sufficient guaranty for all that his observations are accurate and his interpretations sound.

The essence of Dr. Ward's findings is that the placing of muddy water from placer operations in the Rogue River drainage is not inimical to fish and fish life.

Conservationists and fishermen should note particularly Dr. Ward's observation that the future of our famed coastal fishing streams—whether the fish population will be slowly decimated or whether it will be increased and maintained for the pleasure of all—will be determined by whether or not we demand real, honest-to-goodness, scientific biological control of our streams and fish problems.

EARL K. NIXON, Director.

September 1, 1938.  
Portland, Oregon.

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## GENERAL CONSIDERATIONS

### INTRODUCTION

In August, 1937, I was consulted by Mr. Earl K. Nixon, director of the Oregon Department of Geology and Mineral Industries. He stated that the governing board of that department desired to arrange for a study of the effects of placer mine washings on the runs of valuable fish in the Rogue River. Mr. Nixon assured me that the Board had no desire to confirm fixed views but sought to ascertain the actual facts in the case and would welcome the most careful and complete study of the river whatever might be the results of such a study.

Shortly after this conference I received an invitation from the Board to undertake the work in accordance with the general understanding reached in my interview with Mr. Nixon. The month of September was spent partly in Portland conferring with various persons officially interested in the work on the Rogue River, and in part on the river. This was the low water period of the year. Further studies were made on the river at high water stage in March and early April, 1938; following that, the results of my work were discussed in Portland with the director and others.

A preliminary report was submitted last October. At that time as a basis for final conclusions I recommended the periodic collection of water samples at different places on the Rogue and the determination of turbidity and of erosion load throughout the year at points above the entrance of placer mine run-off and also below that. It was agreed that such tests be carried out at Grants Pass and at Agness.

During September I had been granted the assistance in the field of Mr. A. M. Swartley of the department. His intimate knowledge of the area and broad professional experience in geology proved of great service in the study of the river conditions and their probable origin. At the conclusion of our work together, Mr. Swartley wrote an extended report on the physiographic features of the region. From this valuable record I present herewith a part of Mr. Swartley's manuscript having a particularly intimate relation to the biological studies and conclusions reached in my own report. Mr. Swartley's section appears as Appendix A.

I also recommended that experiments be made to measure the effects on young salmon and trout kept for some time in water heavily loaded with mud from placer mining projects. Accordingly Mr. Nixon arranged with Dr. L. E. Griffin to carry out such experiments in his laboratory at Reed College. A summary of Dr. Griffin's important experiments is given with his permission in Appendix B. It is important here to emphasize one conclusion of Dr. Griffin: namely, that these few preliminary experiments should be carried further. The general results secured cannot be questioned, but their unique character and their importance both practically and scientifically call for their repetition in the light of experience gained in order to determine the limits, if any, within which the conclusions are to be accepted. I am indebted to Mr. Swartley and to Dr. Griffin for the privilege of including sections of their reports in my own.

Before I started on a study of the river the complaint filed with the court by citizens of Curry county was placed in my hands. Careful and repeated study of this document familiarized me with the views of the complainants regarding the condition of the river, the state of the fisheries and the alleged cause of the conditions which were described in detail in the document. This presentation of the case was kept constantly in mind; the region was studied with care and no trouble was spared in my efforts to determine the accuracy of the report and the justification for the opinions advanced. The various items included in that complaint are discussed later in my report in connection with the analysis of the situation as I found it.

My problem was to determine how far and in what way the fish of the Rogue River and its tributaries were affected by the placer mine run-off. No other region was to be considered; no other type of mining was to be taken into account. I was free to ascertain the facts in the situation and to make known all the facts which might be discovered in my study without suppressing or modifying any of them to meet the views of any of the apparently conflicting interests involved. I have tried to justify the responsibility laid upon me and hope that I have succeeded in some measure in discharging that responsibility.

### THE ROGUE RIVER

The Rogue River rises in the Cascades of southern Oregon; its headwaters drain the entire western slopes of the ridges which encircle Crater Lake. For about 250 miles among mountains and hills it pursues a circuitous course trending southwest before it empties into the Pacific Ocean at Gold Beach. The region has long been known for the beauty of its scenery, the fertility of its orchard-filled valleys, the abundance and quality of its fish. First of all in the record of history was the fame of its gold-bearing sands and gravels which were extensively exploited by early settlers and have continued with varying activity to yield of their riches to those engaged in placer mining. No records have been found giving accurate data concerning the condition of the water in those early days. We may be sure that workings so extensive as were operated then discharged into the river considerable volumes of the same material that characterizes the run-off today. Indeed, it is reported by early navigators along this coast that the outlet of the river could be detected by the volume of reddish yellow water which it poured out and which could be followed for a considerable distance into the sea before it mingled indistinguishably with the ocean waters.

Only one published record has been found of previous analyses made of water from the Rogue River. This was printed in Water Supply Paper 363 (U. S. Geol. Survey, 1914). The table given there covers a period from September 10, 1911, to August 14, 1912, and the samples were taken near Tolo (now Goldray). It represents conditions in the stream far above placer mining operations, hence due entirely to natural erosion. The suspended matter varied from 3.6 to 1,360 tons per day and the dissolved matter from 239 to 2,328 tons per day. The turbidity varied from a trace to 350 scale units and the curve of variation in turbidity departed somewhat widely from that of the amount of suspended matter present. Thus the maximum turbidity recorded was observed in the period July 16-25, whereas the maximum of suspended and dissolved materials was obtained on January 8-17. The volume of the river fluctuated also widely, as shown by variations in the mean discharge from 1,141 to 14,134 second feet. Though this record covers a single year only, it shows wide and also rapidly fluctuating conditions to which

the fish in it have been and still are subjected by nature.

The geography, geology, climate, water supply and floods in the Rogue River valley are succinctly discussed in the introduction to Water Supply Paper 638-B (U. S. Geol. Survey, 1932) on the Water Power Resources of the Rogue River Drainage Basin, Oregon. No further discussion of these features is needed here. The data given in this bulletin are of value in determining the significance of the additions to the normal stream flow as the results of placer mining operations.

### ROGUE RIVER FISH AND FISHING

The Rogue River has long been held in high esteem as a salmon stream. It has been visited annually by many fishermen from Oregon and from other states and records of their sport, printed in various magazines devoted to travel and outdoor life, have given it truly an international reputation. Some years ago I met on the Rogue the treasurer of the International Olympic Games Committee who had come from England to test his skill on the far-famed salmon and steelhead of that stream. In 1930 I myself published in *Outdoor America* an article in which I dwelt on the beauty of the stream, the abundance and fine quality of its fish and its high value as a recreational center for Oregon and its visitors. Many other similar articles might be cited.

Only three species of anadromous fish contribute in significant numbers to the fame of the river: the chinook salmon (*Oncorhynchus tshawytscha*), also known as king, Columbia River, or quinnat salmon; the silversides (*Oncorhynchus kisutch*), also called coho, or silver salmon; and the steelhead (*Salmo gairdnerii*), commonly classed as salmon trout and regarded by ichthyologists as the sea-run form of the rainbow trout (*Salmo irideus*). Of interest to the fisherman are the various trout of the Rogue system. These do not run to the sea and are not further considered in this report.

It has been customary to speak of separate runs of spring and fall chinooks and of summer and winter steelheads. These are not always clearly separable and their spawning periods are either identical or closely continuous. Structurally the varieties cannot be separated and differences in movement and other activities vary with exact climatic conditions. They are not known to be

affected differently by factors discussed in this report.

No one knows when salmon or trout first came to the Rogue River, but it seems probable that the salmon spawned at the foot of the retreating glaciers of the Ice Age and followed up the cool run off of the disappearing ice masses until their spawning grounds became as today: "These species of anadromous fish ascend the river to the highest point attainable before making their spawning beds, seeking the waters that are purest and coldest." (Wharton—*The Rogue River*)

The first settlers found the stream teeming with the same fish that are present today in lesser numbers. Testimony of the former abundance of salmon is given by many brief references in early records which though apparently extreme in phraseology are nevertheless proof that the fish in their annual migrations appeared in enormous numbers. That these numbers have been greatly reduced in the last 75 years is unquestionably true. But the same is true in every region and probably in every stream from California to Alaska. Increase in population and consequent modifications in natural conditions, multiplication in number of fishermen and "improvements" in means of capturing the fish, better means of transportation and economic pressure are among the factors which have multiplied many times the hazards facing the fish. As one scans the long list of perils that confront the fish in fresh water and in the sea, from the start of life to its finish, should we not rather marvel that despite all so many survive to multiply and maintain the race?

The river was once the seat of an extensive commercial fishery. From the records of the Oregon State Fish Commission it appears that the commercial catch in the years 1929-1933 inclusive was 185,775; 194,269; 267,766; 528,384; and 346,962 chinook salmon alone. In 1934 the catch was 174,006, and the river was closed to commercial fishing June 13, 1935. During all this period the steelhead was rated as a game fish and was not legally taken except on hook and line. Large meshed nets employed in commercial fishing insured a nearly total escapement of the steelheads and also of all save the largest silver salmon, although in the years 1929-1933 from one to 42,000 silversides were taken annually, or on the average in that period nearly 15,000 a year. Since the time when the Rogue was closed to commercial fishing in 1935,

all the fish captured have been taken legally only by sport fishermen limited in season and to the use of hook and line alone. But no record of the catch is required and no figures can be given to measure the present size of the run. Estimates are subject to individual prejudice and are of limited value. In considering the present supply one must bear in mind furthermore that the time intervening has not been long enough to demonstrate the results of this remedial measure. It is well known that the curve of destruction descends sharply, but the curve of recovery rises very slowly at the start.

#### MUDDY WATER

The Rogue has always carried loads of silt. The extent of its drainage, the depth of its valleys, the amount of water-worn material in its area, and the drop of several thousand feet in its course of 250 miles to the sea, as well as the consistent testimony of explorers and settlers during the last century, give evidence of marked fluctuations in volume of stream flow and in clearness and turbidity of its waters.

All the evidence that has been obtained justifies the conclusion that no present-day contributions of materials produced by bank erosion differ in character or exceed in amount those added periodically by purely natural processes in past times. Splendid runs of salmon and steelhead were established and maintained under truly natural conditions which certainly were on occasion more extreme and violent before man ever came into the picture than they are today. Furthermore, there is good reason to believe that placer mining run-off was larger in amount and more continuous in the early years of that industry when for a time at least greater areas were being mined, more men were at work and cruder, more violent methods were followed than are employed today.

Somewhat later the best deposits seemed to have been exhausted, new discoveries of gold elsewhere drew attention away from this region. More recently social and economic changes have led to new interest in this resource and to renewed activity in Rogue River valley placer mining. Even at that the industry has not apparently assumed the proportions of that first period. This is important in our discussion as indicating that conditions today do not exceed and probably do not equal those which the fish met naturally before our nationals invaded this valley and also during that earlier period of pioneer mining activity.



### CHANGES IN THE RIVER AFFECTING FISH LIFE

The river is modified and the life and habits of the fish in its waters are affected by such changes as are produced by human agencies. To be sure no one can think rightly of the stream itself as a constant environment. On the contrary it is undergoing continual change. The amount and location of winter's snowfall, the volume and time of seasonal rains, the duration and precise period of regional droughts, and other climatic variations produce variations in water level, in bank erosion, in growth of grasses, underbrush and trees in the drainage basin; thus sudden and often extreme changes in contours of the banks and surrounding country add sediments of different types to its waters and modify the conditions under which the fish it harbors are forced to live.

Similar changes which are not so easily seen take place in the bed of the river. Each flood cuts deep holes at some places and fills up such holes elsewhere; materials picked up at one point are sorted as the current varies and deposited at many different points. No region is spared, for even solid rocks are deeply grooved or broken and moved about as time passes. During my study of the river in March a tremendous slide at one point poured tons of material into the stream and blocked its course for days. In the past history of the valley such occurrences have often recurred and interfere violently with the gradual though slow disintegration of rocks and soil which are constantly adding to the environmental materials on which weather and water may work in tearing down and rebuilding the different areas in the valley.

Coming from the spring-fed slopes of high mountains, its waters were cold and pure. Its rapid descent and its rocky banks with frequent rapids in its course loaded the water with a rich supply of oxygen. The heavy forest cover of its shores in primitive days served to maintain the low temperature and high oxygen supply of its waters.

Thus the Rogue River furnished originally unsurpassed conditions for the development and perpetuation of large and fine races of the anadromous fishes. The coming of man has wrought many changes in the environment which have been clearly unfavorable to the fish. These changes have been (1) the construction of dams; (2) the building of diversion ditches; (3) the development of agricultural interests, such as farms, orchards, forests,

nurseries; (4) the organization of towns and cities; (5) the establishment of factories and industrial enterprises. Probably in point of time before any of these, came placer mining with its violent overturnings of natural soil.

All of these enter into relations with the river which necessarily modify its original character. The changes are usually made without consideration of their effect on the stream as the home of the fish and in most instances affect unfavorably the welfare of those and other forms of aquatic life. It is important to consider in detail the precise relations involved and the results of the changes made.

Dams interfere with the upstream migration of the adult fish. Under natural conditions the fish penetrate into the smaller tributaries and upper reaches before depositing eggs and milt. To avoid interference with the migration of the fish, dams are provided with fish ladders, the construction and condition of which are all important factors. The dams in the Rogue, at Savage Rapids and Goldray, are equipped with ladders, but at the time of my visit they were not operating well. More extended study would be required to determine whether this was only a temporary condition and how far it affects the welfare of the fish. The same conditions were reported by Ledgerwood who studied the river in August, 1936 (see below). No special devices were found to aid the young fish in their journey down stream. It looked as if the migrating young would be drawn into the turbines and destroyed. No study was made of this problem.

Dams also modify the natural temperature of the river water. This factor was studied in August, 1936, by Edgar Ledgerwood, from whose report to the Oregon Fish Commission the following data has been taken. Above the obstructions the temperature of the river water rose on the average 1° F in 6 miles. At Goldray dam it mounted to 3.5° F in one mile, and at the Savage Rapids dam, while average daily temperatures remained about equal, the minimum was raised about 2° F, and the water in the fishways reached 72° F, a level distinctly unfavorable to salmonoid fishes.

When cooler water from lower levels behind the dam is drawn into turbines and discharged through a tailrace, this stream of lower temperature proves a strong attraction to adult fish ascending the river in search of spawning grounds. The fish attracted to the tailrace fight, of course in vain,

to find access thus to upper levels and many attempts have been made to bar them from this stream. Similar deceptive streams start from leaks at lower levels in dams and draw the fish away from ladders that have been constructed to furnish them access to the water above the dam. As ladders are naturally fed by surface water from the basin behind the dam, they carry a stream warmer than the flow from the tailrace and from leaks near the base of the dam. Under these circumstances the adults are at least delayed, if not injured, on the trip to the spawning grounds, but as yet studies have not been made to determine the loss due thereto.

The plans proposed by the Reclamation Service (Bull. U. S. Geol. Survey 638-B) for transforming the stream into a power-producing element by constructing 34 possible dams, or even part of the maximum efficient number, would undoubtedly entirely destroy the runs of salmonoid fishes and close the career of the Rogue as a rendezvous for fishermen.

Diversion ditches have also modified natural conditions in the Rogue River. The wide open entrance of such a ditch with its inflowing current invites the entrance of aquatic animals, and particularly those living near the surface or feeding along the shore. This includes especially young fish, either fry or fingerlings, seeking to descend the stream and escape into the ocean. Even older fish such as spawned-out steelheads, moved by the same impulse for the sea, will at times enter such ditches. That such is the case abundant testimony can be furnished. Young fish have been watched often entering such ditches, moving freely down the current, accumulating in deeper holes when the water was shut off, or found dead in irrigated fields. They are seen in miners' settling basins or power-plant reservoirs, are torn to shreds in turbines or ejected with water from the nozzle of a giant. It is immaterial whether the diversion ditch serves a power plant, an irrigation project, a mining enterprise or some other purpose, the fish, young and old, which enter it are condemned to destruction. While the number tempted to enter at any particular moment may be small, it must be remembered that such ditches work day and night until shut off and the total count of fish destroyed is unquestionably large. Most of these conditions I have observed personally on the Rogue and these

observations have been confirmed by testimony of others.

Recognizing this serious loss, Oregon has provided by law that the intake of diversion ditches must be screened so as to prevent the entrance of fish. At the Savage Rapids dam an expensive screen has been installed to prevent fish from entering the ditch which takes a large volume of water out of the river. No study whatever was made of the efficiency of this installation, but even casual observation of other ditches showed some to be entirely without protection as well as others in which the screen as placed was worthless. These conditions are responsible for a large and preventable loss in the fish supply of the Rogue River.

Changes in the valley due to human occupation and necessary modifications are significant and in part not usually recognized. The cultivation of farms, orchards, nurseries, and all other agricultural activities, save forestry alone, break up the sod, destroy the underbrush, dry out the soil, drain marsh areas large and small, reduce the capacity of the land to serve as a holding ground for water, hasten the run-off of rain and melting snow, heighten erosion; and all of these influences react unfavorably on the stream as the home of the fish. These conditions are too well known and too often discussed to call for further notice here.

One other feature is less widely recognized and deserves mention because of its intimate relation to the welfare of salmonoid fishes. The diversion of river water through ditches, its dispersion over fields, and slow return to the river by seepage channels results in raising the average daily temperature of the river during the dry summer season. This is certainly significant in the case of a stream like the Rogue where the water temperature at this season is near the upper limit of tolerance for salmonoids. One can hardly doubt that the water of the river is on the average warmer in summer now than it was 100 years ago before the cutting of the forests, the mining of the soils and the creation of farms began. These changes are inevitable, but no one would wish it otherwise. Some modifications of natural conditions must be accepted if the land is ever to be made useful for human homes and the prosperous existence of man. Temperature conditions in the Rogue River have not yet changed sufficiently to make the river unsatisfactory for fish life, but the destruction of forests around its sources and on the

mountainous areas of its lower reaches will certainly threaten its supremacy as a famous fishing ground and should be controlled with the utmost care.

The influx of population into the valley of the Rogue led as elsewhere to the organization of towns and cities, and also to the establishment of industrial plants, such as canneries, factories, packing plants, and other establishments which yield considerable amounts of waste that as usual are discharged into the streams. These materials are often distinguished as domestic sewage and industrial wastes, but are actually not separate types. Under present day conditions both are ordinarily mixed and discharged through collecting systems, i. e., municipal sewers. These wastes contain organic materials in process of disintegration or chemical substances which are by-products of industrial plants. The latter are often toxic in character and the former take up oxygen with such

avidity that the water of the stream is deprived of this essential element. Either condition is serious and in the extreme case fatal to the fish. Young fish are most sensitive to these as to other unfavorable conditions.

The establishment of sewage treatment plants by the larger communities in the Rogue valley has been adequate to meet present dangers. The stream is now free from toxic chemicals and the oxygen content is adequate at all points tested. But the growth of other communities, the establishment of isolated canneries or manufacturing plants and the use of industrial processes involving chemicals of a toxic nature may discharge into the river at any time untreated wastes which will seriously threaten the welfare of the fish. Such occurrences in other regions have resulted in the sudden destruction of large numbers of fish. It would be deplorable if ever such a misfortune befell the Rogue.

## PRESENT CONDITION OF ROGUE RIVER SYSTEM

### MY SURVEY AT LOW WATER

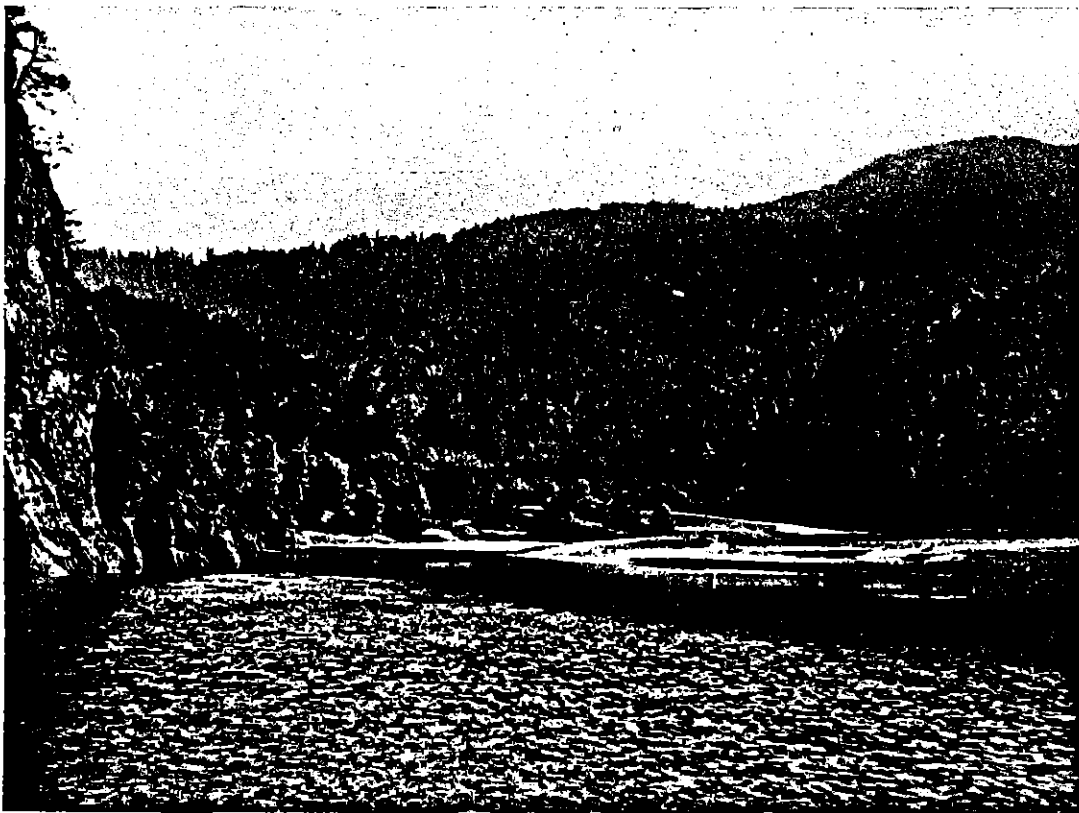
The relations of any organism to the environment are complex and the relative importance of any single factor difficult to determine definitely. Superficial conditions are always most apparent but often of minor significance if any in the solution of a given problem. The first step is necessarily the precise determination of the facts at issue. Only after those have been precisely determined can the causal relations be profitably discussed. At the outset of my study I was forcibly impressed by the mass of wild statements current regarding the condition of the river and the fish. Even among those who lived near the river, fished at all seasons in its waters, knew the pools and the habits of the fish and were not influenced by relations that might warp their judgment of actual conditions, there was wide difference of opinion regarding the condition of the river and the number of fish as well as the cause of changes which all agreed had taken place.

It was of primary importance to settle if possible some of the facts in dispute and my attention was first directed to the river. Since the most serious complaints came from the part of the stream which was below the points at which placer mine run-off reached the main river, it was decided to begin the study near the mouth and work up stream. The work started the first of September and at that time the river water stood at or near the lowest level reached in the course of the year. Placer mining in the district had stopped some weeks earlier; stored up water supplies had been drained and no rain had intervened to complicate the situation. In consequence the river water was remarkably clear and free from products of erosion, the current ran slowly, pools were drained down so that the flowing water rippled lazily over gravel bars. One could see with clearness the records of earlier water levels on the banks and bars and read from a boat the actual condition of the bottom in all save the deepest spots in the pools. No period could have been more favorable for determining the real condition of the stream and the deposits made at various levels.

A trip was made on September 6 in a fishing boat from Gold Beach to Agness. I was accompanied by Mr. Nixon and Mr. Swartley. Evidences

of stream activity at various periods were sought for with great care. Floating materials stranded high on the banks marked the extreme limits of high water; more abundant deposits were found in back waters, on shelving beaches above the existing water level and reaching down to the margin of the water; even on the stones in the pools one could find evidence of stream deposits of recent date. From point to point we landed on the shore, studied the features noted, measured the thickness of the deposits, determined roughly the materials of which the deposits were composed, scraped samples from the surface of the larger stones in protected corners where the covering was thickest and discussed together the amount and origin of these deposits. I made extended field notes on the color, thickness, consistency and physical character of these deposits as well as of the areas involved and their relations to rocks, promontories and direction of stream flow. Since these deposits had occupied a prominent place in statements both written and oral regarding the condition of the Rogue, extreme care was devoted to recording every detail of the situation that could be found.

The area covered by these deposits was conspicuous. As the river channel shifts from bank to bank the deeper water forms a series of crescentic areas reversed in direction and joined at the tips (Fig. 1). The crescents vary in proportions but are essentially uniform in type. The shore which faces the concave side of the crescent has usually a longer, gentler slope (Fig. 2) and these beaches which showed clearly the deposit were from one to several times the area of the low-water river itself. They formed thus conspicuous features of the landscape. On some of them were prominent longitudinal bars of coarse gravel sharply set off from the stream (Figs. 3, 4). In other places the slope of the beach was longer and gentler. Sometimes rocky headlands (Fig. 5) or strings of smaller rock masses along the shore broke up the formal pattern to some extent (Fig. 6). In sheltered spots behind such rock masses one could find deposits of almost pure sand, varying in depth from half an inch to a foot or more, but in number and total volume such deposits were small in comparison with the length of the stream and the area within the high-water marks on the banks.



*FIGURE 1—View of riffle where one crescent of river connects with the reversed crescent next below.*



*FIGURE 2—Wide, gently sloping beach between high and low water levels on Rogue River near the mouth of the Illinois.*

The area within which rocks and stones were covered by the material deposited from the river water was not only considerable in extent but it was conspicuous by virtue of the color of the deposit. That was of a pale reddish yellow hue varying somewhat in intensity or density of coloring but still of a characteristic shade in sharp contrast with the clear greenish water and the darker green of the vegetation or the dull colors of the rocks. In fact, as we rode up stream in the motor boat such areas came out with striking distinctness at every bend when we passed from one pool to the next and the sloping beach with its painted stones was shifted from side to side. No one observing the situation could fail to be impressed with this as the most conspicuous feature of the landscape. Apparently the deposit stopped just at the water's edge, but closer observation showed that stones under water were covered with a similar deposit that needed only to be dried out to attain the appearance of that on the stones of the bank above the water level. At one extreme, stones that were not coated at all or only faintly were located at or near the upper limits of the high water, showing that the material was not present in equal amount or the conditions for its deposit were not favorable at maximum high-water level. But by contrast over the lower half, more or less, of the interval between high water and lower water limits all the stones on the sloping beaches and even the rocky promontories and steep rock faces, which in a few places margined the stream, were colored similarly by this conspicuous deposit.

The amount and character of the deposit was also carefully studied. We landed often and examined at close hand the stones of the beaches, sought to measure the thickness of the deposit on stones at varying levels and in different areas along the course of the river. It varied more in amount than in color; at some points it was so thin that only with difficulty could a sample be scraped off the stone even with the aid of a knife. On rough, broken, nearly vertical rock surfaces the color was distinct, but the material too scanty to get any sort of a sample. Under unusually favorable conditions flat stones lying fairly level carried a layer of the deposit estimated to be 1/16 of an inch thick. In one place, namely in a backwater behind a large rock where there was a considerable deposit of sand, I found a crust about 1/8 of an inch thick. It was so friable or "crumbly" that portions could hardly be removed without breaking up into

powder even under careful manipulation. The surface of the crust was like that on the stones, but it graded without visible boundaries into the sand below, and as the crust was lifted grains of sand fell off leaving some still loosely connected to the upper part in which also some sand grains could be seen. At the first attempt to follow up the structure of the crust, it collapsed into a mass of loose sand grains with a small quantity of a fine powder. When still undisturbed on the surface of the sand or on stones where it was much thicker and devoid of larger sand grains, the surface of the crust was traversed by a multitude of small furrows running in every direction and reaching down into the crust. These furrows divided the crust into small, irregular blocks measuring 1/2 inch or less in maximum diameter. They resembled in miniature the broken surface of dried-out mud. The crust has thus scanty volume, imperfect continuity, and little or no adhesion or cohesion.

Samples of this material were obtained at different times from points on the Applegate River, from both forks of the Illinois River, from various creeks tributary to these or the Rogue, and at numerous places on the Rogue River itself. In gross appearance the samples were alike and manifested similar physical characteristics when handled. At most one could note only slight differences in the color of the dry sample.

When samples of this crust were added to water, thoroughly agitated and left to settle, the sediment settled out in 24 hours, but the water was still colored and held in suspension a small quantity of very fine material. After standing 44 hours the water was perfectly clear. When tested this water showed a very small amount of colloid material which could not be measured in any such rough determination. It probably agreed substantially in amounts with the exact measures given in the Lazell determination (see later). All of these tests show that the amount of colloidal material in the water of the Rogue River and its tributaries below the point at which the run-off of placer mine workings has been added to the stream is too small to produce on the bottom a "blanket" which might affect adversely young fish, eggs in nests if present, or the fish food in the water.

I have discussed this deposit at length so that its character may be clear even if its source is uncertain. It may be derived from natural erosion and it may come from placer mining as artificial erosion. It is more likely to come in part from each

of those sources. However that may be it is not entitled to be called a "blanket" or to be charged with injurious or destructive influences on the fish life of the river. Certain fresh water formations are designated "blankets" because they cover the bed of the streams or lakes so thickly or imperviously that they smother the aquatic life there and prevent its multiplication as well as its growth. Thick cohesive mud layers, deposits of petroleum refining wastes or of some other chemical industries, sludge from domestic wastes and similar substances form continuous, resistant, impermeable layers which rightly are designated as "blankets". Their physical, chemical, and ecological differences from the deposit I have just described in detail are too evident to call for further analysis.

During the month of September our study was extended to cover the Rogue River and its tributaries. The work was carried to points well above all traces of placer mining and of all influences of human interference. Throughout this period conditions were uniform; minimum water level, sluggish current, lack of suspended materials and consequent clear water in the river at all points made it possible to investigate deposits, food supply, and general conditions for fish life thoroughly and reach some definite conclusions. Sewage treatment plants visited at Grants Pass and Medford were being operated well and no evidence was found that domestic or industrial wastes had been released without proper treatment. No extensive or dangerous deposits of any sort were seen at any point. Even below the points at which tributaries entered from areas in which placer mining had gone on at earlier months in the year, no changes from normal conditions were observed. The pools sheltered migrating fish; they were also seen in the stream below the dams, and a normal supply of fish food was found at various points visited. While the fishermen reported scanty catches, or none at all, this condition was apparently due to inactivity on the part of the fish, and that might well be attributed to the plentiful food and lack of stimulating weather.

The data just given summarizes results of the work done in the field last September. That was the period of low water, little or no precipitation and no placer mining. It was deemed important to study the river at the time of high water when the mines were in full operation. The preliminary report submitted at this time was regarded as subject to modification on the basis of later studies.

## ROGUE RIVER SYSTEM AT HIGH WATER

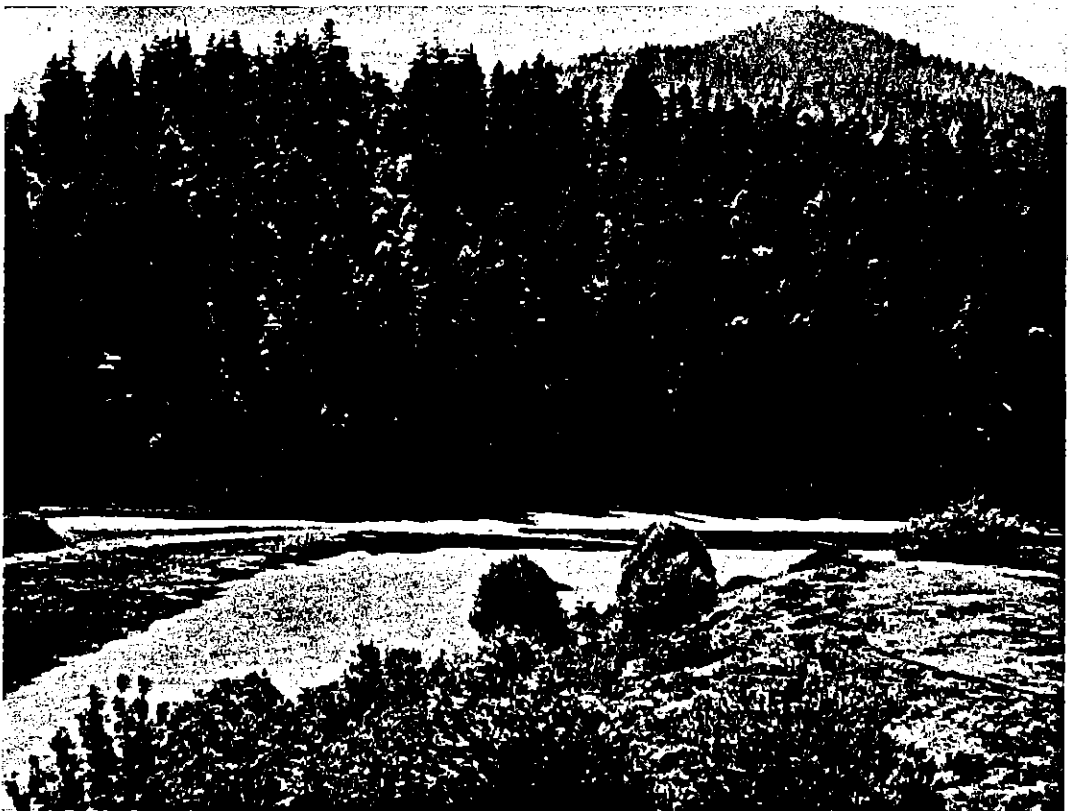
Conditions found on the second visit, during March and April, contrasted strongly with those just described during September, 1937. The water in the river was very high and remained at a high level during my entire stay. Consequently observations on fish and their activities were limited. It was impossible to secure any data on spawning grounds below Grants Pass. However, at that stage of water the fish were hardly likely to stop for spawning in areas where the depth and strong current made conditions so unfavorable. The placer mines were operating actively and the run-off was a conspicuous feature in smaller tributaries and at points on the main river also.

The water supply of the placer miners was about at its maximum and consequently the run-off and its burden of soil materials washed out by the operations were also at a high level. Accompanied by Director Nixon and in some cases by Dr. Griffin also, I visited some of the largest and most active of the operations. Samples of the run-off were taken at points where the stream was first turned out from workings into a watercourse and then at points farther down the creek in order to determine how rapidly the original concentration was diluted. The results of these studies are discussed in a later section of this report. In general it was evident that the amount of material in suspension was reduced more rapidly than the appearance of the water changed. The color of the run-off coming from those workings being carried on in brilliant red deposits was particularly persistent while the amount of material in suspension (ppm) fell off rapidly.

An examination of the Rogue and its tributaries made at a period intermediate between high and low water would disclose, no doubt, some features of the situation not determined at the time of either visit I made to the region. Indeed it would be valuable to continue a study of the stream throughout the entire year. Such an investigation would furnish a solid foundation on which to build regulations for preserving and developing rightly all of the resources of the region. Without such a complete record of the changes from one period to another and of the varying relations between different influences the exact effect of the work done on a single resource can only be roughly determined. The proper solution of all the complex factors involved can only be found by securing



**FIGURE 3**—*Crescent of river above bridge at Agness showing beach with sharper bank at low-water level*



**FIGURE 4**—*Crescent with longitudinal bar of coarse gravel on outside of curve and higher rocky bank with vegetation inside curve. Taken at junction of Rogue and Illinois rivers.*



much larger knowledge and more perfect coordination of all interests involved.

In connection with this section giving the record of the survey made on the Rogue River it is appropriate to call special attention to the value of the assistance given me in different parts of the work. It would not have been possible to start the study and carry it out so promptly without the personal attention afforded me by Director Nixon. Frequent discussions with him enabled me to follow up details I wished to study without loss of time. His frankness in recognizing the dangers in the situation and his constant efforts to find a fair solution of the problem made his assistance inspiring as well as constructive.

The supplementary report of Mr. A. M. Swartley, who aided me in the part of the survey made in September, 1937, is of value in giving the views of a careful and experienced geologist. He confirmed fully statements I had reached in my preliminary report as to the physical conditions found in the Rogue River drainage, and especially the small amount of clay and other fine material on shores and stream bottoms, in backwaters and otherwise in our examination of the river and its tributaries. He discussed fully the methods of rock disintegration and decomposition and the transportation and ultimate character of the materials produced. He emphasized the fact that mining debris "is chemically inert, makes no oxygen demand on the stream and therefore takes away from the flowing water nothing which the fish require. This is equally true of this material whether placed in transit by nature or by man since [the products] are alike in nature, come from the same sources and are only being accelerated by man in their journey to the sea." Further he stated: "All these materials entering the streams, whether by natural or human activity, whether coarse or fine, whether traveling on the bottom, in suspension or solution, are almost altogether inert, suffer little change on their way to the sea, and having reached the end point of chemical change \* \* \* do not rob the water of oxygen which the fish demand, or add to the water toxic agents injurious to fish" [fish food or other forms of life]. The portion of this report printed as Appendix A includes only a few of the items of special importance in connection with features I am discussing in this my own report.

The appended summary in Appendix B of experiments by Dr. L. E. Griffin on young fish in

water carrying a heavy load of natural soil materials gives strong support to the conclusions from stream study. The mud came from the placer mining region in the Illinois River drainage basin; the fish were of species found in the Rogue River basin.

These experiments are unique. To be sure adult fish have been kept in water loaded with sawdust and with pulp or paper mill waste, so that much has been ascertained concerning the effects of certain types of material on adult fish. Also a long series of valuable experiments has been conducted by Shelford and his students on the effects of particular chemicals on adult fish. Further in Oregon, Finley and his associates have tested the results of placing young salmon in diluted municipal wastes and found the fatal effects of such an environment to be almost immediate.

In contrast with all these the experiments of Dr. Griffin have shown that young fish live well up to 30 days in good water mixed with an amount of natural soil materials from two to three times as large as the extreme load of the materials contributed to the Rogue River by maximum conditions produced by placer mining. These findings are discussed later in greater detail.

#### PLACER MINING AND WELFARE OF FISH

It is essential now to consider with exactitude the process of placer mining, the character of its by-products or materials discharged into the streams in the Rogue valley and the effects on the fish of the river at all periods in their life history and under the varying conditions in the stream at different seasons. In this consideration we are concerned only with those features designated properly as biological that have some influence direct or indirect on the life of fish. Problems involved in the construction and maintenance of dams and diversion ditches have been given adequate mention in the earlier portions of this report.

Placer mining is pursued in the Rogue River district by dredging and by sluicing or hydraulicking. The dredges are employed in only a few places and on extensive level areas where settling basins are provided. Under these conditions the final run-off as discharged into the Rogue or some tributary is free from silt and consequently may be left out of further consideration here.

Placers which are mined by hydraulicking and sluices are located in rough territory, very often in narrow gulches where settling basins are me-

mechanically impossible so that the run-off passes into the Rogue River directly or into a tributary from which it ultimately reaches the main stream. The water used is usually obtained by a diversion ditch which taps some tributary at a higher level and is thus in itself of fine quality. Accordingly the character of the run-off is determined by the materials in the soil which is broken up by the action of the water employed. The water carries a heavy burden of soil materials regularly designated as waste. In a large part of this region the run-off is highly colored and criticism has been particularly violently directed at the conspicuous and persistent color contributed to the stream. All of the materials involved deserve further consideration.

Attention must first be directed to the various meanings attached to the word waste or wastes. In mining, waste is "superfluous or rejected material not valuable for a given purpose". In physical geography, waste is defined as "material derived by mechanical and/or chemical erosion from the land, carried by streams to the sea." Wastes may thus consist of or include materials unchanged in nature or those which have been chemically altered, i. e., natural constituents of the soil or new substances produced by chemical action. The placer mine run-off is waste in the sense that it is superfluous and unserviceable material, but it is not material that has been modified by processes of manufacturing or chemical treatment. The placer mine run-off is composed of good water and normal unaltered soil; it carries no materials that can rightly be called *deleterious substances*. This distinction is fundamental and should be emphasized.

To designate placer mine run-off as pollution is a confusion of terms. Neither in dictionary definition nor in scientific analysis can the use of this term be justified. To pollute is to defile; to contaminate with wastes of man or animals; this is done by introducing domestic or community wastes, or such as are produced in manufacturing and industrial processes. Chemically these include toxic materials or unstable compounds which have a high affinity for oxygen and withdraw promptly so much oxygen from the water that they threaten the life of organisms in it. Trout and salmon prefer waters which are surcharged with dissolved oxygen and they are sensitive to any diminution of the oxygen supply. They are also sensitive to domestic and industrial wastes, i. e., foreign substances. But the substances carried in the water

coming from placer mines are those common to the soil of the region. They are stable compounds and make no draft on the oxygen content of the waters. Washings from placer mining have been poured into the Rogue River in quantities since 1850 and even when the stream was crowded with the immense runs of salmon, which characterized it in earlier days, the fish found these waters favorable for their existence; they maintained their runs.

Evidence of the character and effect of erosion materials is given in an important publication on the Detection and Measurement of Stream Pollution (Bulletin U. S. Bureau of Fisheries, No. 22; 1937) by Dr. M. M. Ellis, in charge Interior Fisheries Investigations. On page 432 Dr. Ellis points out that erosion silt has no effect on streams (a) in decreasing dissolved oxygen, (b) in increasing acidity, (c) in increasing alkalinity, (d) in increasing specific conductance, (e) in increasing ammonia, or (f) in specific toxic action on fishes. In his tabulation of effects under the headings of bottom pollution blanket and increase in turbidity, he indicates that erosion silt and other suspensoids have a critical limit which is discussed in detail at another point in his paper (p. 394). The dangers which he sets forth there are not one of them present in the Rogue River, as I shall proceed to show in detail.

In the Rogue River I have already noted the absence of any continuous layer of erosion materials which could possibly be designated as a *blanket*, or cover fish foods, nests or spawning ground with an impermeable layer. Cole (1935) has demonstrated experimentally that fish move uninjured through very muddy waters. Swartley in his supplementary report gives a table of the amount of suspensoids recorded in a group of streams, some of which are good salmon rivers; these carry from 137 to 395 ppm of solid materials and have turbidities varying from 27 to 245. In his experiments Griffin maintained for some weeks young salmon in good condition in water containing more than 1000 ppm of mud from placer mine areas in the Rogue River valley, whereas the maximum amount actually found in water taken from the river at Agness was 440 ppm (See Table II, p. 21).

Placer mining does not burden the stream with foreign materials or with substances that are toxic or inimical to fish life. Its processes contribute to the normal burden of the stream the same materials which are brought down from the hillsides of this area and no substance is involved which is



*FIGURE 5—Bold rocky promontory. Rock marked by color of thin layer of deposit below high-water level.*



*FIGURE 6—Scattered rocks along shore with bed of sand in right foreground.*

foreign to the materials the stream has carried for centuries. Not one of the particular materials listed or discussed by Ellis in his paper as constituting stream pollution hazards is found in the placer mine run-off of the Rogue.

An analysis was made of the dried soil from placer mines used in making the muddy water experiments carried on by Dr. L. E. Griffin (see Appendix B). The analysis was furnished by Dr. E. W. Lazell of Portland Chemical Laboratories. The protocol of this test follows:

Laboratory No. 39058.

Alumina 15.24%  
Total Sulphur .002% equals .005 sulphuric anhydride.

#### Settling Test

Time	Percent in Suspension	Particle Size Microns
2 hours	0.15	40
6 "	0.048	22
24 "	0.027	9
48 "	0.25	5

The particles remaining in suspension 48 hours are amorphous, having no action on polarized light.

Assuming 5 microns as the maximum size of a mineral colloid, the maximum amount would be .025%.

The material of which this analysis was made was taken directly from banks on which placer miners were working or had been working. The placer mine run-off secures its load of suspensoids from the same banks that furnished this material and has no other source of the material it carries.

Actually the process of placer mining adds no new material to the water of the river and produces no change in the aquatic environment except in quantity of soil materials found in the river at a given time. Now the exact amount of such material in the river has changed often radically and rapidly during each year in the past history of the river. Natural variations in climate make natural erosion work variable and with rapid and unpredictable as well as violent changes at unexpected intervals as well as from season to season. So long as materials remain of the normal type found in local soils the quality of the water is unimpaired and neither old nor young fish suffer. We can find no way to distinguish between the effects of placer mining (*artificial erosion*) and those of rain and flood (*natural erosion*). They differ at most only in degree and intergrade at different stream

levels. Both comparative data from other streams and experimental evidence with placer mud from the Rogue River area seem to indicate clearly that the limit of tolerance has not yet been reached here. As the stream flow in the river tapers off seasonally, the drop in miner's water reduces somewhat similarly the run-off from the placer mines, so that the concentration is not likely to exceed the amount employed experimentally without harm to the fish.

The run-off from placer mines in the Rogue River area is characterized by its deep red color which is strikingly persistent as well as conspicuous. This is a finely divided iron compound, probably iron rust, a stable compound, and contrary to common opinion in the region, not in the least injurious to the fish. It may contribute to the opacity of the water and perhaps also makes it difficult for the fish to see the fly, although Dr. Griffin found that young fish readily saw and promptly captured food thrown into the tanks in his experiment. However, if the fish cannot see or are not attracted by the caster's lures, the condition of the water may reasonably be said to protect the fish, even though it disappoints the fisherman!

#### TURBIDITY OF ROGUE RIVER WATER

The turbidity of the Rogue has been measured regularly by Mr. Edward N. McKinstry, engineer of the waterworks at Grants Pass. I am indebted to him for the following data which cover the hydrogen ion concentration (pH) as well as the turbidity of the stream during the period October, 1937, to May, 1938, inclusive. These data are recorded daily at that station and give a very good picture of the condition of the river above the region in which it receives the run-off from placer mining operations. The determinations of turbidity are recorded there by visual comparison with standard solutions made from water and fuller's earth in accordance with specifications of the La Motte Chemical Company. This method is recognized as standard for such analyses, and is widely used. At the same time I wish to call especial attention to the fact observed by several of us independently: the color of the sample affects the result, indicating a higher apparent turbidity than actually exists. (See Table I)

Turbidity samples were taken from the Rogue River at Agness from January to April inclusive

and are given in the following table. These represent the condition of the river water after all contributions of placer mine run-off have reached it. These samples were delivered to the Department in Portland and the determinations were made by Dr. L. E. Griffin. (See Table II)

In March Dr. Griffin accompanied Director Nixon and myself in a survey of the chief points in the Rogue River valley at which placer mines were operating at that time. Samples of the run-off were taken at the seat of operations and in the small streams at places between the workings and the Rogue River. The determinations of turbidities in these samples were made by Dr. Griffin later. In all determinations he used a photo-electric cell apparatus constructed by Professor Day of Reed College on the general principle of that described by Ellis in *Science*. These determinations, though accurate for practical purposes, were found to be influenced by the color of the sample. (See Table III)

Comparison of these records with those of the river at Grants Pass shows that only two (Nos. 10 and 12) taken on small streams close to workings were in excess of the concentrations recorded this year for Grants Pass where no placer mine contributions were involved. Sample No. 13 from Coyote creek equals the Grants Pass maximum for the past winter as recorded on February 6; the next largest sample we took (No. 6) came from the middle of Fry creek near O'Brien with 630 ppm; it only barely exceeds the second Grants Pass record this winter, viz, 600 ppm on March 23, while at No. 7 only one-eighth of a mile down stream from the point of No. 6 sampling this concentration had fallen from 630 ppm to 165 ppm and 450 feet further down stream it had dropped to 105 ppm, much below concentrations observed on various dates at Grants Pass during this winter. (Compare Table I with Table III)

The extremes of concentration of placer mine run-off which we could find were represented by

TABLE I  
DETERMINATIONS OF ROGUE RIVER WATER AT GRANTS PASS

Date	Oct.		Nov.		Dec.		Jan.		Feb.		Mar.		Apr.		May	
	pH	Turb.	pH	Turb.	pH	Turb.	pH	Turb.	pH	Turb.	pH	Turb.	pH	Turb.	pH	Turb.
1	7.3	8	7.3	15	7.1	15	7.2	20	7.1	50	7.3	30	7.1	20	7.1	25
2	7.3	8	7.1	12	7.1	15	7.2	15	7.1	45	7.1	30	7.1	20	7.1	35
3	7.1	8	7.1	10	7.1	15	7.1	30	7.1	150	7.1	30	7.1	20	7.1	30
4	7.1	8	7.3	10	7.1	12	7.3	15	7.1	60	7.1	30	7.1	20	7.1	28
5	7.1	8	7.3	10	7.1	10	7.2	15	7.3	30	7.1	30	7.1	20	7.1	28
6	7.3	10	7.3	10	7.1	10	7.1	15	7.1	700	7.1	15	7.1	15	7.1	20
7	7.1	12	7.4	10	7.1	10	7.1	10	6.9	500	7.3	15	7.1	10	7.1	20
8	7.3	12	7.3	10	7.1	10	7.1	10	7.1	325	7.3	15	7.1	10	7.1	20
9	7.7	10	7.3	10	7.0	7	7.1	25	7.1	100	7.3	10	7.1	10	7.1	15
10			7.3	10	7.1	30	7.1	10	7.1	85	7.1	10	7.2	10	7.1	15
11	7.5	10	7.1	50	6.9	350	7.1	10	7.1	85	7.1	10	7.1	10	7.1	14
12	7.3	10	7.1	75	7.0	225	7.1	10	7.7	50	7.3	10	7.1	10	7.2	12
13			7.1	30	6.9	60	7.1	12	7.1	60	7.3	15	7.1	10	7.1	10
14	7.1	8	7.1	30	6.9	40	7.1	20	7.1	270	7.1	15	7.1	10	7.1	10
15	7.1	8	7.1	50	7.1	30	7.1	80	7.1	80	7.1	15	7.1	10	7.1	20
16	7.1	8	7.1	25	6.9	25	7.1	35	7.1	40	7.1	160	7.1	10	7.1	15
17	7.4	8	7.1	20	7.1	20	7.1	40	7.1	35	7.1	60	7.1	15	7.1	15
18	7.1	12	7.1	70	7.1	18	7.1	225	7.1	35	7.1	45	7.1	15	7.1	15
19	7.1	12	7.1	200	7.1	15	7.1	80	7.1	35	7.1	200	7.1	35	7.1	15
20	7.1	12	7.1	400	7.1	15	7.1	35	7.1	35	7.1	80	7.1	35	7.1	13
21	7.1	12	7.1	90	7.1	15	7.1	30	7.1	35	7.1	35	7.1	35	7.1	12
22	7.1	12	7.1	25	7.1	12	7.1	100	7.3	25	7.1	50	7.1	20	7.3	12
23	7.5	12	7.1	40	7.1	10	7.1	80	7.1	25	7.1	600	7.1	20	7.3	12
24	7.3	12	7.1	25	7.1	20	7.0	35	7.1	60	7.1	225	7.1	20		
25	7.5	12	7.1	20	7.0	10	7.0	20	7.1	50	7.1	150	7.1	18		
26	7.3	12	7.1	15	7.1	10	7.0	15	7.1	45	7.1	50	7.1	18		
27	7.3	12	7.1	15	7.1	15	7.1	10	7.1	40	7.1	40	7.2	18		
28	7.3	11	7.1	15	7.1	12	7.1	10	7.1	40	7.1	40	7.1	15		
29	7.3	11	7.1	15	7.1	90	7.1	12			7.1	35	7.1	12		
30	7.5	11	7.1	15	6.9	30	7.1	10			7.1	30	7.1	20		
31	7.1	10					7.1	10			7.1	25				

\* From E. N. McKinstry, Grants Pass.

sample No. 10, just below the sluice of the Fry pit, with 7,840 ppm and No. 12, at the escape of a working on Coyote creek, with 38,000 ppm. In both cases the concentration was greatly reduced on the small stream a short distance below the point of actual discharge. Fish were seen in Coyote creek above the point of entrance where the sample was taken; they probably had ascended the creek and had passed through the water, although the discharge may not have been as heavy at the time when they went up that section of the creek as it was at the time that sample No. 12 was taken.

EFFECTS OF SILT ON FISH

Popular opinion cherishes an old and widespread belief that sawdust, silt, and similar solid

particles carried by flowing waters clog the gills of fish and kill them by suffocation. This opinion is apparently sustained by frequent discovery on streams or banks of dead fish in which the gills are crowded full of fibers and masses of floating materials identified as sand, paper, and pulp-mill waste, etc. Since these materials came apparently from mines and industrial plants, the responsibility for the destruction of the fish was at once charged to the specific industries. The discussion has long waged violently around the lumber, paper, and pulp mills. It is now clearly recognized that those wastes are dangerous because of the toxic substances discharged with the mill wastes or the decay set up in accumulated masses of such wastes, and not in any degree because of any damage due

TABLE II  
TURBIDITY DETERMINATION OF WATER  
TAKEN AT AGNESS  
(Made with photo-electric cell by L. E. Griffin)

Date	Turbidity			
	January	February	March	April
1		130	85	73
2		120	103	65
3		210	106	68
4		150	120	77
5		108	76	65
6		250	95	
7		267	75	
8		440	60	
9		153	57	
10		157	70	
11		152	65	
12		156	76	
13		168	75	
14		175	67	55
15		87	128	57
16	62	*	285	54
17	70	*	220	74
18	55	*	165	68
19	100	135	215	123
20	125	90	180	107
21	127	89	136	76
22	155	88	*	65
23	103	106	*	54
24	135	122	*	56
25	112	125	*	
26	102	103	142	
27	175	75	134	
28	50	70	100	
29	60		100	
30	103		65	
1	55		54	

\* No sample submitted.

Determinations of pH also were made of 10 samples, all of which were 7.0.

TABLE III  
REPORT ON SEDIMENT CONTENT OF SAMPLES  
TAKEN MARCH 26, 1938

	pts per million
1. From stream at first bridge beyond Ruch, 2.8 miles below summit of hill west of Jacksonville..	475
2. East fork of Illinois River at first bridge on Highway 199, south of Caves Junction .....	25
3. West Fork of Illinois River. Taken on west bank 50 feet above bridge. First West Fork bridge on Highway 199, south of Caves Junction .....	30
4. From bank of West Fork of Illinois River, opposite entrance of Fry Creek, 200 feet above steel bridge east of O'Brien .....	10
5. Taken in West Fork of Illinois River, 2 feet above bridge (same as 4) on east bank of river, below entrance of Fry Creek into Illinois River..	600
6. From middle of Fry Creek, 75 feet above its entrance into Illinois River .....	630
7. From east side of Illinois River, 1/4 mile below Fry Creek. Taken from small side channel of river. Water here heavily colored by Fry Creek discharge; other side of river clear .....	165
8. From west bank of Illinois River, about 450 feet below 7 .....	105
9. From west bank of Illinois River, 1,550 feet below bridge. (Same as 4.) .....	97
Numbers 5-9 form a series showing how rapidly the discharge of Fry Creek becomes diluted in the Illinois River. At point 9 the discharge of Fry Creek seems to be evenly distributed in the river. Above this point it was heavier on the east side of the river.	
March 28, 1938	
10. Sample taken from pool just below sluice of the Fry pit, 1.9 miles above steel bridge and Illinois River. Mine in operation with water flowing through sluice .....	7,840
11. Taken from stream at bridge 54, at Bridgeview. Althouse Creek .....	30
12. From end of flume at pit working on Coyote Creek, on left of road, operated by Cleveland. Fine bright red soil. Very fine material, much colloidal stuff apparently .....	38,000
13. At Coyote Creek bridge on Highway 99. 2.5 miles below point where sample 12 was taken ..	700

to floating particles. Some of the evidence for this may be given.

In 1899 Professor Prince, fish commissioner of the Dominion of Canada, a scientist of high standing at home and abroad, wrote as the conclusion of years of travel and observations on lakes and streams in different parts of Canada, "so far as our present knowledge goes, sawdust pollution, if it does not affect the upper waters, the shallow spawning grounds, appears to do little harm to the adult fish in their passage up from the sea. \* \* \* There is no case on record of salmon or shad, or any other healthy adult fish being found choked with sawdust, or in any way fatally injured by the floating particles". This pronouncement was amply sustained by the researches of Dr. A. P. Knight of Queens University. He began investigations in 1900 and in his first preliminary experiments reported in 1901 found that trout, though badly injured when placed in a mixture of sawdust in water as thick as gruel were healthy and active after two weeks in it. Post mortem examinations showed no trace of damage from sawdust. In a final report published in 1907, he presented at length the results of other observations and experiments on the problem. While his work dealt only with sawdust, the conclusions reached are so significant that I quote some of them *verbatim*: "1. Strong sawdust solutions poison adult fish and fish fry through the agency of compounds dissolved out of the wood cells. 2. The overlying water in an aquarium containing sawdust does not at first kill fish. After about a week it does kill, but solely through suffocation, the dissolved oxygen having all been used up."

In other words floating particles do not damage the fish; but products of decaying organic matter and toxic materials are destructive.

More recently the problem has been studied by Cole (1935) with reference to pulp and paper mill waste. He kept fish three weeks in a gruel-like mixture of pulp. On the basis of his work he states (p. 301), "as long as the fish remained healthy and active their gills were kept clean. \* \* \* It was only when fish were dying that the fibers clogged their gills."

I have myself often observed dead fish with the mouth and gills filled with masses of floating debris which were taken in with the last feeble respiration movements when energy was not sufficient to force the material out through the gill slits. To avoid error and confusion in the mind of

the reader, it must be emphasized that sawdust accumulating in streams does serious damage to fish life, but only by the production of toxic materials that are absorbed in the water and by the exhaustion of free oxygen through decay. Similar effects follow the discharge of pulp and paper mill wastes. However, as floating particles in water neither the rough granular masses of sawdust nor the fibrous elements of wood pulp damage the gills or are accumulated on the gills of healthy fish.

It has also been stated that harsh materials such as sand or grit will injure the surface of the gills or accumulate and clog the passage ways. On careful consideration of conditions this appears most unlikely. The abrasive action of such gritty substances is exerted only when they are forced down on surfaces by pressure from behind. Bathers are familiar with the fact that sharp sand and gravel, although carried by a strong current, do not injure or even irritate the soft skin of the human body. Even in a mixture of a density equal to more than 1,000 ppm, the amount of rough solids is so small that the cushioning power of the volume of water is adequate and mechanical injuries are fully prevented.

Fish live and thrive in rivers carrying large loads of silt. One could make a long list of such streams in the central West and on the slopes of the mountains between that region and the Pacific coast. To be sure, all of these do not have salmon runs, but they do carry trout and up to recent times those affording suitable conditions were the home of the grayling, which is clearly more sensitive to adverse conditions than salmon.

Between California and Alaska are many streams which are seasonally, and some of them constantly, loaded heavily with silt that comes from glacial run-off and from bank erosion. Such streams include those which under undisturbed conditions—i. e., before human interference affected the numbers and environment of the salmon—carried large numbers of these fish every year. It has been impossible to secure from the reports of explorers, surveyors, engineers, or government bureaus which have studied these streams and have recorded the heavy loads of materials in suspension which they carry, any precise mathematical data to compare with those obtained for the Rogue River. Nevertheless the descriptions given show reasonably clearly that the amounts of silt in some of these rivers at least were larger than that found in the Rogue at any time. Engineers

and other experienced men have in personal discussion borne positive testimony to this view, both as to the relative amount of silt and as to the presence of vigorous and healthy fish.

I have myself seen and studied numbers of such rivers in the United States and in Alaska which rank among the well-known salmon streams of the west coast and which are heavily loaded with sediments. I shall confine myself to more precise statements of one region. The Copper river in Alaska has been one of the famous salmon streams of that territory. It has a large number of tributaries which come out of mountain ranges east, north and west of the Copper River valley. Some years ago I had opportunity to visit the upper reaches of some of these rivers where the salmon spawn under what at that time were undisturbed natural conditions. Some of these streams were clear, but others were heavily loaded with glacial detritus. I have seen among these Alaska rivers in which salmon run and spawn some so heavily loaded with mud that one could not trace the body of an adult salmon ascending the river even when the dorsal fin cut the surface of the water. Yet the fish examined on the spawning grounds just before and just after death showed that the gills had suffered no injuries on the way though the body had met with conspicuous external damage through violent contact with sharp rocks at rapids or falls or along the shore. The examination was made in connection with the study on the cause of death after spawning and all organs were closely inspected. The gills were reported as apparently in perfect condition. Although the object of the investigation was not to determine the effect on the gills of silt-loaded waters, still, if any evident injury had been present, it would have been noted. The journey from the sea up the Copper and its tributary was long and strenuous; the chance for damage to the salmon from muddy water was certainly large if any damage could be wrought by such conditions, and yet none was observed. Many other similar cases could be cited from printed as well as personal records.

The long period of past time in which the salmon of the Rogue had been subject to the influence of heavily silted waters in that stream and the persistence of a run large in numbers and unsurpassed in quality serves to confirm the views expressed above on the basis of other evidence. The adult fish are not injuriously affected by up-

stream migration through water as heavily loaded with silt as is the Rogue River.

Strong as this argument is, it must take second place to the results of the experiments on young fish which I suggested and which have been carried out so well by Professor Griffin. His results are fully stated in Appendix B. In further comment I desire to call attention first to the fact that these experiments were performed with young fish. Despite their far greater sensitiveness to changes in environment and susceptibility to injury, the young salmon lived heartily in a concentration of sediment which was at its minimum (760 ppm) twice as much as the maximum recorded at Agness (see Table II). Indeed the average amount of turbidity in Griffin's experiments was ten times the average recorded at Agness. Those who think that normal erosion products will prove injurious to such fish should examine carefully the records in these tables.

#### EFFECT ON SPAWNING GROUNDS

Erosion silt in some streams has been found to cover nests and spawning grounds with a blanket such that the bottom fauna was killed and eggs also were suffocated in nests. In these ways such a deposit does great damage to the fish population in a stream. Unquestionably this is serious in some places and under some circumstances, and it is important to examine the situation carefully in the Rogue River. This was one of the first items to which I devoted my attention in making the study of the Rogue at low-water level.

In the stretch from Gold Beach to Agness I found no evidence of spawning having taken place in the river. Nowhere could I find any of the characteristic nesting areas in the water or on the beaches between the high-water mark and the then present water level. To be sure the time of my visit did not coincide with the spawning period of any species which occurs in the Rogue so that the absence of freshly formed nests was normal, but in spawning areas one can usually see distinctly traces of nests built a year or even more before the date of the inspection. If any spawning had taken place in this stretch of the river, then the intervening floods had been heavy enough to wipe out all the evidence. Equally clearly the spawning had been of no value since the nests had either been scoured out or covered so deeply that the eggs were killed. I have already called attention to the



film deposited on the bottom and on beaches between high and low water marks and have shown that it is thin, granular and broken. It is in no sense a blanket and would not interfere with the respiration of developing eggs if there were any in this region. Normally the fish cover the eggs by a layer of sand or fine gravel; the fresh water carrying oxygen easily penetrates this cover and the young wriggle out after the eggs hatch. A thin, broken layer such as I have already described would not interfere with the permeation of fresh water with oxygen and the development of such eggs as might be present. But I am clear that this is not a true spawning area. As Mr. Joseph Wharton said in an admirable paper on the salmon of the Rogue River, "It is the ambition of all these species of anadromous fish to ascend the river to the highest point attainable before making their spawning beds, seeking the waters that are purest and coldest." This statement is absolutely correct; in difficult streams or when held behind man-made barriers, these fish struggle to the end to make their way upstream and will sacrifice life rather than accept spawning areas in the lower reaches of the river. The urge which drives them on is the basis for the safety of the race. For the straggler or the weakling who may find the achievement of headwaters impossible, an enforced spawning in the lower river is of no significance; the river level varies too widely and its current at full flood is too fierce. Eggs deposited at high water will be exposed and die when the water falls; or if the spawning occurs at a lower water level, the next flood waters will bury the eggs or sweep them away. The suddenness, the violence and the irregularity of the changes in water level of the Rogue are conspicuous in the records of every year.

The spawning grounds lie chiefly at least above the region in which placer mining run-off is poured into the stream so that whatever the effect of this added burden it is not exerted in the spawning period or on the early stages of life of the new generation. Even though natural erosion contributed to the stream burden more material in time long past, and less abundantly and frequently in more recent years, still the fish, young and old, in the higher reaches of the stream held their own and maintained the run under natural conditions. Only when man introduced new barriers, devised new traps in diversion ditches which led away from safety, or discharged waste materials of un-

known and destructive type have the fish been unable to cope with the changes of the environment.

#### QUANTITY OF FISH FOOD PRESENT

My attention was early drawn to the question of the supply of fish food in the Rogue. The low-water season was naturally favorable for the study of this factor as the slow movement of the stream, its numerous shallows and the transparency of the water made it easy to observe the numbers and kinds of aquatic organisms present. I was impressed by the abundance and variety of the aquatic population. Both in the lower river and as far up as Rogue Elk I studied the forms which could be seen in different parts of the stream and recorded in my field notes the frequency with which organisms known to be fish food were met with on the trip. No attempt was made to secure a complete list or to determine precisely the species which were encountered. Such an undertaking would have demanded far more time than had been agreed upon for the study. Speaking generally and in a broad way, I am confident that the food supply of the fish is abundant and well distributed and also adequate to sustain a large run of fish.

One word of caution must be expressed here. No factor is more variable or spotty in my experience than the quantity of food to be seen in traveling along a stream. Conditions vary with every pool. At one moment on a good stream the student may see a veritable crowd of crayfish, insect larvae and smaller organisms and only a few yards away miss entirely some types abundant before, or even look long without seeing much of anything. The conditions of a stream cannot be determined by random sampling at a few places or on a single day. Fisherman's luck affects the student of river conditions also and fish food is as erratic apparently in habits and distribution as are the fish themselves.

Early in October I saw fish in pools where local fishermen were unable to attract them by flies or bait. The temperature of the water was a little higher than usual and the current slower so that the warmer, less oxygenated water may have made the fish logy. It seems possible that the abundant food was so easily caught that bait and lure were less attractive. Certain it is that neither natural nor artificial erosion up to date has exerted any demonstrable change in the fish food supply in the Rogue.

This discussion would not be complete if I omitted to mention certain ecological relations which indicate that the placer mine run-off may be of advantage to the fish. One of these is protection afforded by the turbidity of the water and the other is the suggested increase in the primitive food supply.

That adult fish are screened by the turbid waters is well known and often made the subject of comment by fishermen. In fact, they attribute the difficulty in catching fish to the amount of "waste" discharged by placer mines. I have already discussed the quantity of this discharge and called attention to the rapidity with which it settles. In Table III are given the muddiest water we could find; half the tests were 105 ppm or less, and four were only 30 ppm or less. Yet anyone standing on the bridge at the points where these samples were taken would say the water was too muddy for fishing; and it *was* too dense to see fish in the stream, but really contained very little sediment. This does not deter the fish from getting their own food.

Most significant is a possible relation of fine silt to the food of young fish. It has been shown that the presence of finely divided suspensoids of natural origin may be of advantage to the microbiota which constitutes the foundation element in the food supply of water. Studies on aquatic biology conducted by the Wisconsin Survey demonstrated that colloidal organic particles collect on

carbon and sand grains to build a culture medium for aquatic bacteria. The finest suspensoids and colloidal particles in the placer mine run-off would evidently function in this way and increase the supply of aquatic bacteria and other associated micro-organisms. Thus would be multiplied the food supply of protozoa and other types of aquatic life which subsist primarily on bacteria. Among such are young stages or larvae of small crustaceans and insects which form such an important part of the food of young fish at the start of life. It is even possible that colloidal particles encased by bacterial cultures may form an element in the direct food supply of young fish.

I have on many occasions dissected under the microscope very young fish from muddy waters and found to my surprise that the alimentary canal was filled to repletion with what was apparently only mud, even though the fish were healthy and vigorous. Instead of being merely inert material taken in by chance with small organisms floating in the muddy water, this mass may represent particles coated with a layer of zoogloea, or bacterial jelly, that is in itself of nutritive value. But whether under circumstances the fine material may have any positive worth for the growth or nourishment of the fish, I am clear that evidence thus far obtained from many streams, and at many times, shows that such material does not under conditions already outlined do damage to the gills or to the digestive system even of the young fish at the most susceptible period of life.

## APPENDIX A

## EXTRACTS FROM REPORT ON ROGUE RIVER TURBIDITY

By ARTHUR M. SWARTLEY

*Transportation methods.* Material is moved by transportation, in suspension and as dissolved matter.

*Traction* is the method by which the particles, too coarse to be carried in suspension, are moved forward upon the bottom of the stream by sliding, rolling, or in short jumps.

*Suspension* is that method of stream transportation wherein the small particles are lifted above the bottom for considerable time and distance. The larger particles in suspension are largely dependent upon velocity, the smaller particles are somewhat independent, while colloidal material is almost independent of it.

With lowering of velocity the larger particles in suspension drop to the bottom and become a part of the tractional movement. If the currents proceeded in straightforward movement as in a flume, the suspended particles might soon go to the bottom except those of colloidal size.

*Solution* material is independent of velocity in its forward movement.

Material in solution and suspension is mostly carried out to sea at once or within a short time, once it reaches the larger tributaries. A minor part of this fine material may be left behind where streams pass through occasional valleys and remain there indefinitely. The bulk of these valley deposits are of the larger particles such as coarse sand, gravel and boulders. The lateral migration of streams and the deepening of their channels may leave benches of gravel well above the flood-water level to remain for ages to be affected only by the slower agencies of erosion, like rain, to transport it to a nearby stream.

These stream beds, benches and valley deposits are of necessity no different than the material that is continually migrating to sea from the narrow canyons and their more rapid flowing streams. The material is derived from the same places but was stopped because the channel widened out and the grade lessened so that the stream was not competent to carry the load. If the erosion is from a mountainous area containing gold, platinum and the other heavy metals, these will be deposited in

the valley along with the boulders, gravel and sand, but at best these are only incidental. Their presence there is of interest to the placer miner, but to others it is only of academic interest until such time as placer mining begins and mining debris is being dumped into the stream. If there enters into the problem here being discussed and a more particular description of its nature is pertinent, whether in transit or sidetracked for a time in the valley or on beaches to await removal by the agencies of nature or of man, and the material transported along the bed of the stream whether gravel or sand is essentially no different than the solid rock from which it came. Water flowing over it is as clear as though it were flowing over solid rock. In flood periods it is in slow motion, the deeps being deepened and the shallows being filled and broadened. When the flood recedes the deeps are slowly filling from the shallows. Each flood makes its contribution to its downstream movement. That it does not shallow the pools as the years go by is well known to all observers of the habit of streams. It is composed of small rock fragments and contributes practically nothing to the composition of the water, either chemically or in turbidity. It is chemically inert and has no oxygen demand and therefore takes away from the flowing stream nothing which the fish require. This is equally true of this material whether placed in transit by nature or by man, since they are alike in nature, come from the same places, and are only being accelerated by man in their journey to the sea.

The material carried in suspension varies from fine sand to particles almost infinitely small. Speaking in sizes, the fine sand, which is about the very coarsest material carried in suspension, ranges from a maximum of 1/100 of an inch in diameter down to 1/200 inch; very fine sand 1/200 inch to 1/400 inch; silt 1/400 inch to 1/6400 inch; and clay 1/6400 inch and finer. The coarse sizes of fine sand are now in suspension, now in traction, dependent mainly upon the velocity of the stream under flood conditions.

Along with the above described materials which are merely minerals in a fine state of subdivision, are the colloids. Colloids are the more

finely divided particles altered physically and chemically, usually combined with water, and frequently jelly-like. Material in solution is fully dissolved matter; it is composed of various substances and varies in the different streams, dependent upon the rock found in each watershed, and it contains practically all the elements found in the suspended material, such as silicon, iron, calcium, magnesium, sodium, and potassium combined with oxygen or as carbonates, sulphates, nitrates, and chlorides, plus the decomposition products of vegetation.

It is to be noted that all the materials entering the streams, whether placed there by nature or by man, whether coarse or fine, whether travelling upon the bottom, in suspension or in solution, are almost altogether inert, suffer little change on their way to the sea, and having reached the end point of chemical change have no further need of oxygen, therefore not robbing the water of its

oxygen which the fish demand, or adding to the water toxic agents injurious to fish or fish life.

From various sources data on the Rogue River and other streams, not subjected to influence of mining projects, show a range of parts per million and an average turbidity as follows:

	<i>Parts per million</i>	<i>Average turbidity</i>
Rogue River at Copper Canyon (estimated) .....	321	.....
Snake River at Weiser, Idaho .....	324	80
Owyhee River at Owyhee, Oregon .....	395	167
Klamath River at Klamath Falls, Oregon .....	146	.....
Umatilla River at Umatilla, Oregon ....	247	79
John Day River at McDonald, Oregon	324	245
Columbia River at Cascade Locks, Oregon .....	137	27
Colorado River (flood conditions) .....	21,500	.....
Rio Grande .....	14,840	.....

## APPENDIX B

## EXPERIMENTS ON TOLERANCE OF YOUNG TROUT AND SALMON FOR SUSPENDED SEDIMENT IN WATER

By Dr. L. E. GRIFFIN, Reed College

The experiments which are described in the following account were undertaken to obtain definite information as to the direct effect of large amounts of soil sediment in water upon the fish inhabiting such water. The Department of Geology and Mineral Industries of the state of Oregon arranged with me for experimental studies on this question. I have been ably assisted in carrying on the studies by Mr. Harry Beckwith of Reed College.

The experiments covered two periods: One of three weeks, the other of four weeks. In the first period the fish tested were cutthroat fingerlings; in the second, young chinook salmon. The fish were kept in troughs, similar to those used in fish hatcheries, in which a depth of five inches of water was maintained. The water was kept flowing by circulation through a centrifugal pump, and aeration was secured by ejection of the water into the troughs in a heavy spray. The pumps used were small, limiting the flow of water to a rate of about one-half mile an hour. The slow streamlike movement of the water along the troughs was sufficient to keep a much heavier load of fine sediment in suspension than is ordinarily found even in muddy streams, but was not rapid enough to keep in suspension all the sediment which was put into the troughs, or to maintain a turbidity of more than 750 parts per million for 24 hours.

The material used for the sediment consisted of soil and alluvial material taken from ten spots around the Esterly mine, near O'Brien, Josephine county, Oregon, which were representative of the alluvial soils of that region. The samples were thoroughly mixed; when material was needed for the tests, the dirt was mixed with water and the portion which settled quickly was rejected. When the remaining fine sediment was placed in the fish troughs it was found that a considerable portion settled out at a regular rate during the first six hours after it was put in, but that after that period the amount of suspended silt remained nearly constant. As the sediment which settled in the troughs was stirred and strained daily, and occasionally fresh soil was added, the water of

the experimental trough carried a heavy load of sediment for a few hours of each day and a lighter but constant load for the remainder of the day.

After several preliminary experiments in which apparatus and methods were tested, the first trial run was begun. Two troughs were arranged parallel to each other in a dimly lighted, unheated building. The water with which the troughs were filled came from a spring-fed stream on the Reed College campus, in which trout are living and breeding. One trough contained the sediment-laden water, the other clear water. Aside from the processes needed to keep the sediment in suspension, both troughs and the fish placed in them were treated in the same manner.

December 11, 1937, 90 cutthroat trout fingerlings, 2 to 2½ inches in length, were secured from the federal hatchery at Clackamas, Oregon. Fifty of these were placed in the sediment-containing trough, 40 in the clear-water trough. The experiment continued until December 30. At the time of the daily stirring (at which time fresh sediment was occasionally added) the load of sediment varied from 2,300 to 3,500 parts per million by weight. This was enough to make the water a dark brown color, and so opaque that a hand held an inch under the surface was invisible. The load of sediment fell rapidly during the first hour, and then more slowly, until after the sixth hour an almost constant load was carried for the remainder of a 24-hour period. This constant load varied from day to day from 360 ppm to 600 ppm, being 500 or more ppm on all but six of the 19 days during which the test lasted.

The fish were fed with the same food used in the hatchery from which they came. Those in the clear water usually did not feed until the operator had backed away from the trough. In the muddy water the fish were not seen to feed for the first two days, but after that they rose to the surface and fed actively as soon as particles of food began to fall on the surface of the water. The trout in the clear water remained nervous throughout the experimental period, while those in the muddy water became bold enough to peck at the operator's hand when it was placed in the water. Because of

the necessity of scraping the bottom of the trough, stirring up the silt, and adding fresh soil, fish in the sediment trough were disturbed much more than those in the clear water.

When the test was ended on December 30, it was found that a much larger proportion of the fish in the sediment-containing trough had survived (56%) than in the clear-water trough (10%). There was no noticeable difference in the color of the surviving fish in the two troughs, and the fish which had lived in the muddy water were as large as the survivors from the clear-water trough.

On January 12, 1938, a second experiment was begun in which 150 chinook salmon fingerlings,  $1\frac{3}{4}$  to 2 inches long, were divided equally between the two troughs. This time the sediment was placed in the trough which had contained clear water in the previous experiment, and the other trough was used for clear water. Care was taken to reduce all movements near the troughs to those absolutely necessary to conduct the test. During the period of this test, which lasted 28 days, until February 9, the load of sediment was greater than in the first test. The maximum load at the time of stirring was from 3,100 to 6,500 ppm on most days. The constant load after the sixth hour was from 300 to 480 ppm from January 12 to January 25; and from 650 to 750 ppm from January 26 to February 9, except on two days when the load fell to 380 and 410 ppm.

The salmon fingerlings in the clear water at first showed the same nervousness as the trout, but after a week those which survived were not easily disturbed and fed avidly. The young salmon were not seen to feed in the muddy water quite so quickly as the young trout, and when they were seen they took food more deliberately than the trout. After the fish became accustomed to the new conditions of their lives and to the movements of the operator, those in both troughs fed satisfactorily.

Most of the salmon fingerlings in the muddy water were considerably lighter in color than the controls at the close of the test, though a few had not changed color. The fish of the muddy water were also irregular in growth, some having grown as much as the controls, while some were noticeably smaller.

At the close of the 28-day experimental period, 88% of the fish kept in the muddy water were alive, while 36% of the controls lived. Most of the controls which died did so during the first three days of

the test; after which time there is no significant difference in the death rate of the two lots of fish.

On examining the day-by-day record one is struck by the heavy mortality which occurred on the third day of both experiments among the fish kept in the clear-water trough. This was not due to special conditions in one of the troughs, because the troughs were reversed for the two experiments. It could not be determined whether the fish kept in clear water were more active than those in the muddy water trough because the latter were invisible most of the time. The fact that more of the fish in clear water jumped over the ends of their trough indicates that they were more nervous. It was evident also that the fish in clear water were more disturbed by movements of the observers, changes of light intensity, etc., than the other fish.

In the second experiment the electric lights in the dimly illuminated aquarium room were not turned on, so that disturbance was avoided; but it was necessary to scrape the bottoms of the troughs, adjust screens and strainers, and perform other necessary actions daily. All these disturbed the fish in clear water much more than those in the muddy water. When excited, the fish frequently darted against the sides of their trough with considerable force. On several occasions startled fish were seen to strike the side of the trough with sufficient speed to stun themselves. It seems possible that the high mortality of the fish in clear water during the first week of both experiments was due to the injuries they inflicted upon themselves when excited. After a few days the fish became accustomed to their living conditions and to the movements of the operator in and around their trough, and then were excited much less easily.

After the first week the mortality among the young trout of the first experiment was almost the same in both troughs; 13 in the muddy water, 11 in the clear water. As the cutthroat trout fed well and grew normally in the muddy water, the conditions there do not seem to have been unfavorable for these fish.

After the first week of the second experiment, with young salmon for subjects, 9 died in the muddy water trough and 2 in the clear water. But after the heavy loss discussed above only 29 remained alive in clear water and 74 in muddy water, so that the difference in mortality is relatively about the same.

The results of the experiments indicate that young trout and salmon are not directly injured by

living for considerable periods of time in water which carries so much soil sediment that it is made extremely muddy and opaque. They also indicate that cutthroat trout and salmon fingerlings can feed and grow apparently well in very muddy water.

The sediment load of the water in these experiments was continuously much greater than it is in the ordinary muddy stream. Water taken from the Willamette River at flood stage after three days of heavy winter rains, and when the river water appeared to be extremely turbid, contained only 42 ppm of sediments.

While the results of these experiments throw some light on the problems which were under con-

sideration, it seems desirable that more extensive tests should be undertaken, in order to secure a larger accumulation of data, and to investigate factors which could not be studied in the limited time or with the apparatus available for these experiments.

EXPERIMENT II  
Chinook Salmon Fingerlings

Date	Water Temperature	Sediment Stirred	Sample Taken	Parts per Million	Tank 1 with Sediment		Tank 2 with Clear Water	
					Dead	Living	Dead	Living
Jan.	F.							
12	58.0	†			0	75	0	75
13	58.0				0	75	1	74
14	58.0				0	75	* 40	34
15	58.0				1	74	5	29
16	58.0				0	74	0	29
17	58.0	9:00 am	9:30 am	820	0	74	0	29
18	58.0	9:00 am	9:30 am	950	0	74	0	29
19	58.0				0	74	0	29
20	58.0	9:00 am	9:30 am	960	0	74	0	29
21	58.0	9:00 am	9:30 am	1100	0	74	0	29
22	58.0	9:00 am	9:30 am	1350	0	74	0	29
23	58.0	3:00 pm	3:30 pm	1240	0	74	0	29
24	58.0	3:00 pm	3:30 pm	1600	1	73	1	28
25	57.2				1	72	0	28
26	57.2	3:00 pm	3:30 pm	2130	1	71	0	28
27	55.4	11:30 am	4:00 pm	930	0	71	0	28
28	55.4	9:00 am	9:30 am	2050	0	71	0	28
29	55.4	9:00 am	9:30 am	1670	0	71	0	28
30	53.6	9:00 am	9:30 am	1520	0	71	0	28
31	53.6	9:00 am	9:30 am	2120	0	71	0	28
Feb.								
1	53.6	11:30 am	4:00 pm	850	2	69	0	28
2	53.6	9:00 am	9:30 am	1480	0	69	0	28
3	53.6	9:00 am	9:30 am	1060	1	68	0	28
4	55.4				0	68	0	28
5	60.8	6:00 am	6:30 am	2317	3	65	0	28
			12:30 pm	841	0	65	0	28
			8:00 pm	770	0	65	0	28
6	60.8				0	65	1	27
7	60.8	6:00 am	6:30 am	2150	0	65	0	27
			12:30 pm	780	0	65	0	27
			8:00 pm	760	0	65	0	27
8	60.8				0	65	0	27
9	60.8	4:00 pm	4:01 pm	5960	0	65	0	27
Totals					10	65	48	27

EXPERIMENT I  
Cutthroat Fingerlings

Date	Water Temperature	Sediment Stirred	Sample Taken	Parts per Million	Tank 1 with Sediment		Tank 2 with Clear Water	
					Dead	Living	Dead	Living
Dec.	F.							
11	62.6	5:00 pm	6:00 pm	840	0	50	0	40
12	62.6	9:00 am	10:00 am	760	0	50	0	40
13	62.6	9:00 am	9:30 am	1190	1	49	12	28
			4:00 pm	520	0	49	0	28
14	62.6				2	47	3	25
15	62.6	9:00 am	9:30 am	1140	0	47	0	25
			4:00 pm	690	3	44	8	17
16	62.6	9:00 am	9:30 am	1130	0	44	0	17
			4:00 pm	390	3	41	2	15
17		No record			0	41	0	15
18	62.6	9:00 am	9:30 am	990	0	41	0	15
			4:00 pm	480	5	36	* 5	10
19	62.6	9:00 am	9:30 am	1040	1	35	1	9
20	62.6	9:00 am	9:30 am	990	0	35	0	9
			4:00 pm	500	0	35	† 1	8
21	60.8	9:00 am	9:30 am	750	1	34	0	8
22	60.8	9:00 am	4:00 pm	560	† 4	30	0	8
23	58.0				0	30	0	8
24	57.2				1	29	1	7
25	58.0				1	28	0	7
26	58.0				0	28	2	5
27	58.0				0	28	0	5
28	58.0				0	28	1	4
29	58.0				0	28	0	4
30	58.0				0	28	0	4
Totals					22	28	36	4

Circumstances made weighing impossible from December 23 to December 30; conditions of the troughs were kept the same as they had been.

\* Two of these jumped over the end screen and were carried through the pump.

† Killed by the pump.

‡ One killed by the pump.

From January 12 to 16 silt was added to the sediment trough daily in order to build up the load of suspended matter to a maximum. The load of suspended material was somewhat greater than during the first experiment.

\* Four of these jumped over the screen at the outlet and were killed in the pump; six leaped over the side at the inlet end, which was not covered by mosquito netting as was the rest of the trough.

† Fish put in trough.

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- Van Winkle, W., 1914. Quality of the Surface Waters of Oregon. U. S. Geol. Survey, Water Supply Paper 363, pp. 43-45. Washington.



Geoffrey Garcia

---

12303 Galice Rd.  
Merlin, Oregon 97532  
(503) 474-2717

David Haight  
ODFW  
5286 Table Rock Rd.  
Central Point, Oregon 97502

March 2, 1993

Re: Turbidity in Rocky Gulch - Your Memorandum January 26, 1993

David:

While conferring with Scott Titzler, Deputy District Attorney for Josephine County there came a question about whether or not turbidity from Rocky Gulch is detrimental to anadromous fish. I know of only one study done on the subject and it seemed to indicate that the turbidity from placer mines in this area was beneficial to the survival of anadromous fish in the lower Rogue area. As this study was done quite some years back, possibly you have more recent information on tests carried out on the lower Rogue drainage which indicates that turbidity is not beneficial to anadromous fish.

Is there any evidence that turbidity from Rocky Gulch has harmed fisheries?

There has been some notice lately of changes in the ecology of the Rogue River. Changes in the composition of the gravel bars may also be occurring which has resulted in the lack of suitable spawning areas for salmon and steelhead. It may be beneficial for both fisheries and fishermen to test gravels along the Rogue River for suitability as spawning beds. Possibly with my background in geology and yours in biology we could devise a study and method of testing the gravels as part of study. The project could be tailored to determine how the gravel bars along the Rogue River have been impacted by Rocky Gulch and any other recent phenomena such as dam building, bank stabilization, or reservoir cleaning projects.

I am looking forward to working with you in a positive manner on this subject.

Yours truly,



Geoffrey Garcia  
cc. Scott K. Titzler District Attorney Josephine County  
Kenan Smith Oregon DEQ

E-13

Tap water in Galice 0.55 NTU's

State Approved ICM Turbidometer 11150

Sample # 1 Water in Spring along Rd 3.95 NTU  
after running across Rd. & Through Puddles

Sample # 2 Creek Water 0.55 NTU  
above confluence of Spring Water

Sample # 3 Creek Below Confluence of Puddle  
after driving through 7.8 NTU

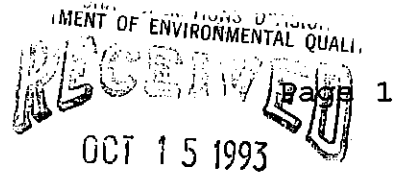
Sample # 4 Spring water, Water below Puddle  
after driving through it > 200 NTU's

Samples taken 6:30 p.m. Sept 28, 1993

Samples Run 7:00 p.m.

by Paul Brooks Galice Watermaster

EBM



## AFFIDAVIT

I, Dennis William Belsky, am currently employed full time by the Oregon Department of Environmental Quality, and have been so employed in the Southwest Region as Region Engineer since September 1, 1983. My experience also includes employment as an environmental engineer with several private and government organizations since January, 1972. I earned a BS Chemical Engineering in 1971 from the University of Washington and became registered as a Professional Engineer in Oregon in 1985.

During the course of my duties as Region Engineer, I have met and discussed water quality permit requirements with Geoff Garcia. On these occasions, Mr. Garcia was informed of the necessity to obtain and comply with permit requirements. Further, DEQ wrote Mr. Garcia in 1983, 1987, and 1993 concerning permits for his mining claim(s) on Rocky Gulch, including the Last Chance Claim.

Mr. Garcia has not been issued a general permit #600 or other permit authorizing treatment and disposal of wastewater in an approved manner from operations at the Last Chance claim. Mr. Garcia stated his inability to comply with permit #0600 requirements in a letter to DEQ dated February 21, 1983 and has not proposed an alternative mining method which could be expected to meet permit #0600 requirements or other wastewater permit which would be applicable.

Issuing permit #0600 for the Last Chance claim is injudicious. The refusal to issue a permit originates from the mining methods employed by Mr. Garcia, and the topography in the area which precludes, with reasonable certainty, complying at the outset with all permit requirements. These #0600 permit requirements include the 100% capture of muddy process wastewater in sedimentation ponds for reuse and preventing direct discharge to surface waters. The inability to prevent direct discharge of wastewater has led to complaints to DEQ and other agencies, and specific violations of Oregon's environmental laws.

Documented complaints concerning unpermitted turbid discharges have been received by DEQ-Southwest Region-Medford in 1987, 1988, and 1993. Based on my experience, these complaints indicate a continuing record of wastewater discharge from Mr. Garcia's mining

Ex 15

operations, including the 1993 operation of the Last Chance claim on Rocky Gulch.

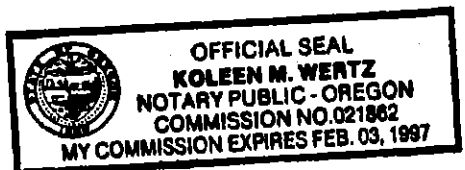
Continued mining of the Last Chance claim is likely to cause turbidity in Rocky Gulch above background levels attributable to discharge of wastewater from the claim.

Dennis William Belsky      10/12/93  
Dennis William Belsky, Region Engineer      DATE  
Oregon Department of Environmental Quality  
201 West Main 2-D  
Medford, OR 97501  
503-776-6010

SUBSCRIBED and SWORN to before me this 12th day of October, 1993.

Koleen M. Wertz  
Notary Public for Oregon

My Commission Expires: 2/3/97





*Department of Fish and Wildlife*  
**SOUTHWEST REGIONAL OFFICE**

3140 N.E. STEPHENS STREET, ROSEBURG, OREGON 97470 PHONE 672-7726  
 5375 Monument Drive, Grants Pass, OR 97526

February 18, 1987

Tim Thompson  
 District Attorney  
 Josephine County Courthouse  
 Grants Pass, OR 97526

State of Oregon  
 DEPARTMENT OF ENVIRONMENTAL QUALITY

**RECEIVED**  
 FEB 25 1987

**SOUTHWEST REGION OFFICE**

Re: Investigation of turbid water from Rocky Gulch.

During the week of February 3 to 6, 1987, my office received complaints of muddy water entering the Rogue River from Rocky Gulch at Galice, Oregon. The complaints came from the Oregon State Police (Jack Baker), Terry King, Matt Smith and Lee King. The Department of Environmental Quality (DEQ) office in Medford (Larry Jack) received a similar complaint from Ernie Rutledge of Illahe. The citizen complaints were made because turbid water over about 15-20 JTU interferes with fishing by reducing the catch rate. Fishing guides are especially sensitive about increased turbidity because it affects their livelihood.

On Monday, February 9, 1987, I talked to Sgt. Larry Belcher, Oregon State Police Game Division in Medford. He authorized Senior Trooper Jack Baker to take action on the turbidity complaints. I likewise received permission from Gary Grimes, DEQ, for the State Police to issue a citation, if necessary, under the criminal enforcement section of DEQ Oregon Revised Statutes. I also informed Bob Bessey, fishery biologist with the Bureau of Land Management, Medford, of my intent to investigate the complaints. The suspected turbidity source was on BLM land.

On February 10, 1987, at about 12:15 pm, Jack Baker, OSP, and I observed highly turbid water entering the Rogue River from Rocky Gulch. Baker took photographs of the gulch and river. I took a water sample from Rocky Gulch just above Merlin-Galice Road crossing. The sample was tested at the Grants Pass Water Filtration Plant by Bob Chapman on February 12, 1987. The turbidity was 85 Jackson Turbidity Units (JTU). The turbidity of the Rogue as measured at the Filtration Plant on February 10, 1987 was 5 JTU.

Baker and I drove up Rocky Gulch to the placer mine of Geoff Garcia. The turbid water was originating from his operation. The stream was clear above (0.57 JTU, sample tested as above). Baker took photographs of the mining equipment, the mined area and the stream. As we arrived, Bill Wornstaff, an employee of Garcia, had just finished working on the dam across Rocky Gulch at the mine site. Much of the turbidity originated from this point.

Ex 16

After initial contact, a long discussion followed between Baker and Garcia. Garcia admitted that 1) he was mining at that site on Rocky Gulch, 2) this mining operation was and had been the source of turbidity in Rocky Gulch and the Rogue River and 3) he had started mining more intensively this winter after his two year probation from a previous mining violation was over with in November 1986. Garcia also said he could not afford a DEQ waste discharge permit and that DEQ had never contacted him with a warning not to mine in a manner that released turbid water into Rocky Gulch and the Rogue River. Garcia said he wanted those people complaining about the turbidity to come to him so they could "work something out". He referred several times to the Rogue Coordination Board as having authority over conflicts between miners and fishermen.

On the way out of the Garcia mine, I took a sample of water from Rocky Gulch above the mine. Baker took photographs.

*Allan K. Smith*

Allan K. Smith  
Assistant District Fish Biologist

12303 Galice Rd.  
 Merlin, Oregon 97532  
 Feb 19, 1987

~~Dennis Rocky~~

~~DEA~~

201 W. Main R.M. 20  
 Medford, Oregon 97501

RE: Placer mining permit.

Dennis:

We are applying for a permit to discharge tailings from our placer mine into Rocky Gulch. As I explained in our phone conference; Rocky Gulch is narrow and it would be improbable that we can operate without raising the turbidity level in Rocky Creek above state guidelines. For this reason we would like a variance which would allow us to mine during the winter months as has traditionally occurred in this area since the late 1800's. We agree to mine according to the guidelines set forth by the Rogue Coordination Board so as to minimize impact with fishing interests.

Yours Truly

*Geoff Gorin*

Enc.

Check for \$200 (Application & Filing Fee)

Completed Application NEDEC Standard Form A + 2.C

EXHIBIT

EXHIBIT \_\_\_\_\_

CC: WQ /  
GARY FYE  
TAKE  
PRIDE IN  
AMERICA



# United States Department of the Interior

BUREAU OF LAND MANAGEMENT  
MEDFORD DISTRICT OFFICE  
3040 BIDDLE ROAD  
MEDFORD, OREGON 97504

IN REPLY REFER TO:  
OR 43816  
3809(11780)  
6139L/6140L  
(MC:bb)

MAR 10 1989

Department of Environmental Quality  
ATTN: Dennis Belsky  
201 W. Main Street  
Medford, OR 97501

IW-Josephine  
Geoff Garcia

Dear Mr. Belsky:

We have recently received a mining notice from Mr. Geoffrey Garcia for placer mining operations near Galice, Oregon. The notice was very general, however, during a field inspection we found that Mr. Garcia has been operating in non-compliance with our Surface Management Regulations. The attached Notice of Non-Compliance was sent to Mr. Garcia and summarizes his activities.

This letter is sent to your office to notify you of these activities and to inform you that Mr. Garcia may contact you to inquire about a permit or variance from your agency. If you have questions, please call Matt Craddock at (503) 776-3910.

Sincerely yours,

*Harold J. Belisle*

Harold J. Belisle  
Grants Pass Area Manager

Attachment (as stated)

EX 18



*MC*  
*3/9/89*

3809(11780)  
OR 43816  
6127L(MC:jg)

~~MAR 9 1989~~

CERTIFIED MAIL - RETURN RECEIPT REQUESTED (P 767 019 885)

DECISION

Geoffrey Garcia	:	Non-Compliance
12303 Galice Road	:	43 CFR 3809
Merlin, OR 97532	:	Mining Notice (OR 43816)

*Shirley G. Belknap*  
*3-9-89*

NOTICE OF NON-COMPLIANCE

On February 23, 1989, we received an updated mining notice outlining your proposed mining operations at the location of your mining claims in the SE1/4, Section 26, T. 34 S., R. 8 W., W.M., Josephine County, Oregon. Your notice was very general; however, during a field inspection conducted on February 27, 1989, we discussed the specifics of your operations. We found that you expect to mine the area at your cabin location and at the area on Rocky Gulch. Your operations to be conducted near the cabin appear to be in compliance with our Surface Management Regulations (43 CFR 3809 - attached); however, your operations in Rocky Gulch appear to be conducted in a manner causing unnecessary and undue degradation.

Because you are operating in a manner causing unnecessary and undue degradation, you are hereby served this Notice of Non-Compliance pursuant to 43 CFR 3809.3-2. The specific reasons for your non-compliance are:

1. ~~You are discharging turbid waters directly into a live stream.~~
2. ~~You have placed a settling pond directly in a live stream.~~
3. You have failed to acquire pertinent State Permits, variances, or exemptions from the permitting requirements; and
4. Access to your operations on Rocky Gulch is achieved by driving up the streambed of Rocky Creek.

You are allowed a period of thirty (30) days from the date of this letter to come into compliance with the above regulations. In order to operate in a manner not causing unnecessary or undue degradation, you will need to discontinue utilizing a settling pond in the direct flow of Rocky Creek and discontinue direct discharge into the creek; acquire all necessary State permits, variances, or exceptions to permits; and relocate your access route to the operations on Rocky Creek. There may be other alternatives and it may end up being necessary to remove the mined material to another location for processing.

Your failure to comply with the requirements and timeframes of this Notice will constitute the establishment of a record of non-compliance. At that point, you will be required to file a Plan of Operations pursuant to 43 CFR 3809.1-4, and bonding will be required for your operations. Your operations

*M.C. check: pg. 3/7/89*

will be continuously monitored to document the corrective actions you are taking.

You have the right to appeal this decision to the Oregon State Director, Bureau of Land Management, in accordance with 43 CFR 3809.1-4. If you exercise this right, your appeal, accompanied by a statement of reasons and any arguments you wish to present, which would justify reversal or modification of the decision, must be filed in writing at this office within 30 days after the date of this decision. This decision will remain in effect during appeal unless a written request for a stay is granted.

Sincerely yours,  
**/s/ HAROLD A. BELISLE**

Harold Belisle  
Grants Pass Area Manager

Attachment:  
(Surface Management Regulations)

cc: OSO 920  
Gerry Capps

1                   BEFORE THE ENVIRONMENTAL QUALITY COMMISSION  
2                                   OF THE STATE OF OREGON

3 DEPARTMENT OF ENVIRONMENTAL QUALITY    )  
4 OF THE STATE OF OREGON,                    )  
  )  
5                   v.                            )  
6 GEOFF GARCIA,                                )  
  )  
7                   Respondent.                )

  ) NO. WQIW-SWR-93-043  
  ) HEARINGS OFFICER'S  
  ) FINDINGS OF FACT AND  
  ) CONCLUSIONS OF LAW  
  ) JOSEPHINE COUNTY

8 BACKGROUND

9           On April 16, 1993, DEQ notified Geoff Garcia that on January 24, 1993 he had  
10 violated ORS 468B.050(1)(a) by discharging waste from his gold mining operation into state  
11 waters without a permit, and that he had violated ORS 468B.025(1)(b) and OAR 340-41-  
12 365(2)(c) because his waste discharge increased turbidity above the regulatory standard.  
13 DEQ assessed a penalty of \$4,800. Garcia appealed DEQ's action on the grounds that his  
14 mining operation had produced no water pollution.

15           A hearing was conducted on October 15, 1993. DEQ's case was presented by its lay  
16 representative, Larry Cwik, an environmental law specialist. Garcia attended the hearing and  
17 provided evidence and argument. The record closed November 10, 1993.

18 FINDINGS OF FACT

19           Geoff Garcia mines gold for profit on Rocky Gulch Creek in Josephine County,  
20 Oregon. The creek is a tributary of the Rogue River and is a component of Oregon state  
21 waters.

22           Garcia has had a number of discussions with DEQ staff about his need to obtain a  
23 pollution discharge permit. In 1987 he applied for a permit, seeking a variance from the  
24 usual requirements because, as he acknowledged: "[I]t would be improbable that [the facility  
25 could] operate without raising the turbidity of Rocky Creek above state guidelines."

26 Ex. 17.<sup>1</sup>

27 \_\_\_\_\_  
28 <sup>1</sup>The case record does not disclose the disposition of the application.

1 On January 24, 1993, Garcia did not have a permit to discharge waste into state  
2 waters. On January 24, 1993, Garcia mined for gold at his claim by, among other things,  
3 moving earth with a bulldozer. The mining activities resulted in discharge of mud into  
4 Rocky Gulch Creek.

5 On January 24, 1993, a biologist from the Oregon Department of Fish and Wildlife  
6 took water samples from the creek above, at and below the site of Garcia's mining activity.  
7 The samples were analyzed. The analyses established that the samples taken at Rocky Gulch  
8 Creek above the point of Garcia's discharge had a measured turbidity of 5 Est NTU; the  
9 sample taken below the discharge had a measured turbidity of 34 Est NTU; while the sample  
10 taken from the discharge entering Rocky Gulch Creek from the mining operation had a  
11 measured turbidity of 2800 Est NTU.

12 Observation of the stream's color and turbidity were consistent with the laboratory  
13 analysis. The timing of the conduct of mining activities on January 24, 1993 was consistent  
14 with observations of changes in river color and turbidity.

15 The case record does not contain evidence of any emergency.

16 I take official notice of OAR 340-41-365(2)(c); 340-12-055(1)(b); 340-12-055(2)(f)  
17 and 340-12-090(2)(a) which provide in relevant part:

18 OAR 340-41-365(2)(c): \* \* \* \*

19  
20 No wastes shall be discharged and no activities shall be conducted  
21 which either alone or in combination with other wastes or activities will  
22 cause violation of the following standards in the waters of the Rogue  
23 River Basin.

\* \* \* \*

24 (c) Turbidity (Nephelometric Turbidity Units, NTU): No more  
25 than a ten percent cumulative increase in natural stream turbidities shall  
26 be allowed, as measured relative to a control point immediately  
27 upstream of the turbidity causing activity. However, limited duration  
28 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. \* \* \*

1 (B) Dredging, Construction or other Legitimate Activities:  
2 Permit or certification authorized under terms of Section 401 or 404  
3 (Permits and Licenses, Federal Water Pollution Control Act) or OAR  
4 141-85-100 et seq. (Removal and Fill Permits, Division of State  
5 Lands), with limitations and conditions governing the activity set forth  
6 in the permit or certificate.

7  
8 340-12-055 Violations pertaining to water quality shall be classified as  
9 follows:

10 (1) Class One:

11 \* \* \* \*

12 (b) Any discharge of waste that enters waters of the state, either  
13 without a waste discharge permit or from a discharge point not  
14 authorized by a waste discharge permit . . .

15 (2) Class Two:

16 \* \* \* \*

17 (f) Any violation related to water quality which is not otherwise  
18 classified in these rules.

19 OAR 340-12-090(2)(a)

20 \* \* \* \*

21 (2) Magnitudes for select violations pertaining to Water Quality  
22 wastewater discharge limitations may be determined as follows:

23 (a) Major:

24 (A) Greater than 1.6 times any applicable maximum flow rate,  
25 concentration limitation, or any applicable mass limitation; or

26 (B) Greater than 50 percent below any applicable minimum  
27 concentration limitation; or

28 (C) Greater than 2 pH units above or below any applicable pH  
range; or

(D) Greater than ten percentage points below any applicable  
removal rate.

## 29 ULTIMATE FACTS

30 On January 24, 1993 Garcia intentionally discharged wastes from a commercial  
31 establishment to waters of the state without first obtaining a permit from DEQ. He knew he  
32 needed a permit and knew that his mining activities would cause an increase in the turbidity  
33 above the regulatory limit violating the regulatory standard.

## 34 CONCLUSIONS OF LAW

35 The Commission has jurisdiction.

36 Geoff Garcia violated ORS 468B.050(1)(a) by discharging waste from his mining  
37 operation into state waters without a permit and is liable for a civil penalty. The \$4,800 total  
38

1 penalty assessed was authorized by OAR 340-12-045 and supported by the case facts.

## 2 DISCUSSION

### 3 Liability

4 The conduct which constitutes the violations was not controverted.

5 However, Garcia has affirmatively charged that the regulations under which he was cited  
6 are so stringent that they violate the provisions of ORS 183.545 and 183.550. Those statutes  
7 require agencies to review their rules considering among other things:

- 8 a. Economic impact of the rule;
- 9 b. Continued need for the rule;
- 10 c. Complexity or redundancy of the rule;
- 11 d. Extent to which the rule overlaps, duplicates or conflicts with other state rules,  
12 federal regulations, and local government regulations;
- 13 e. Degree to which technology, economic conditions or other factors have changed in  
14 the affected subject area;
- 15 f. Statutory citation or legal basis for the rule;
- 16 g. The rule's potential for enhancement of job producing enterprises;
- 17 h. Internal consistency of the rule.

18 Specifically, Garcia asserts that the turbidity rule is stricter than is necessary to prevent  
19 pollution.

20 Even assuming that the requirements of ORS 183.545 and 183.550 provide a basis for  
21 penalty avoidance, Garcia has not provided any evidence to establish that a properly justified  
22 rule would protect a 580% increase in creek turbidity, which was the evidence in this case  
23 concerning Garcia's actions. Therefore, Garcia has not established any connection between the  
24 purported rule defect and the circumstances of his case. Consequently, Garcia has not  
25 established a basis for avoiding penalty liability.

### 26 The penalty

27 The system used by DEQ to establish the amount of this penalty contains a matrix and  
28 formula that consider the "class" or "classification" and "magnitude" of the violation (which  
create a base penalty (BP)), whether the regulated party had any prior "significant actions" (P),  
whether the regulated party took corrective action in prior violations (H), whether the violation  
was repeated or continuous (O), the cause of the violation (R), cooperativeness and efforts  
to correct the violation (C) and economic benefit gained.

1 The resulting penalty formula is:

$$2 \quad BP + [(1 \times BP)] (P + H + O + R + C) + EB. \quad \text{OAR 340-12-045.}$$

3 In determining the amount of the penalty for the first violation in the present case DEQ  
4 rated the classification Class I, rated the magnitude minor, and assigned a value of 6 to R and  
5 values of zero to P, H, O, C and EB, producing a base penalty of \$1,000 and a total of \$1,600.  
6 For the second violation, DEQ rated the classification Class II, rated the Magnitude major, and  
7 assigned a value of 6 to R and values of 0 to P, H, O, C and EB, producing a base penalty  
8 of \$2,000 and a total penalty of \$3,200.

9 The classification and magnitude determinations were not challenged and were supported  
10 by the case record.

11 The violations were valued as "intentional." Intentional is defined by agency rule as  
12 "conduct by a person with a conscious objective to cause the result of the conduct." The  
13 evidence in this case was that Garcia knew both that a permit was required and that his discharge  
14 would reduce water quality below the allowable limits. In proceeding nonetheless, he showed a  
15 conscious objective to discharge without a permit and a conscious objective to reduce the quality  
16 of state waters. He acted intentionally.

17 The penalty assessed is supported by the case record.

18 Dated this 21st day of January, 1994.

19  
20 ENVIRONMENTAL QUALITY COMMISSION

21  
22 /s/ Linda K. Zucker

23 Linda K. Zucker, Hearings Officer  
24  
25  
26  
27  
28

1                                    BEFORE THE ENVIRONMENTAL QUALITY COMMISSION  
2                                    OF THE STATE OF OREGON

3 DEPARTMENT OF ENVIRONMENTAL QUALITY    )  
4 OF THE STATE OF OREGON,                    ) NO. WQIW-SWR-93-043  
5    )  
6    ) Department,                    ) FINAL ORDER  
7    )                                    ) AND  
8    )                                    ) JUDGMENT  
9    )  
10     ) GEOFF GARCIA,                )  
11     )                                    ) JOSEPHINE COUNTY  
12     ) Respondent.                   )

13                                    The Environmental Quality Commission, through its hearings officer, orders that  
14 Respondent, Geoffrey Garcia, is liable to the State of Oregon in the sum of \$4,800 and that  
15 the State have judgment for and recover the amount pursuant to a civil penalty assessment  
16 dated April 16, 1993. Review of this order is by appeal to the Environmental Quality  
17 Commission pursuant to OAR 340-11-132. A request for review must be filed within 30  
18 days of the date of this order.

19                                    Dated this 21st day of January, 1994.

20                                    ENVIRONMENTAL QUALITY COMMISSION

21                                    /s/ Linda K. Zucker

22                                    Linda K. Zucker, Hearings Officer

23 NOTICE:    If you disagree with this Order you may request review by the Environmental  
24 Quality Commission. Your request must be in writing directed to the  
25 Environmental Quality Commission, 811 S.W. Sixth Avenue, Portland,  
26 Oregon 97204. The request must be received by the Environmental Quality  
27 Commission within 30 days of the date of mailing or personal service of  
28 Order. If you do not file a request for review within the time allowed, this  
order will become final and thereafter shall not be subject to review by any  
agency or court.

A full statement of what you must do to appeal a hearings officer's order is in  
Oregon Administrative Rule (OAR) 340-11-132. That rule is enclosed.



**RECEIVED**  
FEB 14 1994

Geoffrey Garcia

Consulting Geologist  
**OFFICE OF THE DIRECTOR**

12303 Galice Rd.  
Merlin, Oregon 97532  
(503)474-2717

2/11/94

Environmental Quality Commission  
Department of Environmental Quality  
811 S.W. Sixth Avenue  
Portland, Oregon 97204-1390

**Certified Mail**

**RE: NOTICE OF APPEAL**

I hereby give notice in the form of proof of service that I have served upon the Department of Environmental Quality this notice of appeal by regular U.S. Postal Service Mail this 11 Day of February 1994 at: DEQ, 811 S.W. Sixth Avenue, Portland, Oregon 97204-1390; as certified by my signature below.

Dear Commission:

Please accept the above proof of service as certified by my signature below, my notice of appeal in the following case:

**DEQ v. Geoffrey Garcia  
No. WQIQ-SWR-93-043  
Josephine County**

Please be advised that I am not an attorney and am representing myself in this appeal. There are some difficulties in doing this as I do not know what has gone into the record. Please send copies of the transcripts and any other records which the Commission will use in its judgment of this case.

My last understanding of the proceedings is that Hearings Officer Zucker allowed introduction of exhibit 17 and informed me that I could respond to exhibit 17 in writing by November 9, 1993. After receiving the letter on November 5, I immediately wrote a reply on November 6 asking to be able to question the people who are in charge of the agency that received exhibit 17 in 1987 and those who are responsible for the creation of this litigation. I was awaiting Ms. Zucker's action to continue the hearing when I was informed that she had rendered a judgment against me. It is unknown if my letter of November 6 is a part of the record or anything else which I brought up at the hearing.

There are a number of issues at question here: Whether the DEQ is following their own rules in reviewing their rules on a regular basis. Whether the DEQ is authorized to promulgate rules in which pollution is defined outside of what was originally intended by the legislature. Whether it is allowable for agents of the state to violate DEQ rules provided that they are valid. For instance, in the manner by which I was cited, agents of the OSP, ODFW, and DEQ created a DEQ appeal

turbidity increase greater than that which I am charged with. There is also the question of the competence of the DEQ's expert witness David Haight who ignored the influence of another watershed between sample points and was unaware of the only study specifically done on the *same* issue in the *same* location which directly refutes much of his testimony.

I attempted to make all of the above a part of the record and was going to further develop this and other points but was unable to proceed when Ms. Zucker failed to respond to my letter of November 6, 1993 thus terminating my defense.

I request a copy of the record that you have to review and request that my 30 day appellants briefing period be ordered to start after I receive it. Enclosed is an order for the Commission's review and signature.

On appeal:

  
Geoffrey Garcia

Environmental Quality Commission  
811 S.W. Sixth Avenue  
Portland, Oregon 97204-1390

**RE: NOTICE OF APPEAL**

**DEQ v. Geoffrey Garcia  
No. WQIQ-SWR-93-043  
Josephine County**

To the DEQ and Geoffrey Garcia

The Commission has received the notice of appeal in the above titled matter. After careful review the commission makes the following findings.

1. Geoffrey Garcia is not represented by council
2. He has raised factual and legal questions
3. That the ends of justice would not be abused or misused in this specific case by granting the requests of Mr. Garcia

**THEREFORE IT IS ORDERED:**

The DEQ deliver unto Mr. Garcia by certified mail, personal service, or any other method calculated to insure that it is received and that the date of receipt is recorded the following:

1. The entire file constituting the written documentation in the administrative hearing in the above matter denoting those portions which are included in the administrative record.
2. Copies of the transcript tape recordings in the above hearing at the normal recording charge.

It is further ordered that Mr. Garcia shall have 30 days from the date of receipt of the administrative record and tapes in which to file the appellants brief.

It is further ordered that Mr. Garcia be required to bear the burden of the costs of the tapes and copies, that he be invoiced for those but that said billing costs and payment thereof are not to delay the delivery of the administrative records and transcripts.

For the Commission

\_\_\_\_\_ Date

Respectfully submitted by

Geoffrey Garcia

Geoffrey Garcia

---

12303 Galice Rd.  
Merlin, Oregon 97532  
(503)474-2717

4/7/94

Environmental Quality Commission  
Department of Environmental Quality  
811 S.W. Sixth Avenue  
Portland, Oregon 97204-1390

Certified Mail

RE: APPEAL

DEQ v. Geoffrey Garcia  
No. WQIQ-SWR-93-043  
Josephine County

Environmental Quality Commission:

The following is an appeal of the conclusions of law by hearings officer Lirida K. Zucker dated the 21st of January, 1994 in regards to the above case. This appeal has been mailed to the Commission on the 7 day of April, 1994. The respondent charges that he is not guilty and that the charges in the above case should be dismissed for the following reasons:

**[1] Evidence has not been brought forth proving that ORS 468B.050 (1) (a) has been violated by the respondent.**

Before a defendant is found to have violated a law, the defendant must have been found to have violated each substantive element of the charge.

When the DEQ talks of violation of ORS 468B.050 (1)(a) by discharging wastes from a mining operation into state waters, the definition of "wastes" in 468B.005 (7) must apply. In ORS 468B.005 (7) "waste" is defined by "pollution." Thus the definition of "pollution" under ORS 468.005 (3) must also apply. Before a defendant can be found to have violated ORS 468B.050 (1) (a) the DEQ must show that said discharge is "waste" which: "...will or may cause pollution or tend to cause pollution of waters of the state." as defined in ORS 468.005 (3) See ORS 468B.005 (7).

Nowhere in the record or in the "findings of fact" was any evidence brought forth that anything discharged from the respondent's mine "either by itself or in connection with any other substance, created a public nuisance, or rendered such water harmful, detrimental, or injurious to public health, safety, or welfare, or to domestic, commercial,

DEQ appeal

Page 1 of 3

industrial, agricultural, recreational or other legitimate beneficial uses or to livestock, wildlife, fish or other aquatic life or the habitat thereof." See ORS 468.005 (3). This is a critical test for both pollution and subsequently a test for waste.

No person has come forward to declare that any discharge from the respondent's mine adversely effected them in any way.

There was no evidence put forth that any wildlife had been adversely affected. In fact the evidence on record indicates just the opposite. The essence of an exhaustive study on placer mining discharges in the Rogue Drainage commissioned by the State of Oregon by Dr. Henry Baldwin Ward [Exhibit 12] concluded that: "placing muddy water from placer operations in the Rogue River Drainage is not inimical to fish and fish life." and when questioned, the DEQ's only witness, ODFW biologist David Haight, stated that he had no evidence of harm to wildlife.

Furthermore, sample of water entering the mine has not been entered into evidence, thus the effect of the respondent on the water discharged remains unknown.

In conclusion, the prosecution has failed to show that any discharge from the respondent's mine has caused or would cause "pollution." It follows that there is no evidence that "waste has been discharged from the respondent's mining operation to support the charge of a violation of ORS 468.050 (1) (a).

**[2] The Commission is not compliance with the provisions of ORS 468.110 (3,4) in their establishment and enforcement of water quality standards in Rocky Gulch and thus they are in violation of ORS 183.545 and 183.550 in their requirement that the respondent acquire a permit based on these standards and thus the comission does not have the authority to require the permit upon which a violation of ORS 468B.050 is based.**

The DEQ has not considered natural fluxuations in their establishment of water quality standards. While the prosecution has brought forth evidence that water in Rocky Gulch below the mine had a 580% increase in turbidity, the record also shows that the Grants Pass Filtration Plant recorded turbidities in the Rogue River upstream from Rocky Gulch varying between 7 and 130 ntu's. This reflects natural variations of 1800% in the whole drainage due to a single storm. [Exhibit 11-2 page 6, column 2]. The record also shows that on September 28, 1993 the Galice Watermaster, Paul Brooks, recorded a turbidity rise in the creek from 0.55 ntus to 7.8 ntus after driving through the spring fed puddles in the road next to the creek in Rocky Gulch. [Exhibit 14] This shows an increase of over 1400% in the turbidity of the water in the creek. The above increases are far in excess of the 580% increase in creek turbidity which the respondent is charged with at this hearing. Requiring a permit that stipulates that the respondent be sensitive to a 10% variation in turbidity of the water in Rocky Gulch when common occurences result in turbidity fluxuations which are orders of magnitude greater is unreasonable and clearly a violation ORS 183.545, ORS 183.550, and ORS 468B.110 (3).

An interesting point is that it is improbable that agents of the OSP, ODFW, and DEQ could drive up to cite the respondent without driving through the same puddles  
DEQ appeal

Mr. Brooks drove through. A similar rise in the turbidity of the creek would have resulted from their action and they would also be in violation the DEQ's water quality standards for Rocky Gulch should they be valid.

The DEQ's ignorance of issues related to water quality in the creek as required by ORS 468B.110 (3) in this case is so gross that they have accepted and relied on samples taken as evidence by an expert witness David Haight who until the time of the hearing was unaware of another watershed approximately equal in size to the one tested which enters Rocky Gulch between sample points. [Exhibit 10 and the record.]

The respondent has notified the DEQ in the past that the DEQ's standards and sampling points were unreasonable and asked for some kind of variance which would allow the respondent to continue his livelihood without conflict. [Exhibit 17] The DEQ has been negligent in its duties by not investigating the complaint and over-reached their authority by supporting this litigation and continuing to establish and enforce standards without a sufficient background necessary to establish meaningful stream water quality standards.

The commission should be aware that at no time during the hearing did any representative of the DEQ testify. When the respondent asked to be allowed to question Fred Hanson of the DEQ in regards to the above action, specifically questions relating to the above section, the hearings officer terminated the hearing and rendered a judgment against the respondent thus depriving the respondent the ability to face and question the person responsible for initiating this legal action.

**[3] The DEQ in its prosecution of this case is acting in violation of Section 12 of the State of Oregon's constitution which states: "Double jeopardy;...No person shall be put in jeopardy twice for the same offense...."**

In the District Court of the State of Oregon for Josephine County, the respondent was tried in Case No. 930189M for violation of ORS 468B.050 on September 29, 1993. The case factually involved the same charge for the same offense on the same dates as concerns this hearing.

The hearing for which this appeal is being made was held on October 15, 1993. Under 131.515 (1) "No person shall be prosecuted twice for the same offense." The hearings officer was made aware of this at the hearing.

Submitted this 7th day of April, 1994

  
Geoffrey Garcia  
Respondent

1 BEFORE THE ENVIRONMENTAL QUALITY COMMISSION  
2 OF THE STATE OF OREGON

3 In the Matter of )  
Geoff Garcia, ) DEPARTMENT'S RESPONSE  
4 ) TO RESPONDENT'S APPEAL  
Respondent. )

5  
6 **PROCEDURAL BACKGROUND**

7 DEQ issued a Notice of Assessment of Civil Penalty on  
8 April 15, 1993, for discharging wastes from his gold mining  
9 operation without obtaining a permit in violation of  
10 ORS 468B.050(1)(a) and for violating the water quality standards  
11 for turbidity of the Rogue River Basin set forth in OAR 340-41-  
12 365(2)(c). Respondent appealed on the grounds that no pollution  
13 occurred and requested a contested case hearing, which was held  
14 October 15, 1993.

15 On January 21, 1994, the hearing officer issued her Findings  
16 of Fact and Conclusions of Law that the civil penalty is  
17 authorized by law and supported by the facts. Respondent does  
18 not contest the Findings but has requested review by the  
19 Commission of the hearing officer's Conclusions of Law.

20 **FACTUAL BACKGROUND**

21 Respondent operates a placer mine on Bureau of Land  
22 Management land on Rocky Gulch Creek, a tributary of the Rogue  
23 River near Galice, Oregon. Over the years, there have been  
24 numerous complaints about turbidity entering the Rogue from Rocky  
25 Gulch as a result of the mining operation. Respondent has had  
26 numerous discussions with DEQ staff and other state agency staff

1 regarding unlawful discharges from this operation and the need to  
2 obtain a pollution discharge permit. Nonetheless, he has  
3 continued to operate the facility without a permit and in a  
4 manner that causes mud to enter the creek and increases in the  
5 stream turbidity in excess of that allowed by the rules.

6 On January 24, 1993, Oregon Department of Fish and Wildlife  
7 (ODFW) and Oregon State Police representatives responded to  
8 complaints of turbidity in the Rogue River downstream from where  
9 Rocky Gulch Creek enters the river. The subsequent investigation  
10 and water samples established that respondent's mining activities  
11 were the cause of the turbidity.

12 Although not included in the hearing officer's Findings, it  
13 is relevant to this proceeding that respondent also was  
14 criminally prosecuted and convicted in Josephine County for  
15 intentionally discharging mining waste into waters of the state  
16 without a permit in violation of ORS 468B.050 and intentionally  
17 causing pollution of waters of the state in violation of  
18 ORS 164.785. Respondent has appealed that conviction and it is  
19 pending in the Court of Appeals.

## 20 **ISSUES**

21 Respondent challenges only the hearing officer's Conclusions  
22 of Law. In addition, the Department points out that the  
23 Conclusions are incomplete because they only address violation 1,  
24 operating without a permit, although the discussion of the civil  
25 penalty addresses both violations and supports the Department's  
26 penalty assessment. Accordingly, a final Commission Order should



1 include Conclusions of Law concerning the second violation as  
2 well.

3 1. Respondent is estopped from relitigating violation of  
4 ORS 468.050

5 Respondent is precluded from relitigating this issue because  
6 he was criminally charged and found guilty by a Josephine County  
7 court for the same violation. Collateral estoppel prevents  
8 relitigation of particular issues or determinative facts that  
9 were necessary to decide in a previous legal action. Collateral  
10 estoppel can be used to preclude litigation of an issue in a  
11 civil action that was previously and conclusively addressed in a  
12 criminal action. See Bahler v. Fletcher, 257 Or 1, 474 P2d 329  
13 (1970).

14 Because collateral estoppel is a judicial tool for  
15 streamlining the fair administration of justice and to conserve  
16 judicial resources, the judge (or, in this case, the Commission)  
17 has discretion in deciding whether to apply the doctrine in a  
18 particular case. With this in mind, this memorandum will address  
19 respondent's substantive defenses to provide the Commission with  
20 the option of hearing those matters if it wishes.

21 2. Whether the Department must show actual harm to the  
22 environment

23 Respondent's first affirmative defense is that DEQ failed to  
24 prove that he violated ORS 468B.050(1)(a). That statute states  
25 that without first obtaining a permit from the director, which  
26 specifies the applicable effluent limits, no person shall

1 "[d]ischarge any wastes into the waters of the state from any  
2 industrial or commercial establishment or activity or any  
3 disposal system." There is no dispute that the stream is waters  
4 of the state or that the mining operation is a commercial  
5 establishment. The only dispute is whether the effluent from  
6 respondent's mining operation constitutes "waste."

7 ORS 468B.005(7) defines "waste" as "sewage, industrial  
8 wastes, and all other liquid, gaseous, solid, radioactive or  
9 other substances which will or may cause pollution or tend to  
10 cause pollution of any waters of the state."

11 ORS 468B.005(3) defines "pollution" as  
12 such alteration of the physical, chemical or biological  
13 properties of any waters of the states, including  
14 change in temperature, taste color turbidity, silt or  
15 odor of the waters \* \* \* which will, or tends to,  
16 either by itself or in connection with any other  
17 substance, create a public nuisance or which will or  
18 tends to render such waters harmful, detrimental or  
19 injurious to public health, safety or welfare, or to  
20 domestic, commercial, industrial, agricultural,  
21 recreational or other legitimate beneficial uses or to  
22 livestock, wildlife, fish or other aquatic life or the  
23 habitat thereof. (emphasis added)

24 Respondent asserts that because DEQ did not present any evidence  
25 of actual harm to any wildlife and no person has declared that  
26 the discharge from the mine adversely affected them, there has  
27 been no showing of "pollution."

28 Respondent relies solely on a 1938 study for the Oregon  
29 Department of Geology and Mineral Industries on placer mining  
30 discharges in the Rogue River drainage for his contention that  
31 muddy water from mining operations cause no harm. As was pointed

1 out at the hearing, this report has been discredited by  
2 subsequent studies and by a recent review and critique by the  
3 staff at the Oregon Department of Fish and Wildlife. No one can  
4 seriously contend anymore that muddy discharges into streams have  
5 no deleterious effect whatsoever.

6 Further, neither federal nor state law requires a showing of  
7 actual harm. DEQ must only show that the discharge will or tends  
8 to make the waters harmful, detrimental or injurious to fish or  
9 fish habitat. The primary way of making such a showing is to  
10 prove that the discharge caused the stream to exceed its water  
11 quality standards because one of the purposes of the water  
12 quality standards is to protect fish.

13 The Oregon Supreme Court discussed this concept in  
14 considerable detail in City of Klamath Falls v. Environ. Quality  
15 Comm., 318 Or 532 (1994). The City had argued that the EQC could  
16 prohibit a water temperature increase above the standards only  
17 when the agency affirmatively finds in any individual instance  
18 that the temperature increase would adversely affect trout. The  
19 Court upheld the EQC's rejection of that argument.

20 Although that case concerned the temperature standard, the  
21 discussion and reasoning applies to turbidity standards as well.  
22 The Court explained the standards as follows:

23 The temperature standard is a part of this state's  
24 water pollution laws. When it established and adopted  
25 [the standard], EQC factually determined that trout are  
26 harmed by discharges that increase [the water  
temperature by the prescribed amount.] Given that  
prior determination, it would be redundant, as well as  
contrary to the "value of stability and the public's  
right to rely on standards," to require a further

1 showing of harm to trout before a violation of the  
2 stand is made out. Consequently, we believe that the  
3 temperature standard embodies a policy choice to  
4 protect trout through a one-time factual determination  
5 of general applicability that trout are harmed by  
6 temperature increases above the standard's limits.

7 318 Or at 544.

8 DEQ has proved there was "pollution" by showing that the  
9 discharge caused an increase in turbidity that was a violation of  
10 the standard. The agency has met its burden of proof.

11 3. Whether DEQ is barred from enforcing the regulations  
12 because of failure to consider natural fluctuations of  
13 turbidity in the river

14 Respondent's second argument is not entirely clear. First,  
15 the reference to 468.110(3,4) must be a typographic error and we  
16 assume respondent means 468B.110(3) and (4). However, those  
17 sections are part of the 1991 statute concerning water quality  
18 standards related to forest practices operations and are not  
19 relevant to this case.

20 Respondent contends that the water quality standards do not  
21 comply with the requirements of ORS 183.545 and 183.550 and,  
22 therefore, they are unenforceable. Tied to this assertion is the  
23 argument that the stream's natural fluctuations create turbidity  
24 that at times is in excess of the water quality standards and,  
25 therefore, it is unreasonable to require respondent's operations  
26 to comply with the standards.

27 First, the ORS chapter 183 sections to which respondent  
28 refers concern the triennial review of all agency rules and  
29 opportunity for public comment. Respondent does not state why he

1 believes DEQ and the EQC have not complied with these statutes  
2 other than his assertion that DEQ has not considered natural  
3 fluctuations in establishing water quality standards. He asserts  
4 that "[r]equiring a permit that stipulates that the respondent be  
5 sensitive to a 10% variation in turbidity of the water in Rocky  
6 Gulch when common occurrences result in turbidity fluctuations  
7 which are orders of magnitude greater is unreasonable and clearly  
8 a violation [of] ORS 183.545, ORS 183.550, and ORS 468B.110(3)."

9       The Department completed its triennial review of its rules  
10 as required by law. Respondent has provided no authority in  
11 support of his assertion that the rules are unreasonable or that  
12 the triennial review process provides a basis for avoiding a  
13 civil penalty.

14       Furthermore, as discussed above, the Oregon Supreme Court  
15 has acknowledged that "the legislature has made a general policy  
16 choice to establish water quality standards to protect fish but  
17 has left it up to the EQC to specify the details of the  
18 standards" when it upheld the temperature standards in City of  
19 Klamath Falls v. Environ. Quality Comm., supra, 318 Or at 546.  
20 "To that extent, EQC has discretionary authority to refine the  
21 legislature's choice to protect the state's water quality for  
22 fish and to choose the manner by which the legislative goal will  
23 be achieved." Id.

24       Respondent raises two other matters in this section of his  
25 appeal. First, he asserts that witness David Haight was unaware  
26 of another watershed that enters Rocky Gulch between the sample

1 points, apparently implying that this water supply could have  
2 been the source of the increased turbulence. This is incorrect.

3 Mr. Haight testified that he was well aware of the other  
4 stream. When he found the turbidity, he followed it upstream and  
5 traced it to respondent's operation. Although he could not see  
6 the other stream as well, it appeared to be running normally.  
7 However, the stream on which respondent's operation was located  
8 was excessively turbid. In addition, this goes to the Findings  
9 of Fact, which respondent said he does not challenge.

10 Second, respondent complains that no one from DEQ testified  
11 at the hearing, even though he has complained to DEQ in the past  
12 about the standards and asked to be allowed to question  
13 Fred Hansen regarding why he was not granted a variance as  
14 requested in 1987. The hearing officer rightfully ruled that the  
15 director did not have to appear for questioning by respondent.  
16 At issue is whether respondent violated the statute and the rules  
17 in January 1993, not whether his 1987 permit variance request was  
18 reasonable. It is no defense to say that he asked permission to  
19 exceed the standards, was not granted such permission and,  
20 therefore, has a right to violate the standards.

21 4. Whether the prohibition against double jeopardy applies

22 Respondent contends ORS 131.515(1) prohibits a civil penalty  
23 because he has been tried (and convicted) in Josephine County for  
24 the same offense. That statute refers to criminal procedure and  
25 does not automatically bar this civil penalty.

26 ///

1           The general rule under U.S. v. Halper, 490 US 435 (1989), is  
2 that the government is precluded from seeking civil penalties  
3 against a defendant that has been criminally prosecuted for the  
4 same offense if the primary effect of the civil penalty is  
5 punitive or to serve as a deterrent. In other words, courts will  
6 look to see whether the civil penalty sought is so grossly  
7 disproportionate to the amount of loss suffered or the costs  
8 incurred by the government as to constitute deterrence or  
9 retribution instead of compensation.

10           Although one stated goal of DEQ's enforcement procedures,  
11 including civil penalties, is to deter future violators and  
12 violations, it is unlikely that the courts would find the civil  
13 penalty in this case to be unreasonable. The cost of the  
14 investigation alone exceeded the \$1,600 assessment for violation  
15 of ORS 468B.050. This amount simply does not reflect the  
16 concerns addressed in Halper. The criminal proceeding did not  
17 address the second violation for which a civil penalty is  
18 assessed, violation of the water quality standards, and, thus, is  
19 not subject to the Halper Doctrine in any event.

20 **CONCLUSION**

21           Respondent is collaterally estopped from denying liability  
22 for the civil penalty assessed for violation of ORS 468B.050  
23 because of his criminal conviction for the same offense in  
24 Josephine County court.

25           If the Commission chooses to rule on the merits, respondent  
26 challenges only the hearing officer's Conclusions of Law, not the

1 Findings of Fact. He raises as an affirmative defense that the  
2 mining discharges are not a pollutant and, therefore, he has not  
3 violated any statute or rule. This is erroneous as a matter of  
4 law.

5 A violation of the turbidity standard constitutes pollution.  
6 The discharges resulted in an increase in turbidity in excess of  
7 the standard. Therefore, the discharges constitute pollution.  
8 Respondent is in violation of ORS 468B.050(1)(a) for discharging  
9 wastes from a commercial or industrial establishment into waters  
10 of the state without first obtaining a permit from the  
11 Department. Furthermore, respondent is in violation of OAR 340-  
12 41-365(2)(c) for causing an increase in stream turbidity in  
13 violation of the standards for the Rogue Basin.

14 Respondent also asserts that DEQ or the EQC erroneously  
15 failed to consider natural stream fluctuations in setting the  
16 standard and, therefore, the standard is unenforceable. This too  
17 is an erroneous assertion as a matter of law. The rules were  
18 adopted pursuant to the EQC's statutory authority and are  
19 enforceable.

20 Finally, respondent claims this proceeding puts him in  
21 double jeopardy because of his prior criminal conviction for the  
22 same offense. The amount of the civil penalty does not meet the  
23 standards for the application of the double jeopardy protection  
24 and, thus, it does not apply.


25 ///

26 ///



1           The hearing officer's Conclusions of Law should be upheld  
2 and modified to reflect the violation of the water quality  
3 standard as well as discharging without a permit.

4                               Respectfully Submitted,

5  
6                                 
7                               SHELLEY K. MCINTYRE                               5/11/94  
8                               Assistant Attorney General

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CERTIFICATE OF SERVICE BY MAIL

I certify that on May 12, 1994, I served the foregoing  
DEPARTMENT'S RESPONSE TO RESPONDENT'S APPEAL upon the party below  
by mailing, regular mail, postage prepaid, true copy to:

Geoff Garcia  
12303 Galice Road  
Merlin, OR 97532

  
Shelley K. McIntyre

dld0046.plc

1                   BEFORE THE ENVIRONMENTAL QUALITY COMMISSION

2                                   OF THE STATE OF OREGON

3 DEPARTMENT OF ENVIRONMENTAL    )  
4 QUALITY OF THE STATE OF        )  
5 OREGON,                            )

No. WQIW-SWR-93-043

6                   Department,    )

**COMMISSION'S FINDINGS OF FACT,  
CONCLUSIONS OF LAW, OPINION  
AND ORDER**

7                   v.                )

8 GEOFF GARCIA,                    )

9                   Respondent.         )

10 BACKGROUND

11           On April 15, 1993, DEQ notified Geoffrey Garcia (respondent)  
12 that on January 24, 1993, he had violated ORS 468B.050(1)(a) by  
13 discharging waste from his gold mining operation into waters of  
14 the state without a permit, and that he had violated  
15 ORS 468B.025(1)(b) and OAR 340-41-365(2)(c) because his waste  
16 discharge increased turbidity above the regulatory standard. DEQ  
17 assessed a penalty of \$4,800. Garcia appealed DEQ's action on  
18 the grounds that his mining operation had produced no water  
19 pollution.

20           Linda Zucker, the Commission's hearing officer, conducted a  
21 contested case hearing on October 15, 1993. Larry Cwik, DEQ's  
22 lay representative, presented DEQ's case. Garcia attended the  
23 hearing and provided evidence and argument. The record closed  
24 November 10, 1993, and the hearing officer issued her Findings of  
25 Fact and Conclusions of Law on January 21, 1994. Pursuant to OAR  
26 340-11-132, Garcia requested review by the full Commission. The  
matter was set for the Commission's July 22, 1994, meeting.

1 FINDINGS OF FACT

2 Respondent mines gold for profit on Bureau of Land  
3 Management land on Rocky Gulch Creek in Josephine County, Oregon.  
4 The creek, a tributary of the Rogue River, is a component of  
5 Oregon state waters.

6 Garcia has had a number of discussions with DEQ staff about  
7 his need to obtain a pollution discharge permit. In 1987 he  
8 applied for a permit, seeking a variance from the usual  
9 requirements because, as he acknowledged: "[I]t would be  
10 improbable that [the facility could] operate without raising the  
11 turbidity of Rocky Creek above state guidelines." Ex. 17.<sup>1</sup>

12 On January 24, 1993, Garcia mined for gold at his claim by,  
13 among other things, moving earth with a bulldozer. The mining  
14 activities resulted in muddy discharge into Rocky Gulch Creek.  
15 Garcia did not have a permit to discharge waste into waters of  
16 the state.

17 On January 24, 1993, a biologist from the Oregon Department  
18 of Fish and Wildlife took water samples from the creek above, at  
19 and below the site of Garcia's mining activity. Laboratory  
20 analysis established that the samples taken from Rocky Gulch  
21 Creek above the point of Garcia's discharge had a measured  
22 turbidity of 5 Est NTU. The sample taken below the discharge had  
23 a measured turbidity of 34 Est NTU. The sample taken from the

24 ///

25

---

26 <sup>1</sup> The case record does not disclose the disposition of the application.

1 discharge entering Rocky Gulch Creek from the mining operation  
2 had a measured turbidity of 2800 Est NTU.

3 Observations of the stream's color and turbidity were  
4 consistent with the laboratory analysis. The timing of the  
5 mining activities on January 24, 1993, was consistent with  
6 observed changes in river color and turbidity. The case record  
7 does not contain evidence of any emergency.

8 We take official notice of OAR 340-41-365(2)(c); 340-12-  
9 055(1)(b); 340-12-055(2)(f) and 340-12-090(2)(a).<sup>1</sup> We also take  
10 official notice of the respondent's criminal prosecution and  
11 conviction in Josephine County District Court for intentionally  
12 discharging mining wastes into waters of the state without a  
13 permit in violation of ORS 468B.050 and intentionally causing  
14 pollution of waters of the state in violation of ORS 164.785,  
15 Case No. 930189M.<sup>2</sup>

16 ULTIMATE FACTS

17 On January 24, 1993, respondent intentionally discharged  
18 wastes from a commercial establishment into waters of the state  
19 without first obtaining a permit from DEQ and his waste discharge  
20 increased turbidity above the regulatory standards. He knew he  
21 needed a permit and he knew his mining activities would cause an  
22 increase in the turbidity above the regulatory limit, violating  
23 the regulatory standard.

24 CONCLUSIONS OF LAW

25 The Commission has jurisdiction.

26 Respondent violated ORS 468B.025(1)(b) by discharging waste

1 from his mining operation into waters of the state without a  
2 permit and OAR 340-41-365(2) because his discharge reduced the  
3 quality of Rocky Gulch Creek below the Commission's standards for  
4 waters of the Rogue Basin. Accordingly, respondent is liable for  
5 a civil penalty.

6 OAR 340-12-045 authorizes and the case facts support the  
7 \$4,800 total penalty.

8 DISCUSSION

9 A. Liability

10 Respondent has not denied or otherwise controverted the  
11 conduct that constituted the violations. In his appeal dated  
12 April 7, 1994, Respondent appealed only the hearing officer's  
13 conclusions of law. That appeal raises three affirmative  
14 defenses, addressed in turn in paragraphs 2 through 5 below.  
15 Paragraph 1 discusses the Commission's authority to preclude  
16 respondent from relitigating one of the violations.

17 1. Whether Respondent is estopped from relitigating  
18 violation of ORS 468.050

19 We wish to bring to the Commission's attention that, as a  
20 legal matter, respondent is precluded from relitigating this  
21 issue because the Josephine County court found him guilty of the  
22 same violation. Collateral estoppel prevents relitigation of  
23 particular issues or determinative facts that were necessary to  
24 decide in a previous legal action. It can be used to preclude  
25 litigation of an issue in a civil action that a criminal action  
26 ///

1 previously and conclusively addressed. See Bahler v. Fletcher,  
2 257 Or 1 (1970).

3 Because collateral estoppel is a judicial tool for  
4 streamlining the fair administration of justice and conserving  
5 judicial resources, the judge (or, in this case, the Commission)  
6 has discretion to decide whether to apply the doctrine in a  
7 particular case. In exercising this discretion, the Commission  
8 finds that Respondent is estopped from relitigating the violation  
9 of ORS 468B.050. However, because we are unaware of any written  
10 decision in the criminal case, we will address respondent's  
11 substantive defenses.

12 2. Whether the Department must show actual harm to the  
13 environment

14 Respondent's first affirmative defense is that DEQ failed to  
15 prove that he violated ORS 468B.050(1)(a). Respondent asserts  
16 that because DEQ did not present any evidence of actual harm to  
17 any wildlife and no person has declared that the discharge from  
18 the mine adversely affected them, there has been no showing of  
19 "pollution."

20 Without first obtaining a permit that specifies the  
21 applicable effluent limits, no person shall "[d]ischarge any  
22 wastes into the waters of the state from any industrial or  
23 commercial establishment or activity or any disposal system."  
24 ORS 468B.050(1)(a). It is undisputed that the stream is waters  
25 of the state and that the mining operation is a commercial

26 ///

1 establishment. Respondent does dispute whether the effluent from  
2 his mining operation constitutes "waste."

3 ORS 468B.050(7) defines "waste" as "sewage, industrial  
4 wastes, and all other liquid, gaseous, solid, radioactive or  
5 other substances which will or may cause pollution or tend to  
6 cause pollution of any waters of the state."

7 ORS 468B.005(3) defines "pollution" as:

8 "[S]uch alteration of the physical, chemical  
9 or biological properties of any waters of the  
10 states, including change in temperature,  
11 taste, color, turbidity, silt or odor of the  
12 waters \* \* \* which will, or tends to, either  
13 by itself or in connection with any other  
14 substance, create a public nuisance or which  
15 will or tends to render such waters harmful,  
detrimental or injurious to public health,  
safety or welfare, or to domestic,  
commercial, industrial, agricultural,  
recreational or other legitimate beneficial  
uses or to livestock, wildlife, fish or other  
aquatic life or the habitat thereof."  
(Emphasis added.)

16 DEQ must show only that the discharge "will or tends to"  
17 make the waters harmful, detrimental or injurious to fish or fish  
18 habitat. The primary way of making such a showing is to prove  
19 that the discharge caused the stream to exceed its water quality  
20 standards because one of the purposes of those standards is to  
21 protect fish. See City of Klamath Falls v. Environ. Quality  
22 Comm., 318 Or 532 (1994). Respondent does not dispute that the  
23 discharge caused an increase in turbidity that violated the  
24 standard.

25 ///

26 ///



1           3.    Whether DEQ is barred from enforcing the regulations  
2                   because of failure to consider natural fluctuations of  
                  turbidity in the river

3           Respondent's second argument is not entirely clear. First,  
4 the reference to "468.110(3,4)" must be a typographic error. We  
5 assume respondent means 468B.110(3) and (4). However, those  
6 sections are part of the 1991 statute concerning water quality  
7 standards related to forest practices and are not relevant to  
8 this case.

9           Respondent also contends that the water quality standards do  
10 not comply with the requirements of ORS 183.545 and 183.550 and,  
11 therefore, they are unenforceable. Respondent also argues that  
12 the stream's natural fluctuations create turbidity that at times  
13 exceeds the water quality standards and, therefore, DEQ is  
14 unreasonable in requiring his operations to comply with the  
15 standards.

16           However, the ORS chapter 183 sections to which respondent  
17 refers concern the triennial review of all agency rules and  
18 opportunity for public comment. Respondent does not state why he  
19 believes DEQ and the EQC have not complied with these statutes  
20 other than asserting that DEQ has not considered natural  
21 fluctuations in establishing water quality standards.

22           DEQ completed its triennial review of its rules as required  
23 by law. Respondent has provided no authority supporting his  
24 assertion that the rules are unreasonable or that the triennial  
25 review provides a basis for avoiding a civil penalty.

26    ///

1 Even assuming that the requirements of ORS 183.545 and  
2 183.550 provide a basis for penalty avoidance, respondent has not  
3 provided any evidence to establish that a properly justified rule  
4 would protect a 580% increase in creek turbidity, which was the  
5 evidence in this case concerning respondent's actions. He has  
6 not established any connection between the purported rule defect  
7 and the circumstances of his case. Consequently, he has not  
8 established a basis for avoiding penalty liability.

9 Respondent raises two other matters in this section of his  
10 appeal. First, he asserts that DEQ's witness David Haight was  
11 unaware of another watershed that enters Rocky Gulch between the  
12 sample points, apparently implying that this water supply could  
13 caused the increased turbulence. This argument goes to the  
14 Findings of Fact, which respondent does not challenge.

15 Second, respondent complains that no one from DEQ testified  
16 at the hearing, even though he has complained to DEQ in the past  
17 about the standards and asked to be allowed to question  
18 Fred Hansen regarding why DEQ did not grant him a variance as he  
19 requested in 1987. The hearing officer rightfully ruled that the  
20 director did not have to appear for questioning by respondent.  
21 At issue is whether respondent violated the statute and the rules  
22 in January 1993, not whether his 1987 permit variance request was  
23 reasonable. It is no defense to say that he asked permission to  
24 exceed the standards, was not granted such permission and,  
25 therefore, has a right to violate the standards.

26 ///

1           4.    Whether the prohibition against double jeopardy applies

2           Respondent contends ORS 131.515(1) prohibits a civil penalty  
3 because he has been tried and convicted in Josephine County for  
4 the same offense. That statute refers to criminal procedure and  
5 does not automatically bar this civil penalty.

6           The United States Supreme Court has held that the double  
7 jeopardy clause of the United States Constitution protects a  
8 defendant who has been convicted criminally from receiving an  
9 additional sanction for the same conduct in a subsequent civil  
10 proceeding where the civil sanction can be characterized only as  
11 deterrent or retributive. United States v. Halper, 490 US 435  
12 (1989). However, where the civil penalty is fairly characterized  
13 as remedial, not only as a deterrent or retribution, it falls  
14 outside the double jeopardy clause protection.

15           In this case, the total civil penalty for violation of ORS  
16 468B.025(1)(b) is \$1,600. The cost to the State of Oregon for  
17 investigating and issuing the Notice of Civil Penalty was over  
18 \$1,600. This amount simply does not reflect the concerns  
19 addressed in Halper.

20 B.    The Penalty

21           The system DEQ used to establish the amount of this penalty  
22 contains a matrix and formula that consider the "class" or  
23 "classification" and "magnitude" of the violation (which creates  
24 a base penalty (BP)); whether the regulated party had any prior  
25 "significant actions (P); whether the regulated party took  
26 corrective action in prior violations (H); whether the violation

1 was repeated or continuous (O); the cause of the violation (R);  
2 cooperativeness and efforts to correct the violation (C); and  
3 economic benefit gained. The resulting penalty formula is:

4  $BP + [(.1 \times BP)](P + H + O + R + C) + EB.$  OAR 340-12-045.

5 In determining the amount of the penalty for the first  
6 violation, DEQ rated the classification Class I, rated the  
7 magnitude minor, and assigned a value of 6 to R and values of  
8 zero to P, H, O, C and EB, producing a base penalty of \$1,000 and  
9 a total of \$1,600.

10 For the second violation, DEQ rated the classification Class  
11 II, rated the magnitude major, and assigned a value of 6 for R  
12 and values of zero to P, H, O, C and EB, producing a base penalty  
13 of \$2,000 and a total penalty of \$3,200.

14 Respondent did not challenge the classification and  
15 magnitude determinations and the case record supports them.

16 DEQ valued the violations as "intentional." Agency rule  
17 defines "intentional" as "conduct by a person with a conscious  
18 objective to cause the result of the conduct." OAR 340-12-  
19 030(9). The evidence shows that Garcia knew both that the law  
20 required a permit and that his discharge would reduce water  
21 quality below the allowable limits. In proceeding to operate his  
22 equipment nonetheless, he showed a conscious objective both to  
23 discharge without a permit and to reduce the quality of state  
24 waters. Therefore, he acted intentionally.

25 ///

26 ///

1 The case record supports the penalty assessed.

2 DATED this \_\_\_\_\_ day of July, 1994.

3 ENVIRONMENTAL QUALITY COMMISSION

4  
5 William Wessinger, Chair

6  
7  
8 1. These rules provide in relevant part:

9 OAR 340-41-365(2)(c):

10 \* \* \* \* \*

11 No wastes shall be discharged and no  
12 activities shall be conducted which either  
13 alone or in combination with other wastes or  
14 activities will cause violation of the  
15 following standards in the waters of the  
16 Rogue River Basin.

17 \* \* \* \* \*

18 (c) Turbidity (Nephelometric Turbidity  
19 Units, NTU): No more than a ten percent  
20 cumulative increase in natural stream  
21 turbidities shall be allowed, as measured  
22 relative to a control point immediately  
23 upstream of the turbidity causing activity.  
24 However, limited duration activities  
25 necessary to address an emergency or to  
26 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.

\* \* \* \* \*

(B) Dredging, Construction or other  
Legitimate Activities: Permit or  
certification authorized under terms of  
Section 401 or 404 (Permits and Licenses,

1 Federal Water Pollution Control Act) or OAR  
2 141-85-100 et seq. (Removal and Fill  
3 Permits, Division of State Lands), with  
4 limitations and conditions governing the  
5 activity set forth in the permit or  
6 certificate.

7  
8 340-12-055 Violations pertaining to water  
9 quality shall be classified as follows:

10 (1) Class One:

11 \* \* \* \* \*

12 (b) Any discharge of waste that enters  
13 waters of the state, either without a waste  
14 discharge permit or from a discharge point  
15 not authorized by a waste discharge permit

16 \* \* \* \* \*

17 (2) Class Two:

18 \* \* \* \* \*

19 (f) Any violation related to water  
20 quality which is not otherwise classified in  
21 these rules.

22 OAR 340-12-090(2) (a):

23 \* \* \* \* \*

24 (2) Magnitudes for select violations  
25 pertaining to Water Quality wastewater  
26 discharge limitations may be determined as  
follows:

(a) Major:

(A) Greater than 1.6 times any  
applicable maximum flow rate, concentration  
limitation, or any applicable mass  
limitation; or

(B) Greater than 50 percent below any  
applicable minimum concentration limitation;  
or

(C) Greater than 2 pH units above or  
below any applicable pH range; or

1 (D) Greater than 10 percentage points  
2 below any applicable removal rate.

3 2. At the hearing before the hearing officer, DEQ offered copies  
4 of citations issued to respondent and copies of a case register  
5 recording findings of guilt and asked the hearing officer to  
6 admit them and find that they are conclusive of liability in the  
7 present proceeding. By letter dated October 27, 1993, the  
8 hearing officer excluded these documents.

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**DEPARTMENT OF JUSTICE**

PORTLAND OFFICE  
1515 SW 5th Avenue  
Suite 410  
Portland, Oregon 97201  
Telephone: (503) 229-5725  
FAX: (503) 229-5120  
TDD: (503) 378-5938  
**July 1, 1994**

Linda Zucker, Hearing Officer  
Department of Environmental Quality  
811 SW Sixth Avenue  
Portland OR 97204

Re: Garcia Hearing

Dear Ms. Zucker:

Enclosed is a Motion to Present Additional Evidence with attached documents consisting of a memorandum from Larry Cwik to me dated June 30, 1994, copies of e-mails documenting time for Kenan Smith, a memorandum from Dennis Belsky to me dated June 22, 1994, a memorandum from Beth Woodrow to me dated June 30, 1994 and a Certificate of Service on respondent of same. I also am giving you the original of the Findings, Conclusions, Opinion and Order that we have prepared for the Commission pursuant to Michael Huston's suggestion. I have not served this on respondent. I understand from your correspondence that you are sending respondent a copy of the Commission's packet, so I assume he will get a copy of it.

Sincerely,

A handwritten signature in cursive script that reads "Shelley K. McIntyre".

Shelley K. McIntyre  
Assistant Attorney General



1                   BEFORE THE ENVIRONMENTAL QUALITY COMMISSION  
2                                   OF THE STATE OF OREGON

3 DEPARTMENT OF ENVIRONMENTAL    )  
4 QUALITY OF THE STATE OF        )  
5 OREGON,                            )

No. WQIW-SWR-93-043

6                   Department,    )

**MOTION TO PRESENT  
ADDITIONAL EVIDENCE**

7                   v.                )

8 GEOFF GARCIA,                    )

9                   Respondent.         )

10           This motion is pursuant to OAR 340-11-132(4)(j), which  
11 allows the Commission to take additional evidence during an  
12 appeal to the Commission of the hearing officer's Final Order in  
13 a civil penalty proceeding. The rule requires that requests to  
14 take additional evidence be submitted by motion and explain why  
15 the evidence was not presented at the hearing before the hearing  
16 officer.

17           The additional evidence consists of statements by state  
18 employees of the time spent investigating this matter and the  
19 amount of money it cost the state to bring the enforcement  
20 action. This evidence is relevant to respondent's Double  
21 Jeopardy affirmative defense.

22           As explained in the Department's Response to Respondent's  
23 Appeal, the state's expenses exceeded the civil penalty assessed  
24 for the first violation, that of discharging wastes into waters  
25 of the state without a permit. Under the Halper Doctrine, a  
26 reviewing court will look at the relationship between the state's

///


1 costs and the amount of the civil penalty assessed. The expense  
2 sheets show that the civil penalty is not disproportionate.

3 We understand that the hearing officer found it unnecessary  
4 to hear legal argument on the Double Jeopardy defense because she  
5 disallowed any evidence regarding the prior criminal conviction.  
6 Thus, there was no need to introduce evidence concerning the  
7 state's costs.

8 DATED this 1 day of July, 1994.

9 Respectfully submitted,

10 THEODORE R. KULONGOSKI  
11 Attorney General

12   
13 Shelley K. McIntyre #84401  
14 Assistant Attorney General  
15 Of Attorneys for State of Oregon  
16 Department of Justice  
17 1515 SW 5th Avenue, Suite 410  
18 Portland, OR 97201  
19 Telephone: (503) 229-5725

18 SKM:lyr/SKM0231.PLE

CERTIFICATE OF SERVICE BY MAIL

I certify that on July 1, 1994, I served the foregoing  
MOTION TO PRESENT ADDITIONAL EVIDENCE upon the party hereto by  
mailing, regular mail, postage prepaid, a true, exact and full  
copy thereof to:

Geoff Garcia  
12303 Galice Road  
Merlin, OR 97532

Respondent

Shelley K. McIntyre  
Shelley K. McIntyre #84401  
Assistant Attorney General  
Of Attorneys for State of Oregon

cc: Larry Cwik  
Department of Environmental Quality  
Enforcement Section  
811 SW Sixth Avenue  
Portland, OR 97204-1390

SKM:lyr/SKM0233.PLE



STATE OF OREGON DEQ

INTEROFFICE MEMO

DEQ

229-5728

DEPT

TELEPHONE

TO: Shelley McIntyre, Oregon Department of Justice DATE: June 30, 1994

FROM: Barry CWR DEQ Enforcement Section

SUBJECT: Work on Geoff Garcia Case

My records show that I worked 36 hours on the Geoff Garcia DEQ enforcement action before it was issued on April 15, 1993, and 94 hours in follow-up to the action from April 15, 1993 to the present. My pay rate was \$17.82/Hour until June 30, 1993, and \$20.03/Hour from July 1, 1993 to the present. 24 of the the follow-up hours were before the 7/1/93 salary change date; the rest after. The salary figures do not include benefits or overhead.

36 x 17.82 = 641.52

24 x 17.82 = 427.68

70 x 20.03 = 1402.10

FROM: SMITH Kenan \*DEQ

TO: BELSKY Dennis \*DEQ  
GRIMES Gary \*DEQ

DATE: 06-22-94  
TIME: 11:30

CC: SMITH Kenan \*DEQ

SUBJECT: Time spent on the Garcia Case

PRIORITY:

ATTACHMENTS:

-----  
Here are my latest calcs that you can supply Shelly M. with in the AG's office. I guess she also needs time and cost for you (Denny and Gary), OSP, and ODFW on this WQ issue. I will leave this in your hands Denny unless I hear otherwise from Gary. My cost without administrative cost is \$405.00.  
-----

FROM: CWIK Larry \*DEQ

TO: SMITH Kenan \*DEQ

DATE: 05-23-94  
TIME: 11:01

CC: CWIK Larry \*DEQ  
KOLLIAS Van \*DEQ  
BELSKY Dennis \*DEQ

SUBJECT: Geoff Garcia Case Time

PRIORITY:

ATTACHMENTS:

-----  
Thanks, Kenan. As I mentioned, Shelley sent her brief to the EQC RE Garcia already. In it, she noted that the case investigation time/money exceeded \$1600, the amount of the one Garcia penalty that could be subject to double jeopardy. Denny can hold off on figuring his time. We probably do not need this documentation. I will confirm with Shelley when she returns on 5/24. I will send a cc of this e-mail with your time to her today.  
-----

REPLY FROM: CWIK Larry \*DEQ

FROM: SMITH Kenan \*DEQ

TO: BELSKY Dennis \*DEQ  
CWIK Larry \*DEQ

DATE: 05-23-94  
TIME: 09:54

CC: GRIMES Gary \*DEQ

SUBJECT: Geoff Garcia Case Time

PRIORITY:

ATTACHMENTS:

Larry:

Below is a list of the time I have documented to have spent on this case.

01-25-93-----Initial Investigation-----6 hours  
02-02-93-----Memo write up and notarized-----2 hours  
03-15-93-----Mtg with Josephine DA-----3 hours  
04-05-93-----Review of Cwik documents-----1 hours  
04-15-93-----Review of Enf documents-----1 hours

05-08-93-----Roseburg mtg with Garcia-----8 hours

TOTAL

-----  
21 hours

Average hourly salary for EE2 (level 5) was  $\$3244/168 = \$19.31 \times 21 =$   
\$405.00

---

State of Oregon  
Department of Environmental Quality

Memorandum

Date: June 22, 1994

To: Shelley McIntyre, Dept. of Justice  
From: Dennis Belsky, Dept. Environmental Quality  
Subject: Geoffrey Garcia

*Dennis Belsky*

You asked for a recap of my time spent on this enforcement case from the investigation phase to issuance of a Civil Penalty. Accounting for all time is not possible as many short meetings and phone calls occurred. I did not include time for which I had not written down on my 1993 calendar. On that basis, this is the time spent from January, 1993 to May, 1993.

DATE	ACTIVITY	HOURS SPENT
March 15, 1993	Meet with Josephine Cty DA's	5.0
April 5, 1993	Review of draft enforcement documents	1.0
May 7, 1993	Meet with Garcia in Roseburg DEQ office	8.0
	TOTAL	14.0

Average hourly salary for EE3 (step 7) was  $\$3900/168 = \$23/\text{hour}$   
14 hours x \$23 = \$325

Please call me at 776-6010 ext 226 if you have any questions.

cc: Van Kollias, DEQ enforcement

RECEIVED  
JUN 24 1994  
DEPARTMENT OF JUSTICE  
PORTLAND LEGAL

State of Oregon  
Department of Environmental Quality

Memorandum

Date: June 30, 1994

To: Shelley McIntyre  
From: Beth Woodrow, Budget Office *Beck*  
Subject: Total Cost Factors

In response to your request about the total cost to the state of an employee's time:

- Our budgeted rate for fringe benefits such as FICA, insurances and retirement contributions is 35%, applied to salaries and wages.
- The agency also budgets an indirect rate, expressed as a percent of total personal services costs (salary plus fringe benefits) that recovers general agency administrative costs, such as accounting, information systems and human resources functions. The rate is negotiated each year with EPA and has ranged from 20 to 22% in the past few years.
- The indirect rate does not include standard overhead costs for housing and equipping employees, costs such as rent, telephone, furniture, supplies, etc. We do not employ a standard rate for these costs, but as a reference point, the cleanup program's billing rate might be useful to you. They charge a rate of 98% (again, of total personal services) to cover such items, as well as the costs of training, leave time, and clerical and administrative support.



MEMORANDUM  
Oregon State Police

DATE: July 5, 1994

TO: Shelley McIntyre  
Oregon Department of Justice

FROM: Jack L. Baker, Senior Trooper  
Oregon State Police - Grants Pass

SUBJECT: Geoffrey Garcia case

Regarding your phone message that you left me needing my time spent working on the investigation and the cost for that time.

I estimate the time at 8 hours and the cost at \$167.76. The cost was figured from my monthly salary but did not include the cost of the benefits that are also part of my employment package. I am not sure how they figure that out on an hourly scale. If you use the D&Q formula I am sure that would be close.

Post-It <sup>®</sup> brand fax transmittal memo 7671		of pages = 1
To: Shelley McIntyre	From: Jack Baker	
Co: Ore Dept Justice	Co: OSP - Grants Pass	
Dept:	Phone #	774-3113 ext 308
Fax #	Fax #	

State of Oregon  
Department of Environmental Quality

Memorandum

Date: June 22, 1994

To: Shelley McIntyre, Dept. of Justice  
From: Dennis Belsky, Dept. Environmental Quality  
Subject: Geoffrey Garcia

*Dennis Belsky*

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DATE	ACTIVITY	HOURS SPENT
March 15, 1993	Meet with Josephine Cty DA's	5.0
April 5, 1993	Review of draft enforcement documents	1.0
May 7, 1993	Meet with Garcia in Roseburg DEQ office	8.0
		TOTAL 14.0

Average hourly salary for EE3 (step 7) was  $\$3900/168 = \$23/\text{hour}$   
 $14 \text{ hours} \times \$23 = \$325$

Please call me at 776-6010 ext 226 if you have any questions.

cc: Van Kollias, DEQ enforcement

RECEIVED  
JUN 24 1994  
DEPARTMENT OF JUSTICE  
PORTLAND LEGAL

State of Oregon  
Department of Environmental Quality

Memorandum

Date: June 30, 1994

To: Shelley McIntyre  
From: Beth Woodrow, Budget Office *Bell*  
Subject: Total Cost Factors

In response to your request about the total cost to the state of an employee's time:

- Our budgeted rate for fringe benefits such as FICA, insurances and retirement contributions is 35%, applied to salaries and wages.
- The agency also budgets an indirect rate, expressed as a percent of total personal services costs (salary plus fringe benefits) that recovers general agency administrative costs, such as accounting, information systems and human resources functions. The rate is negotiated each year with EPA and has ranged from 20 to 22% in the past few years.
- The indirect rate does not include standard overhead costs for housing and equipping employees, costs such as rent, telephone, furniture, supplies, etc. We do not employ a standard rate for these costs, but as a reference point, the cleanup program's billing rate might be useful to you. They charge a rate of 98% (again, of total personal services) to cover such items, as well as the costs of training, leave time, and clerical and administrative support.

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BEFORE THE ENVIRONMENTAL QUALITY COMMISSION  
OF THE STATE OF OREGON

IN THE MATTER OF ) No. WQIW-SWR-93-043  
GEOFFREY GARCIA, )  
Respondent ) COMMISSION'S FINDINGS OF FACT,  
 ) CONCLUSIONS OF LAW, OPINION  
 ) AND ORDER

BACKGROUND

On April 15, 1993, DEQ notified Geoffrey Garcia (respondent) that on January 24, 1993, he had violated ORS 468B.050(1)(a) by discharging waste from his gold mining operation into waters of the state without a permit, and that he had violated ORS 468B.025(1)(b) and OAR 340-41-365(2)(c) because his waste discharge increased turbidity above the regulatory standard. DEQ assessed a penalty of \$4,800. Garcia appealed DEQ's action on the grounds that his mining operation had produced no water pollution.

Linda Zucker, the Commission's hearing officer, conducted a contested case hearing on October 15, 1993. Larry Cwik, DEQ's lay representative, presented DEQ's case. Garcia attended the hearing and provided evidence and argument. The record closed November 10, 1993, and the hearing officer issued her Findings of Fact and Conclusions of Law on January 21, 1994. Pursuant to OAR 340-11-132, Garcia requested review by the full Commission. The matter was set for the Commission's July 22, 1994, meeting.

1 MOTIONS TO PRESENT ADDITIONAL EVIDENCE

2 Both the Department and Garcia filed motions to present  
3 additional evidence pursuant to OAR 340-11-132(4)(j). In  
4 addition, at the hearing before the full Commission the  
5 Department offered a December 17, 1993, memorandum from  
6 Emery Wagner to Alan McGie, Oregon Department of Fish and  
7 Wildlife. The Commission admits all additional offered evidence.

8 FINDINGS OF FACT

9 Respondent mines gold for profit on Bureau of Land  
10 Management land on Rocky Gulch Creek in Josephine County, Oregon.  
11 The creek, a tributary of the Rogue River, is a component of  
12 Oregon state waters.

13 Garcia has had a number of discussions with DEQ staff about  
14 his need to obtain a pollution discharge permit. In 1987 he  
15 applied for a permit, seeking a variance from the usual  
16 requirements because, as he acknowledged: "[I]t would be  
17 improbable that [the facility could] operate without raising the  
18 turbidity of Rocky Creek above state guidelines." Ex. 17.<sup>1</sup>

19 On January 24, 1993, Garcia mined for gold at his claim by,  
20 among other things, moving earth with a bulldozer. The mining  
21 activities resulted in muddy discharge into Rocky Gulch Creek.  
22 Garcia did not have a permit to discharge waste into waters of  
23 the state.

24 ///

25

26 <sup>1</sup> The case record does not disclose the disposition of the application.

1 On January 24, 1993, a biologist from the Oregon Department  
2 of Fish and Wildlife took water samples from the creek above, at  
3 and below the site of Garcia's mining activity. Laboratory  
4 analysis established that the samples taken from Rocky Gulch  
5 Creek above the point of Garcia's discharge had a measured  
6 turbidity of 5 Est NTU. The sample taken below the discharge had  
7 a measured turbidity of 34 Est NTU. The sample taken from the  
8 discharge entering Rocky Gulch Creek from the mining operation  
9 had a measured turbidity of 2800 Est NTU.

10 Observations of the stream's color and turbidity were  
11 consistent with the laboratory analysis. The timing of the  
12 mining activities on January 24, 1993, was consistent with  
13 observed changes in river color and turbidity. The case record  
14 does not contain evidence of any emergency.

15 We take official notice of OAR 340-41-365(2)(c); 340-12-  
16 055(1)(b); 340-12-055(2)(f) and 340-12-090(2)(a).<sup>1</sup> We also take  
17 official notice of the respondent's criminal prosecution and  
18 conviction in Josephine County District Court for intentionally  
19 discharging mining wastes into waters of the state without a  
20 permit in violation of ORS 468B.050 and intentionally causing  
21 pollution of waters of the state in violation of ORS 164.785,  
22 Case No. 930189M.<sup>2</sup>

23 ULTIMATE FACTS

24 On January 24, 1993, respondent intentionally discharged  
25 wastes from a commercial establishment into waters of the state  
26 without first obtaining a permit from DEQ and his waste discharge

1 increased turbidity above the regulatory standards. He knew he  
2 needed a permit and he knew his mining activities would cause an  
3 increase in the turbidity above the regulatory limit, violating  
4 the regulatory standard.

5 CONCLUSIONS OF LAW

6 The Commission has jurisdiction.

7 Respondent violated ORS 468B.025(1)(b) by discharging waste  
8 from his mining operation into waters of the state without a  
9 permit and OAR 340-41-365(2) because his discharge reduced the  
10 quality of Rocky Gulch Creek below the Commission's standards for  
11 waters of the Rogue Basin. Accordingly, respondent is liable for  
12 a civil penalty.

13 OAR 340-12-045 authorizes and the case facts support the  
14 \$4,800 total penalty.

15 DISCUSSION

16 A. Liability

17 Respondent has not denied or otherwise controverted the  
18 conduct that constituted the violations. In his appeal dated  
19 April 7, 1994, respondent appealed only the hearing officer's  
20 conclusions of law. That appeal raises three affirmative  
21 defenses, addressed in turn in paragraphs 2 through 5 below.  
22 Paragraph 1 discusses the Commission's authority to preclude  
23 respondent from relitigating one of the violations.

24 ///

25 ///

26 ///

1           1.    Whether Respondent is estopped from relitigating  
2                    violation of ORS 468.050

3           As a legal matter, respondent is precluded from relitigating  
4 this issue because the Josephine County court found him guilty of  
5 the same violation. Collateral estoppel prevents relitigation of  
6 particular issues or determinative facts that were necessary to  
7 decide in a previous legal action. It can be used to preclude  
8 litigation of an issue in a civil action that a criminal action  
9 previously and conclusively addressed. See Bahler v. Fletcher,  
10 257 Or 1 (1970).

11           Because collateral estoppel is a judicial tool for  
12 streamlining the fair administration of justice and conserving  
13 judicial resources, the judge (or, in this case, the Commission)  
14 has discretion to decide whether to apply the doctrine in a  
15 particular case. In exercising this discretion, the Commission  
16 finds that Respondent is estopped from relitigating the violation  
17 of ORS 468B.050. However, because we are unaware of any written  
18 decision in the criminal case, we will address respondent's  
19 substantive defenses.

20           2.    Whether the Department must show actual harm to the  
21                    environment

22           Respondent's first affirmative defense is that DEQ failed to  
23 prove that he violated ORS 468B.050(1)(a). Respondent asserts  
24 that because DEQ did not present any evidence of actual harm to  
25 any wildlife and no person has declared that the discharge from  
26 ///



1 the mine adversely affected them, there has been no showing of  
2 "pollution."

3 Without first obtaining a permit that specifies the  
4 applicable effluent limits, no person shall "[d]ischarge any  
5 wastes into the waters of the state from any industrial or  
6 commercial establishment or activity or any disposal system."  
7 ORS 468B.050(1)(a). It is undisputed that the stream is waters  
8 of the state and that the mining operation is a commercial  
9 establishment. Respondent does dispute whether the effluent from  
10 his mining operation constitutes "waste."

11 ORS 468B.050(7) defines "waste" as "sewage, industrial  
12 wastes, and all other liquid, gaseous, solid, radioactive or  
13 other substances which will or may cause pollution or tend to  
14 cause pollution of any waters of the state."

15 ORS 468B.005(3) defines "pollution" as:

16 "[S]uch alteration of the physical, chemical  
17 or biological properties of any waters of the  
18 states, including change in temperature,  
19 taste, color, turbidity, silt or odor of the  
20 waters \* \* \* which will, or tends to, either  
21 by itself or in connection with any other  
22 substance, create a public nuisance or which  
23 will or tends to render such waters harmful,  
24 detrimental or injurious to public health,  
25 safety or welfare, or to domestic,  
26 commercial, industrial, agricultural,  
27 recreational or other legitimate beneficial  
28 uses or to livestock, wildlife, fish or other  
29 aquatic life or the habitat thereof."  
30 (Emphasis added.)

31 DEQ must show only that the discharge "will or tends to"  
32 make the waters harmful, detrimental or injurious to fish or fish  
33 habitat. The primary way of making such a showing is to prove

1 that the discharge caused the stream to exceed its water quality  
2 standards because one of the purposes of those standards is to  
3 protect fish. See City of Klamath Falls v. Environ. Quality  
4 Comm., 318 Or 532 (1994). Respondent does not dispute that the  
5 discharge caused an increase in turbidity that violated the  
6 standard.

7 3. Whether DEQ is barred from enforcing the regulations  
8 because of failure to consider natural fluctuations of  
9 turbidity in the river

10 Respondent's second argument is not entirely clear. First,  
11 the reference to "468.110(3,4)" must be a typographic error. We  
12 assume respondent means 468B.110(3) and (4). However, those  
13 sections are part of the 1991 statute concerning water quality  
14 standards related to forest practices and are not relevant to  
15 this case.

16 Respondent also contends that the water quality standards do  
17 not comply with the requirements of ORS 183.545 and 183.550 and,  
18 therefore, they are unenforceable. Respondent also argues that  
19 the stream's natural fluctuations create turbidity that at times  
20 exceeds the water quality standards and, therefore, DEQ is  
21 unreasonable in requiring his operations to comply with the  
22 standards.

23 However, the ORS chapter 183 sections to which respondent  
24 refers concern the triennial review of all agency rules and  
25 opportunity for public comment. Respondent does not state why he  
26 believes DEQ and the EQC have not complied with these statutes  
27 ///

1 other than asserting that DEQ has not considered natural  
2 fluctuations in establishing water quality standards.

3 DEQ completed its triennial review of its rules as required  
4 by law. Respondent has provided no authority supporting his  
5 assertion that the rules are unreasonable or that the triennial  
6 review provides a basis for avoiding a civil penalty.

7 Even assuming that the requirements of ORS 183.545 and  
8 183.550 provide a basis for penalty avoidance, respondent has not  
9 provided any evidence to establish that a properly justified rule  
10 would protect a 580 percent increase in creek turbidity, which  
11 was the evidence in this case concerning respondent's actions.  
12 He has not established any connection between the purported rule  
13 defect and the circumstances of his case. Consequently, he has  
14 not established a basis for avoiding penalty liability.

15 Respondent raises two other matters in this section of his  
16 appeal. First, he asserts that DEQ's witness David Haight was  
17 unaware of another watershed that enters Rocky Gulch between the  
18 sample points, apparently implying that this water supply could  
19 caused the increased turbulence. This argument goes to the  
20 Findings of Fact, which respondent does not challenge.

21 Second, respondent complains that no one from DEQ testified  
22 at the hearing, even though he has complained to DEQ in the past  
23 about the standards and asked to be allowed to question  
24 Fred Hansen regarding why DEQ did not grant him a variance as he  
25 requested in 1987. The hearing officer rightfully ruled that the  
26 director did not have to appear for questioning by respondent.

1 At issue is whether respondent violated the statute and the rules  
2 in January 1993, not whether his 1987 permit variance request was  
3 reasonable. It is no defense to say that he asked permission to  
4 exceed the standards, was not granted such permission and,  
5 therefore, has a right to violate the standards.

6 4. Whether the prohibition against double jeopardy applies

7 Respondent contends ORS 131.515(1) prohibits a civil penalty  
8 because he has been tried and convicted in Josephine County for  
9 the same offense. That statute refers to criminal procedure and  
10 does not automatically bar this civil penalty.

11 The United States Supreme Court has held that the double  
12 jeopardy clause of the United States Constitution protects a  
13 defendant who has been convicted criminally from receiving an  
14 additional sanction for the same conduct in a subsequent civil  
15 proceeding where the civil sanction can be characterized only as  
16 deterrent or retributive. United States v. Halper, 490 US 435  
17 (1989). However, where the civil penalty is fairly characterized  
18 as remedial, not only as a deterrent or retribution, it falls  
19 outside the double jeopardy clause protection.

20 In this case, the total civil penalty for violation of  
21 ORS 468B.025(1)(b) is \$1,600. The cost to the State of Oregon  
22 for investigating and issuing the Notice of Civil Penalty was  
23 over \$1,600. This amount simply does not reflect the concerns  
24 addressed in Halper.

25 ///

26 ///

1 B. The Penalty

2 The system DEQ used to establish the amount of this penalty  
3 contains a matrix and formula that consider the "class" or  
4 "classification" and "magnitude" of the violation (which creates  
5 a base penalty (BP)); whether the regulated party had any prior  
6 "significant actions (P); whether the regulated party took  
7 corrective action in prior violations (H); whether the violation  
8 was repeated or continuous (O); the cause of the violation (R);  
9 cooperativeness and efforts to correct the violation (C); and  
10 economic benefit gained. The resulting penalty formula is:

11  $BP + [(.1 \times BP)](P + H + O + R + C) + EB.$  OAR 340-12-045.

12 In determining the amount of the penalty for the first  
13 violation, DEQ rated the classification Class I, rated the  
14 magnitude minor, and assigned a value of 6 to R and values of  
15 zero to P, H, O, C and EB, producing a base penalty of \$1,000 and  
16 a total of \$1,600.

17 For the second violation, DEQ rated the classification Class  
18 II, rated the magnitude major, and assigned a value of 6 for R  
19 and values of zero to P, H, O, C and EB, producing a base penalty  
20 of \$2,000 and a total penalty of \$3,200.

21 Respondent did not challenge the classification and  
22 magnitude determinations and the case record supports them.

23 DEQ valued the violations as "intentional." Agency rule  
24 defines "intentional" as "conduct by a person with a conscious  
25 objective to cause the result of the conduct." OAR 340-12-  
26 030(9). The evidence shows that Garcia knew both that the law

1 required a permit and that his discharge would reduce water  
2 quality below the allowable limits. In proceeding to operate his  
3 equipment nonetheless, he showed a conscious objective both to  
4 discharge without a permit and to reduce the quality of state  
5 waters. Therefore, he acted intentionally.


6 The case record supports the penalty assessed.

7 DATED this 11<sup>th</sup> day of August, 1994.

8 ENVIRONMENTAL QUALITY COMMISSION

9

10

  
\_\_\_\_\_  
William Wessinger, Chair

11

12

DATE OF SERVICE AUG 11 1994

13

14

15

16

17

18

19

1. These rules provide in relevant part:

20

OAR 340-41-365(2)(c):

21

\* \* \* \* \*

22

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 Rogue River Basin.

23

24

25

\* \* \* \* \*

26

1 (c) Turbidity (Nephelometric Turbidity  
2 Units, NTU): No more than a ten percent  
3 cumulative increase in natural stream  
4 turbidities shall be allowed, as measured  
5 relative to a control point immediately  
6 upstream of the turbidity causing activity.  
7 However, limited duration activities  
8 necessary to address an emergency or to  
9 accommodate essential dredging, construction  
10 or other legitimate activities and which  
11 cause the standard to be exceeded may be  
12 authorized provided all practicable turbidity  
13 control techniques have been applied and one  
14 of the following has been granted:

15 (A) Emergency activities.

16 \* \* \* \* \*

17 (B) Dredging, Construction or other  
18 Legitimate Activities: Permit or  
19 certification authorized under terms of  
20 Section 401 or 404 (Permits and Licenses,  
21 Federal Water Pollution Control Act) or OAR  
22 141-85-100 et seq. (Removal and Fill  
23 Permits, Division of State Lands), with  
24 limitations and conditions governing the  
25 activity set forth in the permit or  
26 certificate.

340-12-055 Violations pertaining to water  
quality shall be classified as follows:

(1) Class One:

\* \* \* \* \*

(b) Any discharge of waste that enters  
waters of the state, either without a waste  
discharge permit or from a discharge point  
not authorized by a waste discharge permit

\* \* \* \* \*

(2) Class Two:

\* \* \* \* \*

(f) Any violation related to water  
quality which is not otherwise classified in  
these rules.

1 OAR 340-12-090(2)(a):

2 \* \* \* \* \*

3 (2) Magnitudes for select violations  
4 pertaining to Water Quality wastewater  
5 discharge limitations may be determined as  
6 follows:

7 (a) Major:

8 (A) Greater than 1.6 times any  
9 applicable maximum flow rate, concentration  
10 limitation, or any applicable mass  
11 limitation; or

12 (B) Greater than 50 percent below any  
13 applicable minimum concentration limitation;  
14 or

15 (C) Greater than 2 pH units above or  
16 below any applicable pH range; or

17 (D) Greater than 10 percentage points  
18 below any applicable removal rate.

19  
20  
21 2. At the hearing before the hearing officer, DEQ offered copies  
22 of citations issued to respondent and copies of a case register  
23 recording findings of guilt and asked the hearing officer to  
24 admit them and find that they are conclusive of liability in the  
25 present proceeding. By letter dated October 27, 1993, the  
26 hearing officer excluded these documents.

27  
28  
29 **NOTICE: You are entitled to judicial review of this Order.**  
30 **Judicial review may be obtained by filing a petition for review**  
31 **within 60 days from the date of service of this Order. Judicial**  
32 **review is pursuant to the provisions of ORS 183.482 to the Oregon**  
33 **Court of Appeals.**

34 SKM:dld SKM0227.plc



## Environmental Quality Commission

- Rule Adoption Item  
 Action Item  
 Information Item

Agenda Item F  
July 22, 1994 Meeting

**Title:**

Proposed Policy on Calculation of UST Tax Credit when Applicant Previously Received UST Financial Assistance Grant

**Summary:**

Certain UST owners are eligible to receive state financial assistance benefits under two programs, the Pollution Control Facility Tax Credit Program and the UST Financial Assistance Grant Program. If approved, tax credits are claimed against taxes otherwise owed Oregon and are received after a project is complete. The UST financial assistance grant on the other hand, is paid to the applicant as the project is constructed. While both programs cover pollution control equipment costs, only the financial assistance grant program covers the cost of cleanup of petroleum contaminated soils and groundwater. Cleanup costs are specifically excluded from the tax credit program since they are not considered pollution control equipment. Since neither law speaks directly to the relationship between the two programs, a policy is necessary to determine the appropriate financial benefit that an applicant can derive under each program. The most significant issue is to determine the actual cost that can be claimed on the tax credit application. Since the State is contributing up to 75 percent, not to exceed \$75,000, of equipment and cleanup costs, a determination needs to be made as to whether the grant is first applied against equipment costs, first applied against cleanup costs or prorated between equipment and cleanup in proportion to their share of the total project costs.

**Department Recommendation:**

The Department is recommending that tax credit applicants who have also received an UST financial assistance grant be advised that their actual costs must be adjusted to reflect the grant contribution to their project. We further recommend that the appropriate adjustment is made by apportioning the UST financial assistance grant to equipment and cleanup costs on a pro rata basis in proportion to their share of the overall project cost. Once apportioned, the tax credit applicant is then able to calculate their actual cost for purposes of applying for a tax credit on their financial contribution to the project. This recommendation has been reviewed by the Attorney General's office who've concurred that a pro rata calculation allows the applicant to receive appropriate consideration under each authorized program.

  
Report Author

  
Division Administrator

  
Director

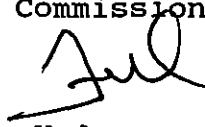
July 18, 1994

†Accommodations for disabilities are available upon request by contacting the Public Affairs Office at (503)229-5317(voice)/(503)229-6993(TDD).

State of Oregon  
Department of Environmental Quality

Memorandum

Date: June 10, 1994

To: Environmental Quality Commission  
From: Fred Hansen, Director   
Subject: Interpretative Issue - Underground Storage Tank (UST)  
Pollution Control Facility Tax Credits

BACKGROUND

Certain owners and operators of underground storage tanks are eligible to receive financial assistance for upgrade or replacement of tanks and installation of pollution control equipment from two sources: the Pollution Control Facilities Tax Credit (468.150 through 190) and the Underground Storage Tank (UST) Essential Services Grant (SB 1215, 1991). A pollution control tax credit offers a 50% Oregon income tax credit for installation of pollution control equipment; an essential services grant pays 75% up to \$75,000 (85% up to \$85,000 in a few cases) for UST project work including tanks, piping, leak detection and spill prevention equipment and cleanup of contamination. The principal difference between the two programs is cleanup, which is not covered by the tax credit program, but can be a significant cost under the grant program.

In order to ensure that public funds are not expended twice for the same pollution control equipment, we are asking your concurrence on the method presented here for adjusting pollution control equipment costs that deducts the grant (or relevant portion thereof) from the amount an applicant may claim for a tax credit. This method was presented to the State Attorney General's office and received their concurrence. There are two parts to the methodology:

ANALYSIS.

(1) Definition of "actual cost"

According to tax credit rule (OAR 340-16-020(2)(b)(B)) "the actual cost or portion of the actual cost certified shall not exceed the [applicant] taxpayer's own cash investment in the facility or portion of the facility". The Attorney General has advised that the essential services grant should not be considered the applicant's own cash investment.

(2) Method for determining "actual cost"

As mentioned earlier, the essential services grant covers the total UST project including some costs not eligible for a tax credit, primarily cleanup costs and equipment such as product pumps (see Exhibit 1). Neither the law or rules establishing the essential services grant program direct monies to be spent in any preferential way, that is, equipment versus cleanup. This was done purposefully since each UST project, while conceptually similar, is very unique given physical site conditions and amount of contamination in soil or groundwater.

As the Department has considered this issue, it appears the actual cost can be determined in one of three ways:

- 1) All the equipment paid for by grant funds first, then cleanup. The results are shown in Exhibit 1.
- 2) All the cleanup paid for by grant funds first, then equipment. The results are shown in Exhibit 2.
- 3) Pro rate the grant in equal amounts to equipment and cleanup in proportion to total project costs. The results are shown in Exhibit 3.

A major drawback to the first and second methods is that they both contain a bias based on the kind of expenditures making up the total project cost. The bias can either favor the applicant significantly or the taxpaying public significantly.

The first method is biased against applicants with projects having significant cleanup costs. That is, the total project cost is high, making the grant sizable and when it is deducted from the equipment expenditure, there is nothing left to claim for a tax credit--no benefit to the applicant, but significant benefit to the taxpaying public since there is no expenditure of public funds. (See Exhibit 1.)

In the second method, the bias favors the applicant. That is, the total project cost is high, the grant is sizable and when it is deducted from the proportionately large cleanup bill, there is only a small amount of grant left to deduct from equipment. The majority of equipment costs remaining can then be claimed for a tax credit--a greater benefit to the applicant and a greater burden on public funds. (See Exhibit 2.)

The third method applies the grant uniformly over equipment and cleanup in the proportion they represent of the whole project. (See Exhibit 3.) In the Attorney General's opinion, "it would

Memo To: Environmental Quality Commission  
June 10, 1994  
Page 3

allow underground storage tank owners to receive a tax credit based on their degree of financial participation in costs eligible for tax credit certification. This balance between the tax credit program and the essential services grant program is consistent with the purposes of both [programs] to assist underground storage tank owners in complying with environmental regulations without suffering undue financial burdens."

In weighing the interest of the taxpaying public vis-a-vis the applicant's interest, the third method of prorating the grant uniformly seems the fairest way to resolve the matter. It allows the applicant to meaningfully participate in each financial assistance program as allowed by law and protects the public interest in providing reasonable assistance under each program. The Attorney General has reviewed our analysis and concurs that this is an appropriate resolution of the matter.

#### CONCLUSION

Attached to this memorandum is the tax relief application review report of the first tax credit application received by DEQ where the taxpayer (Joseph A. Huff, TC-4167) has received an essential services grant. The Department's recommended methodology has been incorporated into this report with the "actual cost" determination and breakdown (labeled "Adjusted Claimed Facility Cost") displayed in a table in section 2 (top of page 2). As added information to be included routinely, the review report includes Attachment A, Tax Credit/Grant Adjusted Facility Cost Worksheet presenting the tax credit/grant deduction method in detail.

The Department requests that you concur with our recommendation to prorate the essential services grant between equipment and cleanup costs in proportion to their share of total project costs. We have access to these detail cost figures through the essential services grant program and can use that information to determine the validity of total project costs.

RPR:ba  
TAXCREDIT  
June 10, 1994

#### Attachments:

Exhibit 1, Grant Applied to Equipment First, then Cleanup  
Exhibit 2, Grant Applied to Cleanup First, then Equipment  
Exhibit 3, Prorate Grant Uniformly over Equipment and Cleanup  
TC-4167, Tax Relief Application Review Report, Joseph A. Huff  
Attachment A, Tax Credit/Grant Adjusted Facility Cost Worksheet

EXHIBIT 1. GRANT APPLIED TO EQUIPMENT FIRST, THEN CLEANUP

UST GRANT		TAX CREDIT
-----		
ELIGIBLE ACTIVITIES		
Equipment(including Stage I and II vapor collection)		Equipment(including Stage I and II vapor collection)
Product pumps		Not eligible
Soil and groundwater cleanup		Not eligible
-----		
TOTAL ELIGIBLE PROJECT COST		
Equipment	\$55,574	\$55,574
Cleanup+pumps	18,126	0
-----		
Total eligible project cost	\$73,700	\$55,574
-----		
DISTRIBUTION OF PROJECT EXPENDITURES		
Total grant award =	\$62,645	Applicant equip. expense eligible for tax credit:
Equipment:		
State =	\$55,574	
Applicant \$55,574-55,574 =	\$0	\$55,574-55,574=
		\$0
		=====
Cleanup:		
State \$62,645-55,574 =	\$7,071	Applicant cleanup expense eligible for tax credit: \$0
Applicant 18,126-7,071 =	\$11,055	
-----		

NOW, CALCULATE TAX CREDIT IN THE NORMAL WAY

TCRED1

EXHIBIT 2. GRANT APPLIED TO CLEANUP FIRST, THEN EQUIPMENT

UST GRANT		TAX CREDIT
-----		
PROJECT ACTIVITIES AND COSTS		
Equipment(including Stage I and II vapor collection)		Equipment(including Stage I and II vapor collection)
Product pumps		Not eligible
Soil and groundwater cleanup		Not eligible
-----		
TOTAL ELIGIBLE PROJECT COST		
Equipment	\$55,574	\$55,574
Cleanup+pumps	18,126	0
-----		
Total eligible project cost	\$73,700	\$55,574
-----		
DISTRIBUTION OF PROJECT EXPENDITURES		
Total grant award =	\$62,645	Applicant equip. expense eligible for tax credit:
Equipment:		
State =	\$44,519	
Applicant 55,574-44,519 =	\$11,055	\$55,574-44,519=
		\$11,055
		=====
Cleanup:		
State =	\$18,126	Applicant cleanup expense eligible for tax credit: \$0
Applicant 18,126-18,126 =	\$0	
-----		

NOW, CALCULATE TAX CREDIT IN THE NORMAL WAY

TCRED2

EXHIBIT 3. PRORATE GRANT UNIFORMLY OVER EQUIPMENT AND CLEANUP

UST GRANT			TAX CREDIT
-----			
ELIGIBLE ACTIVITIES			
Equipment(including Stage I and II,vapor collection)			Equipment(including Stage I and II vapor collection)
Product pumps			Not eligible
Soil and groundwater cleanup			Not eligible
-----			
TOTAL ELIGIBLE PROJECT COST			
Equipment	\$55,574		\$55,574
Cleanup+pumps	18,126		0
-----			
Total eligible project cost	\$73,700		\$55,574
-----			
DISTRIBUTION OF PROJECT EXPENDITURES			
Total grant award =	\$62,645		Applicant equip. expense eligible for tax credit:
Equipment: \$55,574/73,700 =	75%		\$8,590/55,574 =
State .75 x 62,645 =	\$46,984		15%
Applicant 55,574-46,984 =	\$8,590		\$55,574 x 15% =
			\$8,590
			=====
Cleanup: \$18,126/73,700 =	25%		
State .25 x 62,645 =	\$15,407		Applicant cleanup expense eligible for tax credit: \$0
Applicant 18,126-15,407 =	\$2,719		
-----			

NOW, CALCULATE TAX CREDIT IN THE NORMAL WAY

Note: Some discrepancies in calculations may occur due to rounding.

TCRED3

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

---

1. Applicant

Joseph A. Huff  
Joe's Market  
15525 Ferns Corner Rd.  
Dallas, OR 97338

The applicant owns and operates a retail gas station at 373 N. Main, Falls City, OR, Facility No. 2611.

Application was made for a tax credit for a water pollution control facility involving underground storage tanks. The application included related air quality Stage II vapor recovery piping.

This applicant also received an 85% not to exceed \$85,000 essential services grant through DEQ's Underground Storage Tank Financial Assistance Program.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are two STI-P3 tanks and doublewall fiberglass piping, spill containment basins, tank gauge system, overflow alarm, automatic shutoff valves and Stage II vapor recovery piping.

Claimed facility cost	\$55,574
(Accountant's certification was provided)	

The Department has determined that 15 percent of the claimed facility cost of \$55,574 is the actual cost to the applicant when adjustment is made for an essential services grant awarded the project under DEQ's UST financial assistance program (see Attachment A for details of percent calculation). Thus, the Department concludes that an adjusted claimed facility cost of \$8,590 is eligible to be claimed as a tax credit with a breakdown as follows:



	Claimed Facility Cost	Percent Adjustment (see attach. A, item F.)	Adjusted Claimed Facility- Cost
STI-P3 tanks & fiberglass pipe	\$12,261	15%	\$1,895
Spill containment basins	444	"	69
Tank gauge system	5,201	"	804
Stage II vapor recovery	289	"	45
Labor & materials (incl. overfill alarm & automatic shutoff valves	37,379	"	5,777
<b>Total</b>	<b>\$ 55,574</b>	<b>15%</b>	<b>\$ 8,590</b>

3. Procedural Requirements

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

The facility was substantially completed on September 1, 1992 and placed into operation on September 1, 1992. The application for certification was submitted to the Department on November 2, 1993 and was considered to be complete and filed on June 10, 1994, within two years of the completion date of the project.

4. Evaluation of Application

- a. The facility is eligible because the principal purpose of the facility is to comply with underground storage tank requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air. This is accomplished by preventing releases into soil, water or air. The facility qualifies as a "pollution control facility", defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."

Prior to the installation of pollution control, the facility consisted of two steel tanks and piping with no corrosion protection and no spill and overfill prevention or leak detection equipment.

To respond to Air Quality regulations under OAR 340-22-400 - 403 and Underground Storage Tank requirements under OAR 340-Division 150, the applicant installed:

- 1) For corrosion protection - STI-P3 tanks and doublewall fiberglass piping.
- 2) For spill and overflow prevention - Spill containment basins, overflow alarm and automatic shutoff valves.
- 3) For leak detection - Tank gauge system.
- 4) For VOC reduction - Stage II vapor recovery piping.

Contamination found at the site was reported to DEQ. Cleanup is completed.

Based on information currently available, the applicant is in compliance with all applicable DEQ regulations in that these tanks are permitted and fee payments are current.

The Department concludes that the costs claimed by the applicant (adjusted to \$8,590) are eligible pursuant to the definition of a pollution control facility in ORS 468.155.

b. Eligible Cost Findings

In determining the percent of the eligible 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 equipment 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 annual percent return on investment as the applicant claims no gross annual income from the facility.

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

The applicant determined there were no feasible alternatives to tank replacement. The methods chosen are acceptable for meeting the requirements of federal regulations.

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

The applicant claims no savings or increase in costs as a result of the installation.

- 5) Any other factors which are relevant in establishing the portion of the actual cost of the facility properly allocable to pollution control.

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

The actual cost of the facility properly allocable to pollution control is determined by using these factors as displayed in the following table:

	Adjusted Eligible Facility Cost	Percent Allocable	Amount Allocable
	-----	-----	-----
<u>Corrosion Protection:</u>			
STI-P3 tanks and fiberglass piping	\$1,895	42% (1)	\$ 796
<u>Spill &amp; Overfill Prevention:</u>			
Spill containment basins	69	100	69
<u>Leak Detection:</u>			
Tank gauge system	804	90 (2)	724
Stage II vapor recovery piping	45	100	45
Labor & materials (incl. overfill alarm & automatic shutoff valves	5,777	100	5,777
	-----	-----	-----
Total	\$ 8,590	86%	\$ 7,411

- (1) The Department has determined the percent allocable on the cost of a corrosion protected tank and piping system by using a formula based on the difference in cost between the protected tank and piping system and an equivalent bare steel system as a percent of the protected system.

Applying this formula to the costs presented by the applicant, where the protected system cost is \$12,261 and the bare steel system is \$7,107, the resulting portion of the eligible tank and piping cost allocable to pollution control is 42%.

- (2) The applicant's cost for a tank gauge system is reduced to 90% of cost based on a determination by the Department that this is the portion properly allocable to pollution control since the device can serve other purposes, for example, inventory control.

5. Summation

- a. The facility was constructed in accordance with all regulatory requirements.
- b. The facility is eligible for tax credit certification in that the principal purpose of the claimed facility is to comply with requirements imposed by the federal Environmental Protection Agency to prevent pollution of soil, water and air. This is accomplished by preventing releases in soil, water or air. The facility qualifies as a "pollution control facility" defined in OAR 340-16-025(2)(g): "Installation or construction of facilities which will be used to detect, deter or prevent spills or unauthorized releases."
- c. The facility complies with DEQ statutes and rules.
- d. The portion of the facility cost that is properly allocable to pollution control is 86%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$8,590 with 86% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4167.

Barbara J. Anderson  
(503) 229-5870  
June 10, 1994

ATTACHMENT A.

TAX CREDIT/GRANT ADJUSTED FACILITY COST WORKSHEET  
APPLICATION NO. TC-4167

JOE'S MARKET  
373 N. Main  
Falls City, OR  
Facility No. 2611

A. TOTAL STATE GRANT AWARDED TO APPLICANT: \$62,645

B. PROJECT EQUIPMENT AND COSTS:	UST PROJECT WORK ELIGIBLE FOR GRANT	POLLUTION CONTROL EQUIPMENT ELIGIBLE FOR TAX CREDIT	ADJUSTED EQUIPMENT COSTS (Using % in F. below)
	-----	-----	-----
STI-P3 tanks and fiberglass piping	\$12,261	\$12,261	\$1,895
Spill containment basins	444	444	69
Tank gauge system	5,201	5,201	804
Stage II vapor recovery piping	289	289	45
Labor & materials (incl. overfill alarm and automatic shutoff valves	37,379	37,379	5,777
Fuel pumps	2,000	0	0
Contaminated soil/groundwater cleanup costs	16,126	0	0
	-----	-----	-----
C. TOTAL PROJECT COST	\$73,700	\$55,574	\$8,590

D. CALCULATION OF APPLICANT'S ACTUAL EQUIPMENT COST AND ADJUSTMENT PERCENT:

1. Equipment costs eligible for tax credit  
as a percent of total project cost:  $\$55,574 / 73,700 = 75\%$

2. Portion of State grant applicable to equip-  
ment costs eligible for tax credit:  $\$62,645 \times .75 = \$46,984$

E. APPLICANT'S ACTUAL EQUIPMENT COST:  $\$55,574 - 46,984 = \$8,590$

F. Applicant actual equipment cost as a percent:  $\$8,590 / 55,574 = 15\%$

=====



MARILYN DELL  
STATE REPRESENTATIVE  
YAMHILL COUNTY  
DISTRICT 29

HOUSE OF REPRESENTATIVES

COMMITTEES:

Human Development Services  
Natural Resources

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Co./Dept.		Co.	
Phone #		Phone #	472-8444
Fax #	2295850	Fax #	472-5317

June 20, 1994

Environmental Quality Commission

Dear Commission Members:

I have followed the public hearings regarding the proposed expansion of the vehicle testing boundary. Yamhill County citizens are understandably concerned. They have questions regarding the need for the expansion as well as the process used to determine the new boundaries.

DEQ has been helpful in providing answers to some of these concerns. However, there is still a local perception that the data used to make the recommendation is less than reliable.

In addition, local citizens feel that the boundary expansion is being imposed regardless of any efforts, even potentially successful ones, which Newberg could make to decrease commuter traffic to the metropolitan area.

I recognize that Oregon must find ways to bring the Portland metropolitan region into attainment with the Clean Air Act standards. The State Motor Vehicle Task Force was created by the 1991 Legislature to address this. After considerable work it made recommendations to the 1993 Legislature. Some of these were courageous and creative. However, legislative leadership chose to create a Special Task Force to re-examine the original recommendations. The result was that many of the good original proposals did not have public hearings. I was disappointed because I felt that those original proposals contained better solutions than the revised ones. In other words, I thought then and think now that we could have done better.

Therefore, I request that you extend the implementation date for the expanded testing program. Starting it in May of 1995 does not give

State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
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OFFICE OF THE DIRECTOR



Office: H366 State Capitol, Salem, OR 97310—Phone: (503) 378-8012  
Home: 677 Tanglewood, McMinnville, OR 97128—Phone: (503) 472-4565

the legislature any reasonable opportunity to back better solutions. This would not need to be a lengthy delay. Starting the program in November of 1995 would at least allow an opportunity for a legislative improvement on the overall emissions program.

Respectfully,



Marilyn Dell



Making the  
Land Use  
Transportation  
Air Quality  
Connection

# Building Orientation

A Supplement to *The Pedestrian Environment*

Volume 4B

Prepared by  
Parsons Brinckerhoff Quade and Douglas, Inc.  
with Cambridge Systematics, Inc.  
and Calthorpe Associates

May 1994

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Federal Highway Administration  
United States Environmental Protection Agency



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# Summary

This report furnishes information on the role of the built environment in affecting travel behavior. Specifically, it focuses on the setback and building orientation of commercial structures, as these features influence household vehicle miles of travel (VMT).

The report is a supplement to *The Pedestrian Environment* (December 1993), which provides a more detailed explanation of research methods and data used in this analysis. As was done in the earlier report, researchers have examined actual travel behavior by households in the Portland metropolitan area to analyze transportation/land use relationships. In this supplemental report, researchers defined a new variable not previously used in the statistical analysis. Data for the age of all commercial structures in three Portland metropolitan area counties were aggregated to establish an index for each traffic zone in the region measuring the proportion of all commercial structures in the zone built before 1951. The assumption behind the use of this variable is that commercial structures built before that date are typically built to the front of the private lot line, rather than set back to allow for surface parking on private property. Thus, the age of the commercial structure serves as an indicator of building orientation.

Researchers used data from Metro's geographic information system to develop the values for this variable. While building age data was incomplete for some zones, over 90% of the household observations used in *The Pedestrian Environment* report were available for use in this analysis.

The principal finding of this research is that the indicator used for building orientation is statistically significant in explaining observed variations in vehicle miles traveled (VMT) per household in the Portland metropolitan region. Variation in building orientation at the zonal level can account for changes of 10% or more in VMT per household, over the observed range of values of zonal building orientation (age of structure) in this database.

In addition, the equations used in this research included a variable for employment density at the zonal level. Like the indicator variable for building orientation, this variable was not previously used in the analysis included in *The Pedestrian Environment* report. This measure of "mixed use" at the zonal or neighborhood level was also statistically significant in explaining observed variations in automobile dependence.

In the real world, outside of the laboratory of statistics, this research suggests that a number of aspects of the built environment work together to influence vehicle miles of travel and automobile dependency. Building orientation and pedestrian orientation are closely correlated. Ordinances and policies which are designed to regulate the built environment need to be drafted in a manner that reflects these lessons learned from Portland's "traditional" neighborhoods.

---

# Overview

In prior research done for the LUTRAQ project, including that presented in *The Pedestrian Environment*, Volume 4A, there is substantial evidence indicating the influence of land use on travel behavior. One aspect not examined in the research completed to date is the role of building orientation and building setback in influencing travel mode choice and thus, vehicle miles of travel.

This aspect of the built environment is the subject of substantial discussion in Oregon and elsewhere, as planners draft and implement ordinances which are designed to reduce automobile use. Casual observation of pedestrian and travel behavior at large commercial developments, with substantial setbacks from the public right-of-way, suggests that the effect of numerous buildings being set back from front lot lines and from one another is to increase the use of automobiles, even for relatively short trips. However, it has thus far been difficult to estimate the effects of "traditional" building orientation and setback in quantitative terms. We only know by observation that development in the automobile era (essentially that development which has occurred since the end of World War II) looks very different from commercial development prior to that date, and the travel behavior in auto oriented developments may be partly explained by this fact.

To analyze this relationship more systematically, data was gathered on the proportion of buildings in each traffic analysis zone (the neighborhood-level areas at which traffic behavior is analyzed in Portland's travel demand forecasting model). The key assumption in this analysis is that those structures built during or before 1950 were built in an era in which walking and public transit played important roles in urban mobility. While the private automobile had already begun to influence land use, the design of commercial structures prior to 1951 appears largely not to have been influenced by this trend. (E.g., the first shopping centers in America were built in the early 1950s).

Using data furnished by county assessors in Multnomah, Clackamas and Washington counties, researchers established an index of the proportion of buildings in each of the region's 400 traffic analysis zones built on or before 1950. This number, ranging from 0 to 100%, was used in a multiple regression model.

The results of the analysis are described below.

2000  
2001  
2002

2003

# Household Travel Relationships

Because commercial building data in certain zones was incomplete, a small number of household observations were removed from the sample used in *The Pedestrian Environment* report in order to develop the regression model. Of the 2421 households in the original sample, 2223 remained available for use in this research. These households reported a total of 13,788 trips, a decrease of 1,350 trips from the number available in the previous regression analyses. Nevertheless, with over 90% of the households and over 90% of the trips still available, the dataset was sound enough for analytic purposes.

Table 1A

Distribution of Zones and Households by Share of Pre-1951 Commercial Buildings		
ZONAL SHARE OF PRE-1951 COMMERCIAL BUILDINGS	NUMBER OF ZONES	NUMBER OF HOUSEHOLDS
0%	98	546
1-20%	31	263
21-40%	58	394
41-60%	63	504
61-80%	43	343
81-100%	26	178
<b>Totals*</b>	<b>319</b>	<b>2,228</b>

\* 16 of the 400 Transportation Analysis Zones are considered external to the Portland Metropolitan Area and comprehensive building age data was not available for 65 of the remaining 384 zones.

Table 2A exhibits travel mode choice data for those trips. As shown there, and in Figure 1A, the number of trips made by transit, and on foot or by bicycle, appears to increase steadily as the proportion of buildings in the neighborhood oriented toward the street (i.e., built before 1951) increases. In the neighborhoods with the newest commercial development, fewer than 3% of the reported trips are made by transit and fewer than 2% are made on foot. At the other extreme, in those analysis zones or neighborhoods in which 81 to 100% of the buildings are oriented toward the street (built before 1951) transit and nonmotorized trips both exceed 10% of all reported trips. Furthermore, this relationship holds across each of the sets of neighborhoods examined.

Table 2A

Travel Mode Choices by Zonal Share of Pre-1951 Commercial Buildings									
ZONAL SHARE OF PRE-1951 COMM. BUILDINGS	AUTO		TRANSIT		WALK/BICYCLE		OTHER		TOTAL
0%	3,363	93.9%	96	2.7%	69	1.9%	52	1.5%	3,580 100.0%
1-20%	1,478	93.1%	59	3.7%	33	2.1%	18	1.1%	1,588 100.0%
21-40%	2,210	89.4%	156	6.3%	73	3.0%	33	1.3%	2,472 100.0%
41-60%	2,680	85.7%	241	7.7%	144	4.6%	62	2.0%	3,127 100.0%
61-80%	1,612	81.0%	210	10.6%	151	7.6%	17	0.9%	1,990 100.0%
81-100%	851	82.5%	103	10.0%	55	5.3%	22	2.1%	1,031 100.0%
All	12,194	88.4%	865	6.3%	525	3.8%	204	1.5%	13,788 100.0%

Figure 1A

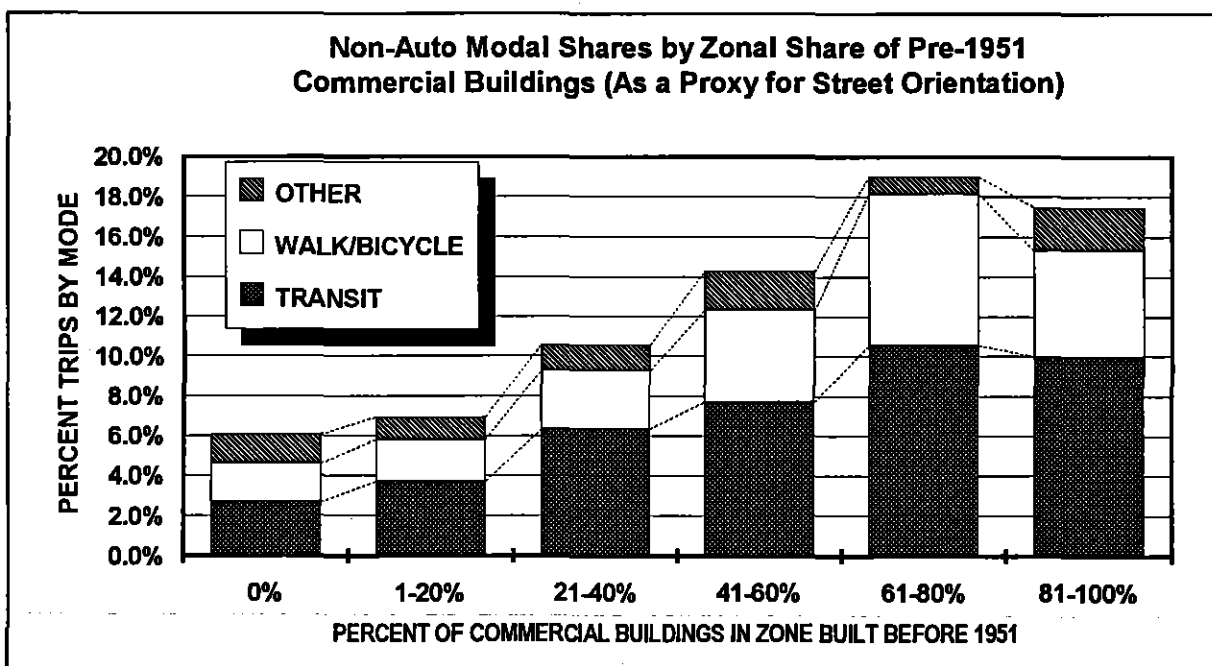
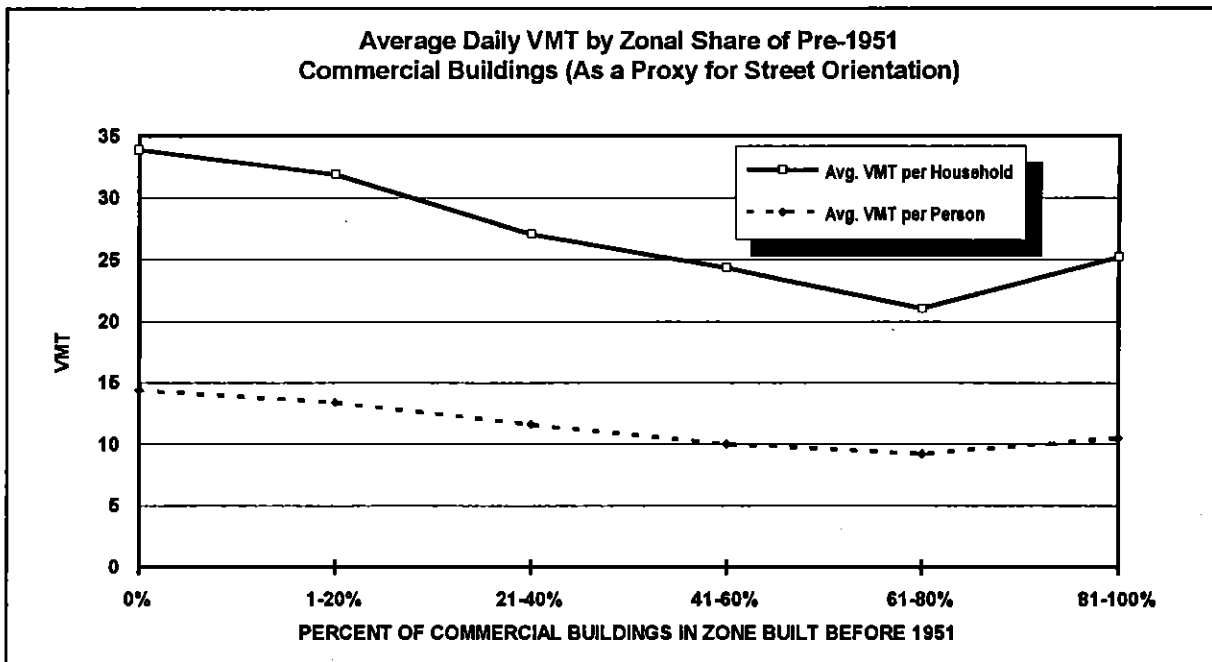


Figure 2A presents the vehicle miles traveled (VMT) of residents in these zones. As shown in the graphic, households in zones where most or all commercial buildings are set back from the street, typically drive over 50% more miles per day than households in zones where most of the buildings are oriented toward the street.

Figure 2A



The descriptive data presented in this graphic, of course, do not include controls for the various social or economic attributes which have been shown to influence travel behavior. The results of including controls of this kind will be discussed below. Further, the relationship between household VMT and building orientation is indirect. The effect of building orientation at the neighborhood level would be felt most directly in the form of vehicle trips eliminated and replaced by nonmotorized trips or by transit trips. Also, the correlation between building age and several other neighborhood land use variables, such as household density, clearly effect the relationships displayed in this figure. A multiple regression (discussed below) was successful in sorting out these interrelationships.



1. The first step in the process is to identify the household members who are likely to be involved in the travel. This includes the primary caregiver, the child, and any other family members who may be affected by the travel.

2. Next, it is important to determine the purpose of the travel. Is it for medical treatment, education, or a family vacation? The purpose will determine the type of travel arrangements that need to be made.

3. Once the purpose is clear, the next step is to research the destination and the travel options available. This includes looking into the cost of travel, the availability of flights, and the safety of the destination.

4. After researching the options, the next step is to make the necessary arrangements. This includes booking flights, arranging for transportation to and from the airport, and making any necessary travel insurance arrangements.

5. Finally, it is important to ensure that all household members are aware of the travel plans and that they are prepared for the trip. This includes packing necessary items, such as clothing, toiletries, and any required documents.

The above steps provide a general overview of the process of household travel. However, each household's situation is unique, and the specific steps may vary depending on the individual circumstances.

# Modeling Household Travel

The researchers made use of a multiple regression model similar to those used in *The Pedestrian Environment* report to measure the individual effects of several land use and socioeconomic variables on vehicle miles traveled by Portland area households. The variables included in this analysis are shown in Table 3A. Household variables include the number of persons per household, the average household income, the number of cars available, and the number of employed individuals, as well as the average age of household members. In addition, the equation includes four zonal/neighborhood land use variables. These are a measure of residential density, a measure of employment density, a measure of automobile accessibility to employment within the region, and the indicator of building orientation (the proportion of commercial buildings within the zone built on or before 1950).

Table 3A

<b>Household VMT Model Predicted Impacts</b>	
CHANGE IN EXPLANATORY VARIABLE	IMPACT ON DAILY HOUSEHOLD VEHICLE MILES TRAVELED
30 Point Increase in Zonal Share of Pre-1951 Commercial Buildings	-1.3 miles
\$5,000 Increase in Household Income	0.8 miles
Unit Increase in Household Size	2.9 miles
Unit Increase in Cars per Household	1.8 miles
Unit Increase in Workers per Household	1.4 miles
Increase from 3 to 4 Households per Zonal Acre*	-0.8 miles
20,000 Increase in Employment Accessible by Auto in 30 Minutes	-0.8 miles
Increase in Employment Density from 1 to 5 Employees per Zonal Acre*	-1.2 miles
<i>Average Daily VMT per Household</i>	<i>27.6 miles</i>
<p>* The household and employment density impacts on VMT are linear functions of the natural logarithm of the density measures but are exponential functions of unit changes in the density measures; therefore, the VMT impact tapers off for unit increases in households per acre as household or employment density increases.</p>	

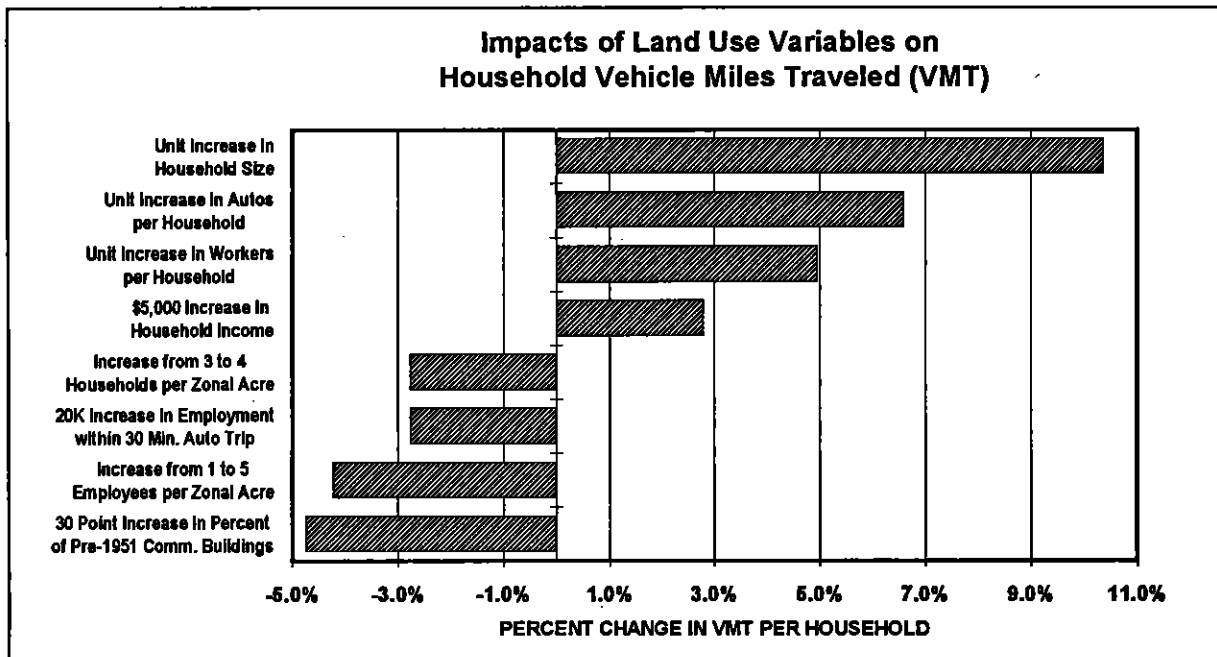
The building orientation indicator was used in place of the "pedestrian environmental factor" (PEF)—the index of pedestrian friendliness used in *The Pedestrian Environment* report regressions. Building orientation toward the street usually occurs in conjunction with the indicators used to establish the PEF index (i.e., street connectivity, sidewalk continuity, ease of street crossings, and topography). Thus, it is statistically correlated with the PEF variable.

All 9 of the variables used in the regression analysis were statistically significant in explaining observed variation in household vehicle miles of travel (see

The *Pedestrian Environment* report for a full explanation of the nature of statistical significance). Both the household and the land use coefficients had the expected signs. The coefficients were quite similar to those observed for the same variables in the regressions included in *The Pedestrian Environment* report.

The equations can best be understood in the terms presented in Table 3A and Figure 3A. There, specific measures for each of the variables are presented in terms of their effect on household VMT. Thus, for every \$5,000 increase of household income, the model suggests an increase of 0.8 miles per day in vehicle travel. Increases in household size, automobile ownership and workers per household also had similar, predictable effects.

Figure 3A



Among the land use variables, an increase in residential density from 3 to 4 households per zonal acre corresponded to a decrease of 0.8 miles in household vehicle travel. A 20,000 increase in the number of jobs accessible within 30 minutes travel by automobile had a similar effect.

A variable not included in the previous regression models, a measure of employment density, was statistically significant as well. This measure of zonal or neighborhood based employment can be seen as an indicator of mixed use in the neighborhood. The more employees found within the zone of residence of a household, the more opportunities for short trips or for changes in mode choice from auto to other modes.

Lastly, the measure of building orientation (building age) also made a statistically significant contribution to the equation. An increase of 30 percentage points in the proportion of commercial buildings in the zone built prior to 1950 corresponded to a decrease of 1.3 miles (approximately 5%) in the household daily VMT.

Building orientation (building age), in the context of the regression equation, can explain a change of 10% in VMT over a 63 percentage point change in the proportion of buildings in the zone built in 1950 or before. A 63 percentage point swing in building orientation represents a change from the very lowest to the very highest quintile of the 400 traffic analysis zones included in this analysis. As is the case for the equations included in *The Pedestrian Environment* report, the correlation between zonal land use variables should be noted.

**Table 4A**

---

**Equivalent Variable Impacts on VMT Per Household Person**

---

**APPROXIMATE INDIVIDUAL VARIABLE CHANGES REQUIRED TO LOWER VMT PER PERSON BY 10 PERCENT FOR A HOUSEHOLD WITH AVERAGE SAMPLE PROPERTIES**

---

- A 63 Point Increase in the Zonal Share of Pre-1951 Commercial Buildings, or
  - A \$17,500 Decrease in Household Income, or
  - A 1.5 Car Decrease in the Number of Cars per Household, or
  - An Increase from 2 to 5 Households per Zonal Acre, or
  - A 70,000 Increase in Employment Accessible by Auto in 30 Minutes, or
  - An Increase from 1 to 50 Employees per Zonal Acre
-



# Conclusions

In an equation in which a set of socioeconomic variables and a set of land use variables have been combined, building orientation (building age) has been shown to be a statistically significant influence on household vehicle miles of travel. The results of this research are significant in the real world of public policy for the following reasons:

1. The research demonstrates that building orientation, as one of several land use variables which can be influenced by public policy, has a statistically significant impact on household vehicle miles of travel, an important measure of travel behavior.
2. Employment density, household density, overall urban form, (expressed as ease of accessibility to employment), and building orientation (expressed as age of commercial structures), intermingle in the real world and in this statistical research. While it is important to identify the significance of each attribute in affecting travel behavior, it is equally important to note the significance of their effect as a group. The reader should examine other reports completed as part of the LUTRAQ Project for further information on the effect of land use on travel.

Table 5A

Vehicle Miles Traveled: Alternative Regression Model Results

DEP VAR: VMT N: 2223 MULTIPLE R: 0.501 SQUARED MULTIPLE R: 0.251  
 ADJUSTED SQUARED MULTIPLE R (R<sup>2</sup>) 0.248 STANDARD ERROR OF ESTIMATE: 22.5166184

Average VMT 27.61 Average Predicted VMT from Model 27.61

VARIABLE	AVERAGE	COEFFICIENT	STD ERROR	STD COEF	TOLERANCE	T-STAT	P(2 TAIL)
CONSTANT		30.8535626	5.496050	0.000000		5.61377	0.00000
HHSIZE	2.52	2.8651639	0.469867	0.136993	0.670958	6.09783	0.00000
AVHHINC	31,045	0.0001549	0.000025	0.124590	0.815778	6.11503	0.00000
CARS	1.82	4.6210312	0.588732	0.178642	0.653758	7.84913	0.00000
WORKERS	1.37	2.8310757	0.685297	0.097681	0.605711	4.13116	0.00004
AVAGE	38.19	-0.0643840	0.033526	-0.041211	0.735351	-1.92040	0.05494
LHHDEN	0.79	-2.6623054	0.612410	-0.102042	0.614628	-4.34726	0.00001
LEMPDEN	0.44	-0.7251629	0.370535	-0.042543	0.716645	-1.95707	0.05047
TOT30A	550,692	-0.0000383	0.000010	-0.086262	0.724272	-3.98932	0.00007
LTE50PCT	37	-0.0436877	0.017265	-0.049995	0.867565	-2.53048	0.01146

VARIABLE NAME DEFINITIONS

HHSIZE	Number of persons in household
AVHHINC	Average household income in dollars
CARS	Number of cars available to household drivers
WORKERS	Number of employed household members
AVAGE	Average age of household
LHHDEN	The natural logarithm of the number of households per zonal acre
LEMPDEN	The natural logarithm of employment per zonal acre
TOT30A	Total employment within a 30 minute auto trip from that zone
LTE50PCT	Percentage of commercial buildings within zone from 1950 or before; proxy variable for building orientation

Table 6A

Land Use Variable Correlation Coefficients

	LEMPDEN	LHHDEN	LTE50PCT	TOT30A	ALOGPEF	PEF
LEMPDEN	1.00					
LHHDEN	0.47	1.00				
LTE50PCT	0.20	0.35	1.00			
TOT30A	0.39	0.48	0.16	1.00		
ALOGPEF	0.45	0.66	0.47	0.41	1.00	
PEF	0.48	0.67	0.53	0.41	0.96	1.00

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## ■ About the Authors of This Volume

### **Parsons Brinckerhoff Quade & Douglas, Inc.**

Parsons Brinckerhoff Quade & Douglas, Inc. is the leading provider of transit planning and design services in the United States. The firm has been involved in more than 75 percent of the nation's light rail transit systems in operation or under construction today. The firm's architects have developed concepts for or designed over 200 transit stations in the last ten years.

Brent Baker, of the firm's Seattle office, is the principal author of this report. Samuel Seskin, Cathy Strombom and Youssef Deghani contributed to the research.





# LUTRAQ UPDATE

Making the Land Use, Transportation, Air Quality Connection

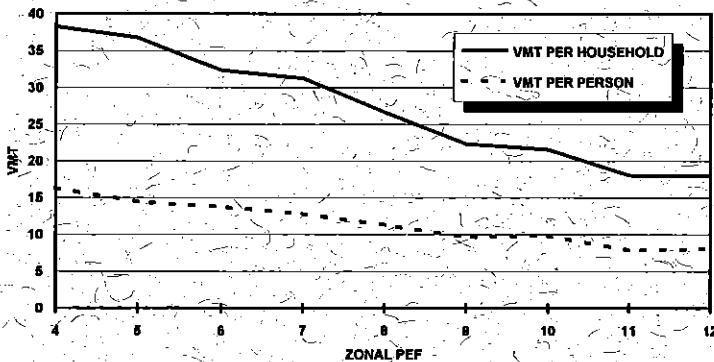
A National Research Demonstration Project of  
1000 Friends of Oregon

Vol. 2, No. 1  
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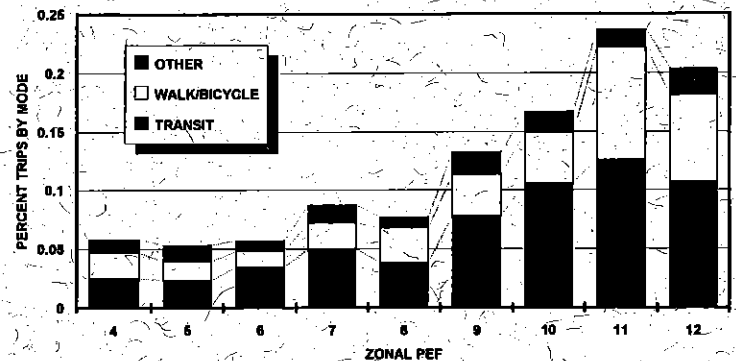
## LUTRAQ Research Progresses: The Pedestrian Environment

In the latest report from "Making the Land Use, Transportation, Air Quality Connection" (LUTRAQ), consultants at Parsons, Brinckerhoff, Quade & Douglas describe how household travel behavior is influenced by physical characteristics of surrounding neighborhoods, in particular by the quality of the pedestrian environment. The study compares the "pedestrian friendliness" of 400 neighborhoods in the Portland, Oregon metropolitan area with data collected in a 1985 household transportation survey. The authors--Brent Baker, Samuel Seskin, Cathy Strombom, and Youssef Dehghani--demonstrate that households in neighborhoods with high quality pedestrian environments are significantly less reliant on the automobile than households in more pedestrian hostile neighborhoods.

The first part of the report examines and quantifies the relationships between a measure of pedestrian friendliness--called the "Pedestrian Environmental Factor" (PEF)--and household travel mode choices, vehicle trips, and vehicle miles traveled. Amongst other findings, the authors determined that households in pedestrian friendly neighborhoods make over three times as many transit trips and nearly four times as many walk and bicycle trips as house-



This graph plots Household VMT by Pedestrian Environmental Factor (PEF) and shows that the more pedestrian friendly the area, the less auto trips households in that area tend to make. The researchers also found that average trip distances decline as PEF values increase.



This graph charts non-auto modal shares by Pedestrian Environmental Factor (PEF). Trips which involve more than one mode have been grouped into the mode "other". Included in this mode are trips using equal combinations of auto, transit and pedestrian modes such as driving to a park & ride lot. Generally, the use of pedestrian and transit modes increases as PEF increases and becomes particularly pronounced as the PEF value exceeds eight.

holds located in neighborhoods with poor pedestrian environments. In addition to the pedestrian environment, the authors also explore the relationships between mode choice and residential density, transit level-of-service, and proximity to employment. The analysis confirms that residents in neighborhoods with higher densities, greater proximity to employment, grid pattern streets, continuous sidewalks, and easy street crossings tend to make more pedestrian, bicycle, and transit trips, whereas residents of more distant, lower density suburban areas with auto-oriented land use patterns show extensive reliance on the auto.

In the second part of the report, the authors employed multiple regression techniques to confirm statistically that land use variables, including PEF, do in fact impact daily household vehicle trips and vehicle miles traveled. The analysis suggests that vehicle miles traveled per household in pedestrian hostile neighborhoods could be reduced by as much as 10% with a significant improvement in the pedestrian environment.

The authors conclude that the quality of the pedestrian environment is a significant factor in explaining auto use, in combination with socioeconomic measures such as household income, household size, and others.

## National and International Case Studies show Financial Rewards for Pedestrian Districts

During a literature review on the topic of pedestrian oriented design, LUTRAQ summer intern Rebecca Ocken found a number of business ventures reaping financial rewards from catering to pedestrians.

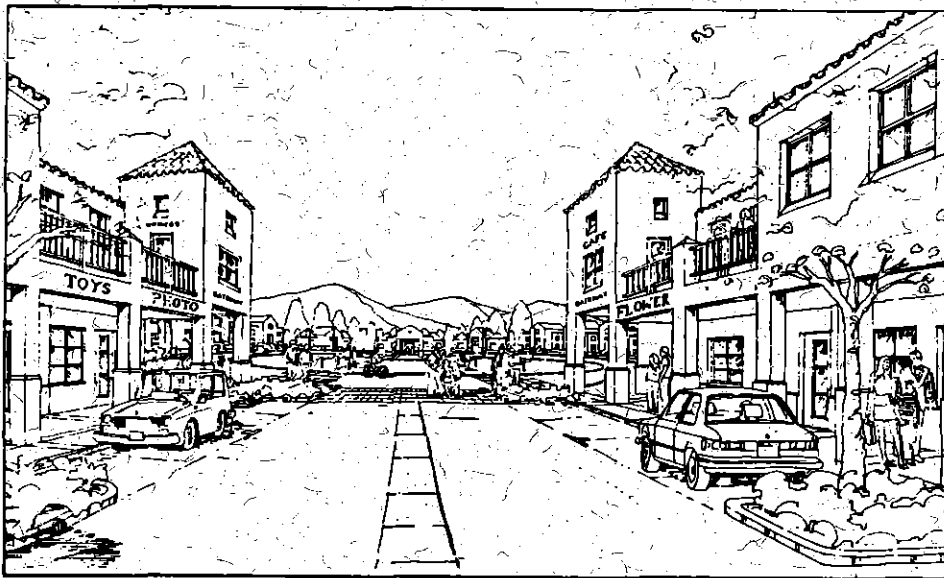
In Southern California, for example, Ralph's Grocery Company has located a new store in San Diego's multi-use complex called the Uptown District. The complex has retail on the ground floor, offices and apartment on the upper levels, and parking below grade. Ralph's executives readily admit that it was more expensive to locate in this mixed-use center than to develop a traditional strip store. While chain wide development costs average \$35/ft<sup>2</sup>, the Uptown store averaged \$41/ft<sup>2</sup>; traffic mitigation alone totaled over one million dollars.

The development has created so much pedestrian traffic, however, that the extra costs have been worthwhile: the Uptown store consistently ranks within the ten highest income producing stores of the chain's 160 supermarkets. In fact, the Uptown store is so successful that Ralph's is actively seeking similar locations for future stores.

Mashpee Commons, in Massachusetts, is another economically successful project. Architects Andres Duany and Elizabeth Plater-Zyberk redesigned the conventional mall to make it more like the central business district (CBD) of a small town. All the stores that were in business both before and after the renovation report sales increases since the renovation.

Developers Arnold Chase, Jr. and Douglas Storrs contend the qualities that make traditional CBD's so appealing can be profitably incorporated into today's commercial projects. "We wanted to make money," explains Storrs, "but we don't feel that you have to put up a strip shopping center or enclosed mall to be financially successful."

For an international example, Ocken points to Curitiba, Brazil. In the mid 1970's city planners closed a three block section of a main retail district to automobile traffic. While the businesses lining the street were skeptical, they agreed to a one month trial. The pedestrian mall was such a financial and aesthetic success, business owners not included in the original project are now lobbying for its expansion.



Core commercial areas in the LUTRAQ alternative are called transit oriented developments (TOD). These areas contain a mix of retail, services, and professional offices, with opportunities for housing on upper floors. Arcades, street vistas, shade trees, and plazas or village greens, strengthen the urban character of core areas.

## LUTRAQ Intern Compiles Bibliography on Pedestrian Oriented Design

1000 Friends summer intern Rebecca Ocken compiled and annotated a bibliography covering books, reports, and articles discussing the relationship between site design and travel behavior.

The entire twenty-five page compilation is available from 1000 Friends. Some of Ms. Ocken's recommendations include:

Cervero, Robert, *Suburban Gridlock*, Rutgers University Press, New Brunswick, New Jersey (1986).

Beimborn, Edward, et al., *Guidelines for Transit Sensitive Suburban Land Use Design*, U.S. Department of Transportation, Washington, D.C. (1991).

Calthorpe Associates, *Transit-Oriented Development Design Guidelines*, Prepared for the City of San Diego, California (August 1992).

Hinshaw, Mark, *Design Objectives Plan-Entryway Corridors*, Prepared for the City of Bozeman, Montana, Hough Beck & Baird Inc., Seattle, Washington (1992).

JHK & Associates, et al., *Planning and Implementing Pedestrian Facilities in Suburban and Developing Rural Areas*, Transportation Research Board, Washington, D.C. (June 1987).

Oregon Department of Transportation, *Transportation Planning Rule Best Management Practices*, Salem, Oregon (August 1992).

Pivo, Gary, et al., *A Summary of Guidelines for Coordinated Urban Design, Transportation, and Land-Use Planning, with an Emphasis on Encouraging Alternatives to Driving Alone*, Washington State Transportation Center, University of Washington, Seattle, Washington (August 1992).

Snohomish County Transportation Authority, *A Guide to Land Use and Public Transportation for Snohomish County, Washington*, U.S. Department of Transportation (December 1989).

TriMet, *Planning and Design for Transit*, Tri-County Metropolitan Transportation District of Oregon, Portland, Oregon (March 1993).

Untermann, Richard, *Linking Land Use and Transportation: Design Strategies to Serve HOVs and Pedestrians*, Prepared for the Washington State Transportation Commission, Seattle, Washington (June 1991).

**Making the LUTRAQ Connection Local**

*New outreach campaign advocates travel mode options and civic involvement*

In November, 1000 Friends received a grant from the New-Land Foundation, Inc. to launch a citizen outreach program for LUTRAQ. While LUTRAQ enjoys national notoriety in professional planning circles, project awareness among local citizens is relatively low.

The grant funded two projects. First, it created a position for a citizen outreach specialist. Meeky Blizzard, a member of the LUTRAQ Policy Advisory Committee and a long-time citizen activist in Washington County, was chosen for the position.

Ms. Blizzard focuses her efforts on making presentations to citizen service clubs, neighborhood associations and planning commissions. Commissioners in many of the smaller jurisdictions surrounding Portland are not familiar with either LUTRAQ's conceptual framework or its specific proposals.

"The extent of many people's expo-

sure to land use planning," Meeky finds, "is zoning ordinances and building permits." As a result, Meeky provides groups with a brief introduction to planning concepts before she launches into the specifics of LUTRAQ.

For example, she discusses land use concepts such as density envelopes, use designations, and design guidelines as "tools" that can be used to influence and guide the evolution of a community or town.

Likewise, she argues that road width, street pattern, and streetscapes are also tools which can be used to enhance or diminish the quality of the built environment.

To highlight the relationship between land use and transportation, Meeky likes to discuss local construction projects: "Building strip-mall shopping centers and widening streets encourages auto usage, and thereby discourages people from traveling by foot or by bicycle—even for neighborhood trips." The point is not to tell people they can't drive, Meeky argues, but to give people travel choices.

*The Willamette County News*

The second part of the LUTRAQ outreach program also focuses on citizen education. Starting at the end of January and continuing for six months, 1000 Friends will publish six editions of a newsletter entitled *The Willamette County News*. It will be mailed to citizens throughout the three counties of the Portland Metropolitan Area.

The purpose of *The Willamette County News* is to help citizens become familiar with the tenets of LUTRAQ and to provide information about the region's growth issues. Topics for the first issue will include an update on the Region 2040 process and a description of Central Bethany, a mixed-use development under design review in Washington County.

The Central Bethany development is slated for land on which LUTRAQ planners envision a neighborhood TOD.

*The Willamette County News* will also publish a calendar of public meetings and inform readers of other avenues to civic involvement.

*To order documents mentioned in this issue of LUTRAQ Update*

<p>Name _____</p> <p>Address _____</p> <p>City/State _____ Zip _____</p> <p>Make checks payable to <b>1000 Friends of Oregon</b> and mail with this form to:</p> <p style="padding-left: 40px;">1000 Friends of Oregon 534 S.W. Third Ave., Suite 300 Portland, Oregon 97204</p> <p>For more information about the LUTRAQ Project, write to the above address, or contact us via phone, fax, or e-mail. Phone: 503/497-1000; Fax: 503/223-0073; E-mail: inmail@friends.rain.com</p>	<table border="0"> <tr> <td style="width: 10%;">Qty.</td> <td style="width: 80%;">Volume 4A: The Pedestrian Environment @ \$18.00 (\$12.00 for 1000 Friends members)</td> <td style="width: 10%; text-align: right;">Subtotal</td> </tr> <tr> <td>_____</td> <td>Bibliography on site design and travel behavior @ \$5.00</td> <td>_____</td> </tr> <tr> <td>_____</td> <td><b>Other LUTRAQ Reports Available:</b></td> <td>_____</td> </tr> <tr> <td>_____</td> <td>Volume 1: Modeling Practices @ \$12.00</td> <td>_____</td> </tr> <tr> <td>_____</td> <td>Volume 2: Existing Conditions @ \$18.00</td> <td>_____</td> </tr> <tr> <td>_____</td> <td>Volume 3A: Market Research @ \$15.00</td> <td>_____</td> </tr> <tr> <td>_____</td> <td>An Interim Report @ \$20.00</td> <td>_____</td> </tr> <tr> <td>_____</td> <td>Volume 4: Model Modifications @ \$15.00</td> <td>_____</td> </tr> <tr> <td colspan="3"><b>Membership in 1000 Friends of Oregon</b></td> </tr> <tr> <td colspan="3"> <input type="checkbox"/> \$25 Individual                    <input type="checkbox"/> \$50 Supporting                    <input type="checkbox"/> Other             </td> </tr> <tr> <td colspan="2"></td> <td style="text-align: right;"><b>Total</b></td> </tr> </table>	Qty.	Volume 4A: The Pedestrian Environment @ \$18.00 (\$12.00 for 1000 Friends members)	Subtotal	_____	Bibliography on site design and travel behavior @ \$5.00	_____	_____	<b>Other LUTRAQ Reports Available:</b>	_____	_____	Volume 1: Modeling Practices @ \$12.00	_____	_____	Volume 2: Existing Conditions @ \$18.00	_____	_____	Volume 3A: Market Research @ \$15.00	_____	_____	An Interim Report @ \$20.00	_____	_____	Volume 4: Model Modifications @ \$15.00	_____	<b>Membership in 1000 Friends of Oregon</b>			<input type="checkbox"/> \$25 Individual <input type="checkbox"/> \$50 Supporting <input type="checkbox"/> Other					<b>Total</b>
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## About "Making the Land Use, Transportation, Air Quality Connection"

Making the Land Use, Transportation, Air Quality Connection (LUTRAQ) is a national demonstration project of 1000 Friends of Oregon to develop methodologies for creating alternative suburban land use patterns, and to evaluate the impacts of such patterns on travel behavior, air quality, and energy consumption.

### Major funding for the LUTRAQ Project was provided by:

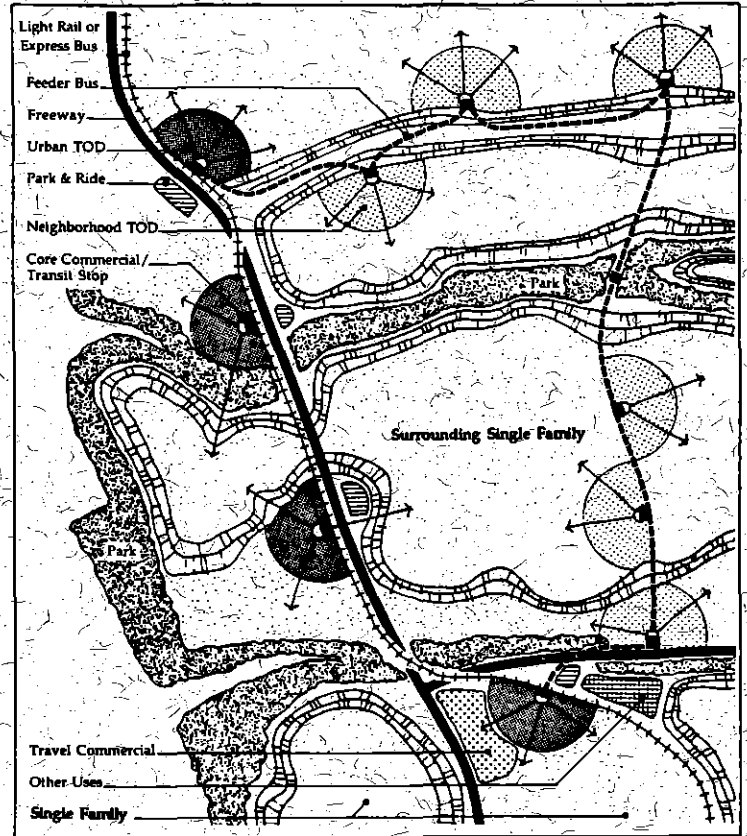
The Energy Foundation  
 Federal Highway Administration  
 U.S. Environmental Protection Agency  
 The Nathan Cummings Foundation  
 Surdna Foundation, Inc.  
 The Joyce Foundation  
 ARCO Foundation  
 The New-Land Foundation, Inc.  
 Portland General Electric Company  
 Pacific Development, Inc.  
 Key Bank of Oregon

### About 1000 Friends of Oregon

1000 Friends of Oregon is a non-profit citizens organization founded in 1975. As an advocate of sound land use planning, 1000 Friends has focused its efforts on conserving farm and forest lands, protecting natural resources, and promoting compact and livable cities. As an independent monitor of the nation's oldest land use planning program, 1000 Friends sponsors research on emerging land use issues, provides legal services to citizens and non-profit organizations, and conducts public education campaigns. 1000 Friends is supported by memberships, individual contributions, and grants from foundations and public agencies.

### LUTRAQ Project Staff:

Director: Keith A. Bartholomew; Assistant Director: Mary Kyle McCurdy; LUTRAQ UPDATE editor & layout: Marc Guichard



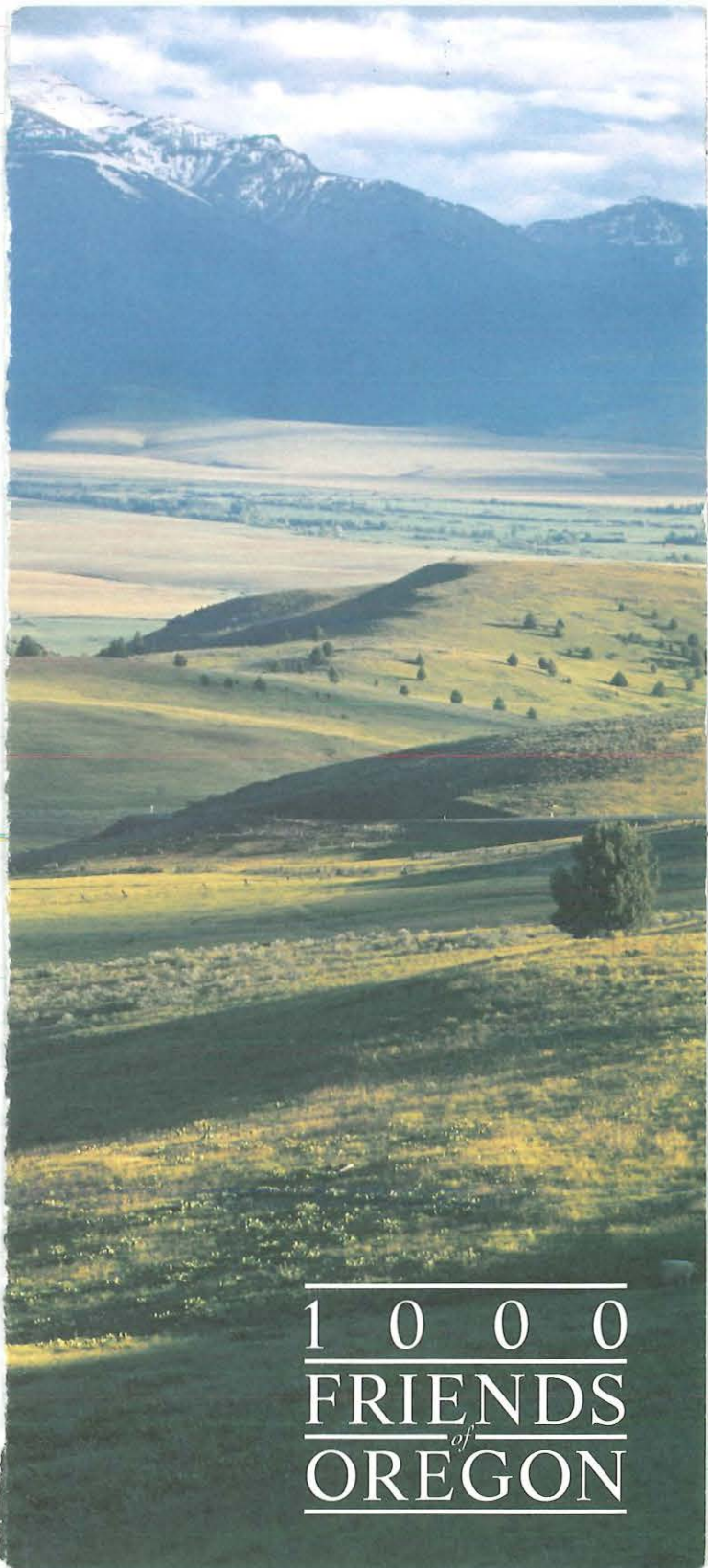
*TODs (transit oriented developments) should be linked by a comprehensive transit system that connects Mixed Use Centers, Urban TODs, and Neighborhood TODs via light rail, express buses, and feeder buses.*

1000 Friends of Oregon  
 534 S.W. Third Avenue, Suite 300  
 Portland, Oregon 97204

Non-profit Org.

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FRIENDS  
*of*  
OREGON





*“Unlimited and  
unregulated growth  
leads inexorably to a  
lowered quality  
of life.”*

GOVERNOR TOM MCCALL  
1973 LEGISLATIVE SESSION

DAN CALLAGHAN

**A**s one of the most beautiful places in the world, Oregon has it all—mountain peaks and a rugged coast, painted deserts and lush valleys, dense forests and rich farmland, small towns and big cities.

And one should ask, what has kept Oregon’s natural resources, scenic beauty, and economic stability intact while other areas of the country are being overwhelmed by sprawling subdivisions, traffic congestion, and the loss of valuable farms, forests and open space?

One important answer is Oregon’s nationally recognized land use planning program.

An equally important answer—**1000 Friends of Oregon**, the nonprofit organization advocating the responsible use of land.

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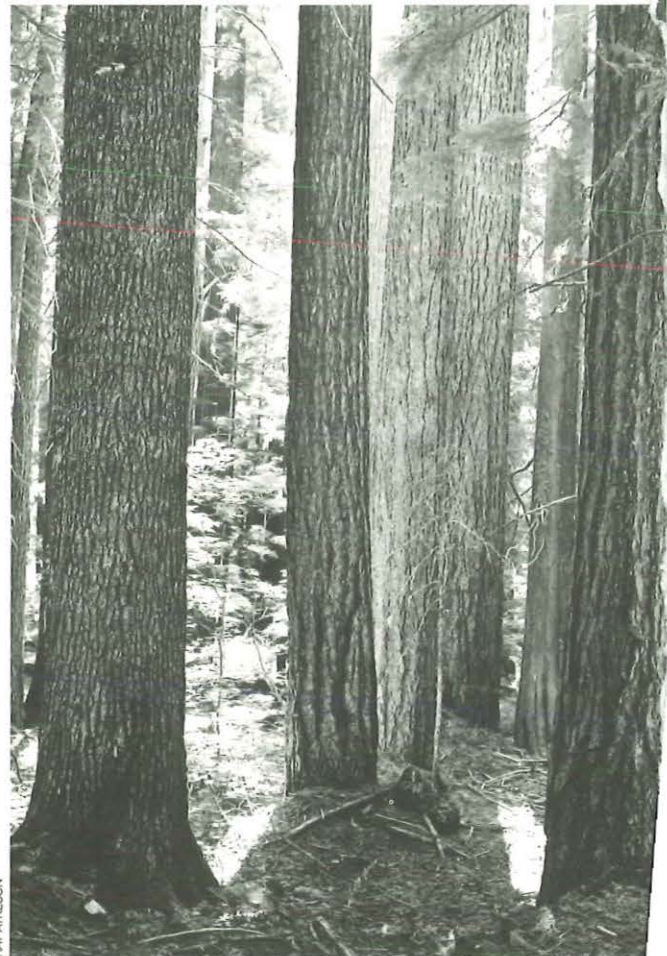
# MANAGING

## OREGON'S LAND USE PROGRAM

In 1973, under the leadership of Governor Tom McCall, the Oregon legislature passed Senate Bill 100, creating the nation's first land use planning program. The program balances conservation and development interests to achieve broad statewide objectives.

The mission was clear:

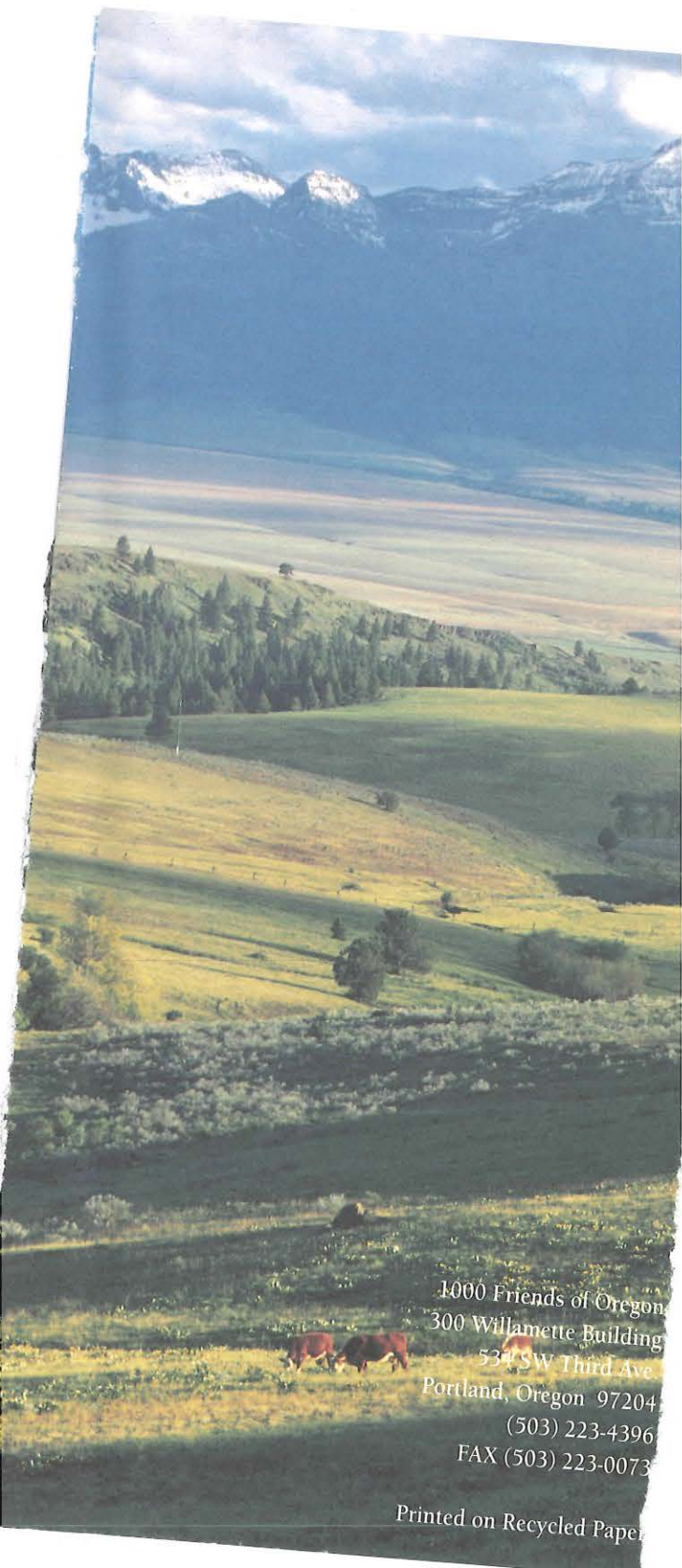
- ▶ Focus economic growth efficiently around urban centers;
- ▶ Conserve important natural resources;
- ▶ Give citizens a clear voice in the planning process.



RAY ATKESON

*9 million acres of forest land have been spared from  
thanks to Oregon's plan*





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FAX (503) 223-0073

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# G G R O W T H

Senate Bill 100 requires every county and every city to adopt and maintain a comprehensive land use plan meeting the 19 statewide planning "goals." Completed in the mid-1980s, these plans are periodically reviewed and amended to respond to changing growth patterns.

The Land Conservation and Development Commission (LCDC) now oversees local governments' compliance with the state's land use laws.

## ABOUT 1000 FRIENDS

In 1975, Governor McCall and others established 1000

Friends of Oregon, an independent organization set up to watch-dog the program and advocate sound land use planning.

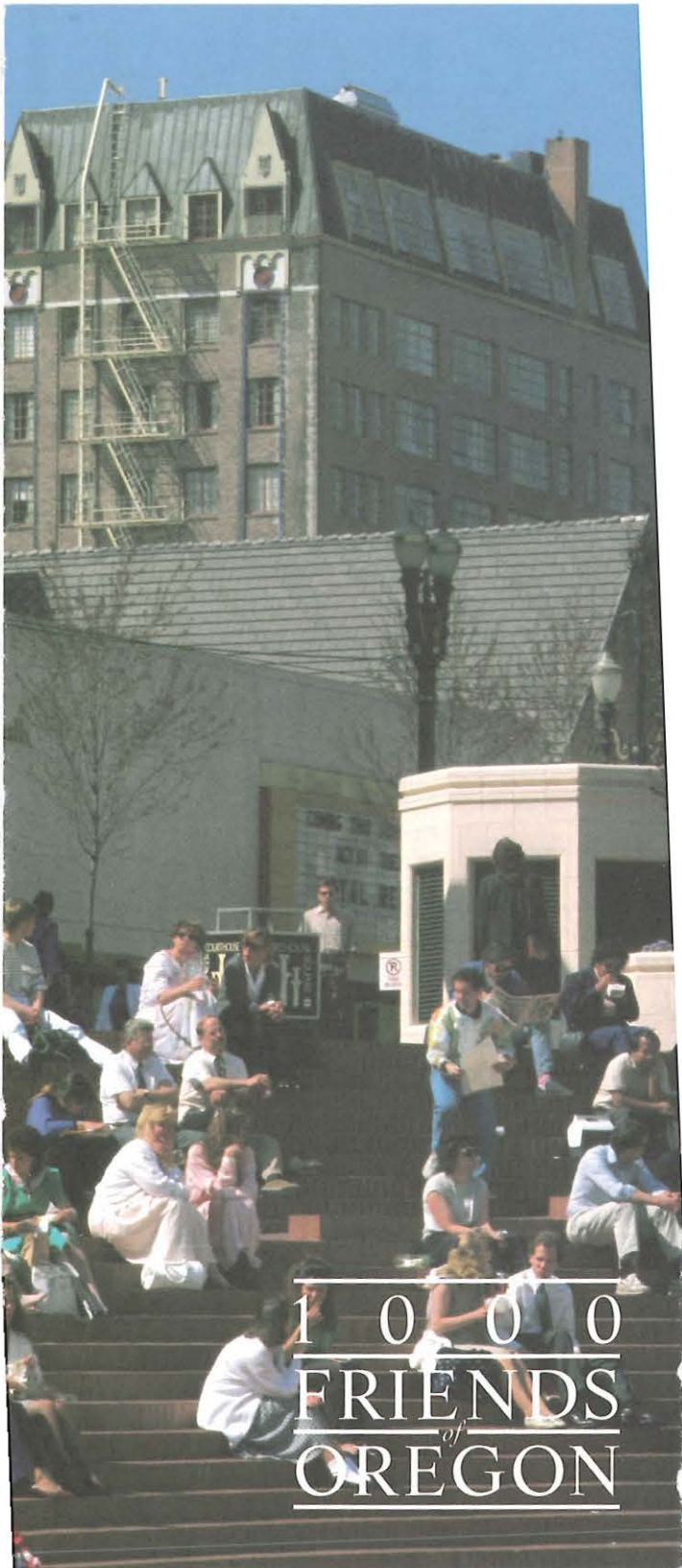
1000 Friends has focused on those elements of the planning program most in need of an advocate: the conservation elements. Much effort is devoted to protecting farm and forest lands and confining urban sprawl. The organization has also made substantial efforts in the areas of affordable housing policy, public services planning, coastal resources and wildlife habitat protection. Recently, 1000 Friends has worked to foster the responsible coordination of land use and transportation planning.

Our many roles include:

- ▶ **CITIZEN ADVISOR:** 1000 Friends provides advice and guidance to individuals and organizations, increasing their effectiveness in the planning process.
- ▶ **WATCHDOG:** 1000 Friends was active during "plan acknowledgement" and staff planners continue to analyze proposals to change local land use plans.
- ▶ **LAWYER:** Staff attorneys initiate appeals when legal precedent is at stake. In addition, staff attorneys recruit and train volunteer attorneys to participate in our Cooperating Attorneys Program (CAP).
- ▶ **EDUCATOR:** Staff appear on radio and television, and conduct seminars, providing public education on the program and current planning issues.



velopment,  
g program.



1 0 0 0  
FRIENDS  
*of*  
OREGON



# U THE ORE



*1000 Friends conducts planning seminars across the state.*

- ▶ **RESEARCHER:** 1000 Friends' staff and interns conduct studies evaluating the performance of the land use program.

## ADVOCATING THE RESPONSIBLE USE OF LAND

Much has been accomplished since the passage of Senate Bill 100:

- ▶ **OREGON'S 241 CITIES** have established urban growth boundaries to contain wasteful urban sprawl.
- ▶ **16 MILLION ACRES** of farm land have been designated for "exclusive farm use."
- ▶ **9 MILLION ACRES** of private forest land have been spared from development.
- ▶ **OREGON'S COAST** has been protected from uncontrolled development.
- ▶ **OPPORTUNITIES** for less costly housing have increased dramatically. Large-lot "exclusionary" zoning policies that hike up housing prices have been avoided.
- ▶ **COMPREHENSIVE PLANNING** increased the supply of industrially zoned land by 79% in Oregon's ten largest urban areas.
- ▶ **LAND USE DECISIONS** are appealed and reviewed in 42% less time than in the 1970s, ensuring a swift response to the concerns of all parties, limiting costly delays.



## JOIN US

To join 1000 Friends and support the responsible use of Oregon's land, complete the form below. All membership payments and gifts are tax-deductible. Please send payment to **1000 Friends of Oregon**, Post Office Box 40367, Portland, Oregon, 97240.

\_\_\_\_\_  
Name

\_\_\_\_\_  
Address

\_\_\_\_\_  
City State Zip

\_\_\_\_\_  
Phone Work

### MY MEMBERSHIP PLEDGE

Guarantor	\$1000	<input type="checkbox"/>
Sponsor	\$500	<input type="checkbox"/>
Patron	\$250	<input type="checkbox"/>
Sustaining	\$100	<input type="checkbox"/>
Supporting	\$50	<input type="checkbox"/>
Individual	\$25	<input type="checkbox"/>

**Please send me the following informational material\*:**

- 1000 Friends' Citizens Guide to Land-Use Decision Making
- Oregon's 19 Statewide Planning Goals
- Myths & Facts of Oregon's Planning Program
- A summary of Oregon's Planning Program

**\*Nominal charge for photocopying and postage.**

**1 0 0 0**  
**FRIENDS**  
*of*  
**OREGON**

# G O N W A Y

## THE CHALLENGE CONTINUES

Pressures continue to threaten Oregon's land use vision. Farm and forest land is fast disappearing. Studies show that thousands of acres of farm and forest land are being converted to urban uses each year. Wetlands, open spaces, and wildlife habitats are being paved over by roads and shopping centers.

Oregon's land use program will be only as strong as the decisions made by the local officials who apply it ... and as strong as the "watchdogging" efforts made by local citizens.

## BENEFITS OF JOINING

As a member of 1000 Friends of Oregon you will benefit from:

- ▶ **EXPERT ADVICE:** consult with 1000 Friends' planners and lawyers on land use issues which affect your community.
- ▶ **LEADERSHIP SKILLS:** take an active role in the planning process.
- ▶ **LANDMARK AND NEWSLETTER:** stay informed of current land use issues.
- ▶ **PEACE OF MIND:** know that your membership goes a long way towards protecting Oregon's landscape, which is again being challenged by rapid growth in the 90's. Oregon's planning program will manage this growth—for our generation and future ones—if we all become involved today. Join 1000 Friends of Oregon; add your voice to that of others who want to manage growth the "Oregon Way."



ANGL NANCE

*Lot prices have remained affordable in Oregon's urban neighborhoods.*

# THE ORE



*1000 Friends conducts planning seminars across the state.*

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"1000 Friends has helped to give the public a direct voice in seeing that the state land use planning law is faithfully implemented."

THE CONSERVATION FOUNDATION

"The land use watch dog group has stepped forward as often to encourage good planning for development as it has to discourage development to protect farm and forest lands. As awareness increases that its goal is sound growth, not opposition to growth, 1000 Friends' base of support has continued to expand."

THE OREGONIAN

"Following Oregon's tradition of active citizen participation in government...1000 Friends is helping to make tomorrow's Oregon a better place."

EUGENE REGISTER-GUARD

"The land use process is worth it because we have assured ourselves that we can grow economically and still protect our livability. No state in the union except Oregon can make that statement."

GOVERNOR VIC ATIYEH,  
KLAMATH FALLS HERALD & NEWS

ANGEL NANCE